



Department of
Environmental
Conservation

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	4952	NAICS Code:	221320	SPDES Number:	NY 003 0724
Discharge Class (CL):	05	DEC Number:	3-4846-00039/00003		
Toxic Class (TX):	T	Effective Date (EDP):	EDP		
Major-Sub Drainage Basin:	14 - 02	Expiration Date (ExDP):	ExDP		
Water Index Number:	D-1-38-3	Item No.:	815 - 102	Modification Dates (EDPM):	
Compact Area:	DRBC				

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:	Town of Thompson			Attention:	Michael Messenger, Superintendent	
Street:	4052 State Route 42			State:	NY	Zip Code: 12701
City:	Monticello			Phone:	(845) 794-5280	
Email:	mmessenger@townofthompson.com					

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL							
Name:	Consolidated Kiamesha Sewer District						
Address / Location:	128 Rock Ridge Drive / Monticello					County:	Sullivan
City:	Monticello			State:	NY	Zip Code:	12701
Facility Location:	Latitude:	41 °	39 '	43 " N	& Longitude:	74 °	39 ' 45 " W
Primary Outfall No.:	001	Latitude:	41 °	39 ' 41 " N	& Longitude:	74 °	39 ' 49.5 " W
Outfall Description:	Treated Sanitary		Receiving Water:	Kiamesha Creek		Class:	C

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

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

DISTRIBUTION:

CO BWP - Permit Coordinator
Alison Wasserbauer, DOW
Helen Budrock, Delaware Eng.
EPA Region II
NYSEFC
DRBC
Town of Thompson Supv.
NYS DOH – Sullivan Co.

Permit Administrator:			
Address:	21 South Putt Corners Rd, New Paltz NY 12561		
Signature:		Date:	/ /

DEFINITIONS

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

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year (unless otherwise specified)	Kiamesha Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	2.0	MGD	-	-	Continuous	Recorder		X	
Flow	Daily Maximum	Monitor	MGD	-	-	Continuous	Recorder		X	
CBOD ₅	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/Week	24-hr. Comp.	X	X	1,2
UOD (June 1 st – Oct. 31 st)	Daily Maximum	15	mg/L	250	lbs/d	1/Week	Calculated		X	2
UOD (Nov. 1 st – May 31 st)	Daily Maximum	32	mg/L	530	lbs/d	1/Week	Calculated		X	2
Total Suspended Solids (TSS)	Daily Maximum	10	mg/L	170	lbs/d	1/Week	24-hr. Comp.	X	X	1
Settleable Solids	Daily Maximum	0.1	mL/L	-	-	2/Day	Grab		X	
Total Dissolved Solids (TDS)	Daily Maximum	Monitor	mg/L	-	-	1/Quarter	Grab		X	3
Ammonia (as N) (June 1 st – Oct. 31 st)	Monthly Average	1.2	mg/L	-	-	1/Week	24-hr. Comp.		X	4
Ammonia (as N) (Nov. 1 st – May 31 st)	Monthly Average	1.9	mg/L	-	-	1/Week	24-hr. Comp.		X	4
Total Kjeldahl Nitrogen (TKN) (as N)	Daily Maximum	Monitor	mg/L	-	-	1/Week	24-hr. Comp.		X	2
Nitrate and Nitrite (as N)	Daily Maximum	Monitor	mg/L	-	-	1/Month	24-hr. Comp.		X	
Total Phosphorus (as P)	Daily Maximum	Monitor	mg/L	-	-	1/Month	24-hr. Comp.		X	
pH	Range	6.5 – 8.5	SU	-	-	2/Day	Grab		X	4
Temperature	Daily Maximum	Monitor	°F	-	-	2/Day	Grab		X	
Dissolved Oxygen	Daily Minimum	7.0	mg/L	-	-	1/Week	Grab		X	
Total Mercury	Daily Maximum	12	ng/L	-	-	1/Year	Grab		X	
Chlorine, Total Residual	Daily Maximum	30	µg/L	-	-	2/Day	Grab		X	5
Biennial Pollutant Scan	Daily Maximum	-	-	-	-	1/Two Years	-		X	6

EFFLUENT DISINFECTION		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Required Seasonal from May 1st - October 31st										
Coliform, Fecal	30-Day Geometric Mean	200	No./100 mL	-	-	1/Week	Grab		X	7
Coliform, Fecal	7-Day Geometric Mean	400	No./100 mL	-	-	1/Week	Grab		X	7

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			0.30	TUa	Quarterly	See footnote		X	8
WET - Acute Vertebrate	See footnote			0.30	TUa	Quarterly	See footnote		X	8
WET - Chronic Invertebrate	See footnote			1.0	TUc	Quarterly	See footnote		X	8
WET - Chronic Vertebrate	See footnote			1.0	TUc	Quarterly	See footnote		X	8

FOOTNOTES:

1. Effluent shall not exceed 15% and 15% of influent concentration values for CBOD₅ & TSS respectively.
2. Ultimate Oxygen Demand (UOD) shall be computed as follows: $UOD = (1.5 \times CBOD_5) + (4.5 \times TKN)$. The samples for CBOD₅ and TKN shall be obtained concurrently.
3. Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st). Quarterly results shall be reported on the DMR for the last month of the quarter (Q1 – March DMR; Q2 – June DMR; Q3 – September DMR; Q4 – December DMR).
4. This is a final effluent limitation. See Schedule of Compliance on page 12 for any applicable interim effluent limitations.
5. Sampling and reporting for total residual chlorine is 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.
6. Biennial Pollutant Scan: The permittee shall perform effluent sampling every two (2) years for all applicable pollutants identified in the NY-2A Application, Tables A - D. Sampling data shall be collected according to the guidance in the NY-2A application and maintained by the permittee. Monitoring results shall not be submitted on the DMR. Data shall be submitted with the next submission of the NY-2A form.
7. Limits and monitoring requirements are not in effect until completion of disinfection construction. See the Schedule of Compliance on page 12.
8. **Whole Effluent Toxicity (WET) Testing:**
Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is **0:1** for acute, and **0:1** for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 4 and 9.

FOOTNOTES CONT.:

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: $TU_a = (100)/(48\text{-hr LC50})$ [note that Acute data is generated by both Acute and Chronic testing] and $TU_c = (100)/(7\text{-day NOEC})$ or $(100)/(7\text{-day IC25})$ when Chronic testing has been performed or $TU_c = (TU_a) \times (10)$ when only Acute testing has been performed and is used to predict Chronic test results, where the 48-hr LC50, 7-day NOEC and/or IC25 are all expressed in % effluent. This must be done, including the Chronic prediction from the Acute data, for both species unless otherwise directed. For Chronic results, report the most sensitive endpoint (i.e. survival, growth and/or reproduction) corresponding to the lowest 7-day NOEC or IC25 and resulting highest TU_c . For Acute results, report a TU_a of 0.3 if there is no statistically significant mortality in 100% effluent as compared to the control. Report a TU_a of 1.0 if there is statistically significant mortality in 100% effluent as compared to the control, but insufficient mortality to generate a 48-hr LC50. Also, in the absence of a 48-hr LC50, use 1.0 TU_a for the Chronic prediction from the Acute data, and report a TU_c of 10.0.

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

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

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SPECIAL CONDITIONS FOR WASTEWATER DISCHARGES WITHIN THE DELAWARE RIVER BASIN WATERSHED

1. Prior to the permittee initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A2.a.16) of the Delaware River Basin Commission's Water Quality Regulations (18 CFR Part 410), a "No Measurable Change to Existing Water Quality Analysis" acceptable to the DRBC, must be submitted to the department. The permittee is encouraged to contact DRBC staff during the planning stages of any project that meets the definition of substantial alteration or additions, as per DRBC.
2. Prior to accepting for treatment and discharge 50,000 gallons per day or more (as a daily average) of wastewater that is imported from outside the Delaware River Basin, the permittee shall first apply to and obtain approval from the DRBC.
3. The permittee may conduct a study to determine if specific conductance may be substituted for TDS in the permit. The study should include effluent specific data to be used to determine a correlation between TDS and specific conductance. Upon review, the Delaware River Basin Commission will determine if the permit may be modified to allow the substitution of specific conductivity for TDS monitoring. Any TDS limit would then be supplanted by a specific conductance limit in the permit.
4. All wastewater treatment facilities discharging to waters classified as Special Protection Waters shall have available standby power facilities unless it can be shown that a proposed discharge can be interrupted for an extended period with no threat to the water quality of Special Protection Waters. Existing facilities must comply with this requirement upon their next permit renewal under the delegated national pollutant discharge elimination system (NPDES) permit program.
5. All wastewater treatment facilities discharging to Special Protection Waters that are not staffed 24 hours every day shall have a remote alarm that will continuously monitor plant operations whenever the plant is not staffed. The alarm system will be designed to alert someone available with authority and knowledge to take appropriate action. Existing facilities must comply with this requirement upon their next permit renewal under the delegated NPDES program.
6. All new wastewater treatment facilities discharging to Special Protection Waters shall prepare and implement an emergency management plan following the guidance provided in the Water Pollution Control Federation's Manual of Practice SM-8, Emergency Planning for Municipal Wastewater Facilities, the U.S. EPA's Design Criteria for Mechanical, Electric and Fluid System and Component Reliability or other suitable manuals. Emergency management plans shall include an emergency notification procedure covering all affected downstream users. Existing facilities must comply with this requirement upon their next permit renewal under the delegated NPDES program.

DRBC Determination – Based upon written recommendation of the DRBC staff, when the discharge is operated in accordance with the provisions and conditions established by this permit, then with respect to effluent quality and stream quality objectives, the project does not substantially impair or conflict with the Commission's Comprehensive Plan.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

General: Stormwater discharges from POTWs with design flows at or above 1 MGD shall be covered under the SPDES permit. The permittee is required to implement Best Management Practices (BMPs) to prevent releases of significant amounts of pollutants through plant site stormwater runoff; spillage and leaks; sludge or waste disposal; and other stormwater discharges including, but not limited to, drainage from raw material storage.

Facility Review: The permittee shall review all facility components or systems that may be exposed to precipitation/surface runoff where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants. The review should include but is not limited to:

- grit
- screenings
- other solids handling areas, storage or disposal areas
- septage or hauled waste receiving stations
- storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides and pesticides
- in-plant transfer, process, and material handling areas
- stormwater, erosion, and sediment control measures
- sludge drying beds
- dried sludge piles
- compost piles
- material storage areas
- process emergency control systems
- loading and unloading operations

In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of stormwater by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

Best Management Practices: Permittee shall identify Best Management Practices (BMPs) that have been established to prevent or minimize any identified potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. At a minimum, the permittee is required to implement the following BMPs:

1. Minimize Exposure - The permittee must minimize the exposure of manufacturing, processing, and material storage areas to rain, snow, snowmelt, and runoff to minimize pollutant discharges. This includes areas used for loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations.
2. Good Housekeeping - The permittee must keep clean all exposed areas that are potential sources of pollutants.
3. Maintenance - The permittee must maintain all industrial equipment/systems and control measures in effective operating condition.
4. Spill Prevention and Response Procedures - The permittee must minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur in order to minimize pollutant discharges.
5. Erosion and Sediment Controls - The permittee must stabilize exposed areas and control runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation. Erosion and Sediment Controls must be in accordance with the New York State Standards & Specification for Erosion & Sediment Control (2016). Note: This permit does not authorize stormwater associated with construction activities as defined in 40 CFR 122.26. Consult with the NYSDEC Regional Water Engineer.
6. Management of Runoff - The permittee must divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff, to minimize pollutants in the discharges.
7. Salt Storage Piles or Piles Containing Salt - The permittee must enclose or cover storage piles of salt, or piles containing salt, used for deicing, maintenance of paved surfaces, or for other commercial or industrial purposes.
8. Employee Training - The permittee must train all employees who work in areas where industrial materials or activities are exposed to stormwater.
9. Non-Stormwater Discharges - The permittee must eliminate non-stormwater discharges not authorized by a SPDES permit.

STORMWATER POLLUTION PREVENTION REQUIREMENTS (Continued)

10. Waste, Garbage, and Floatable Debris - The permittee must ensure that waste, garbage, and floatable debris are not discharged to surface waters of the state by keeping exposed areas free of such materials or by intercepting them before they are discharged.
11. Dust Generation and Vehicle Tracking of Industrial Materials - The permittee must minimize generation of dust and off-site tracking of raw, final, or waste materials in order to minimize the pollutant discharges.
12. Secondary Containment - The permittee must ensure that compliance is maintained with all applicable regulations including, but not limited to, those involving releases, registration, handling and storage of petroleum, chemical bulk and hazardous waste storage facilities (6 NYCRR 596-599, 613 and 370-373).

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MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On January 26, 2022, 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. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements¹ as described in detail below:
 - a. Conditional Exclusion Certification - 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 to the Regional Water Engineer and to the Bureau of Water Permits certifying that 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 **AND** 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. Control Strategy - The control strategy must contain the following minimum elements:
 - i. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
 - ii. Bulk Chemical Evaluation – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

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.

² CSO 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. **Status Report** - An **annual** status report must be developed and maintained on site, in accordance with the [Schedule of Additional Submittals](#), 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. **MMP Modification** - The MMP must be modified whenever:
- a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
 - b. 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.

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

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

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

- (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	Due Date
001	<u>SCHEDULE OF COMPLIANCE STATUS REPORTS</u> Submit interim status reports on the progress related to meeting the specified final limits.	EDP + 9 months, and every 9 months thereafter
001	<p><u>ENGINEERING REPORT</u> The permittee shall submit an approvable engineering report that meets the requirements of the most recent version of the EFC/DEC Engineering Report Outline (https://www.dec.ny.gov/permits/6054.html). The report shall be prepared by a Professional Engineer licensed to practice engineering in New York State and detail the designs that will be used to comply with the final effluent limitations for Fecal Coliform, Ammonia, and pH. Approvable is defined as that which can be approved by the Department with only minimal revision. Minimal revision shall mean revised and resubmitted to the Department within sixty days of notification by the Department of the revisions that are necessary. All approvable engineering submissions must include the seal and signature of the professional engineer.</p> <p><u>DESIGN SUBMITTAL</u> The permittee shall submit an approvable Basis of Design Report (BODR), Engineering Plans, Specifications, and Construction Schedule for the implementation of effluent disinfection. Department approval is subject to SEQR and other permits, as needed.</p> <p><u>NOTIFICATION OF CONSTRUCTION COMPLETION</u> The permittee shall provide a Certificate of Completion⁵ for each unit process to the Department that the disposal system has been fully completed in accordance with the approved Design Documents.</p> <p><u>COMMENCE OPERATION</u> Following receipt of Department acceptance of the Certificate of Completion, the permittee shall comply with the final effluent limitation(s) described in this permit for Fecal Coliform, Ammonia, and pH.</p>	<p>Submitted (Pending NYS DEC approval)</p> <p>Submitted (Pending NYSEFC and NYSDEC approval)</p> <p>June 30, 2025</p> <p>Upon Department Acceptance</p>

The above compliance actions are one-time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the "SPDES NOTICE/RENEWAL APPLICATION/PERMIT" letter.

INTERIM EFFLUENT LIMITS FOR PARAMETERS SUBJECT TO THIS SCHEDULE OF COMPLIANCE

Outfall	Parameter(s) Affected	Interim Effluent Limit			Limits Apply	Notes	Interim Limits Expire
		Type	Limit	Units			
001	Fecal Coliform	N/A	N/A	N/A	N/A	1	N/A
001	Ammonia (as N)	Monthly Average	1.4	mg/L	Jun. 1 – Oct. 31	-	Facility Upgrade Completion
001	Ammonia (as N)	Monthly Average	2.1	mg/L	Nov. 1 – May 31	-	Facility Upgrade Completion

⁵ 6 NYCRR 750-2.10 (c).

001	pH	Range	6.0 – 9.0	SU	Year-round	-	Facility Upgrade Completion
Notes:	1. No Interim Effluent Limits. Final effluent limits and monitoring requirements are not in effect until completion of disinfection construction.						

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

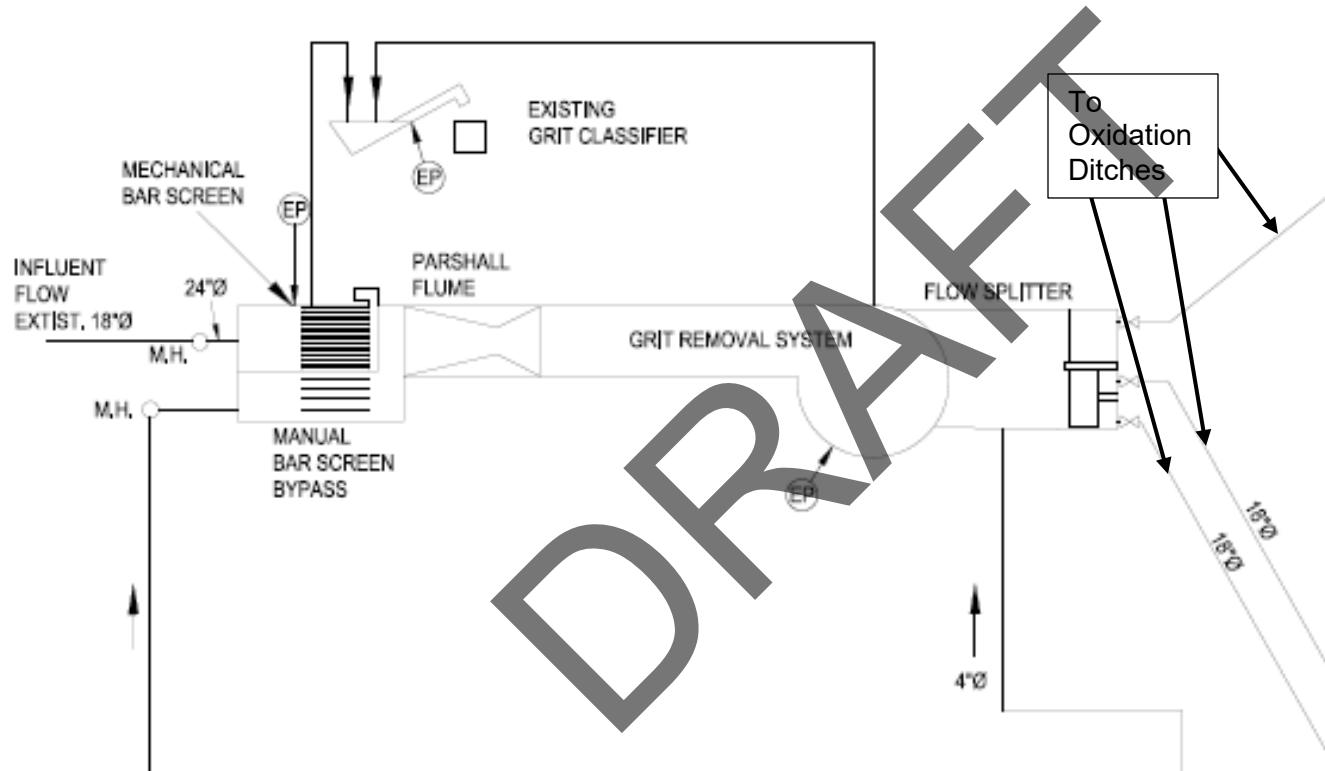
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MONITORING LOCATIONS (Existing Facility)

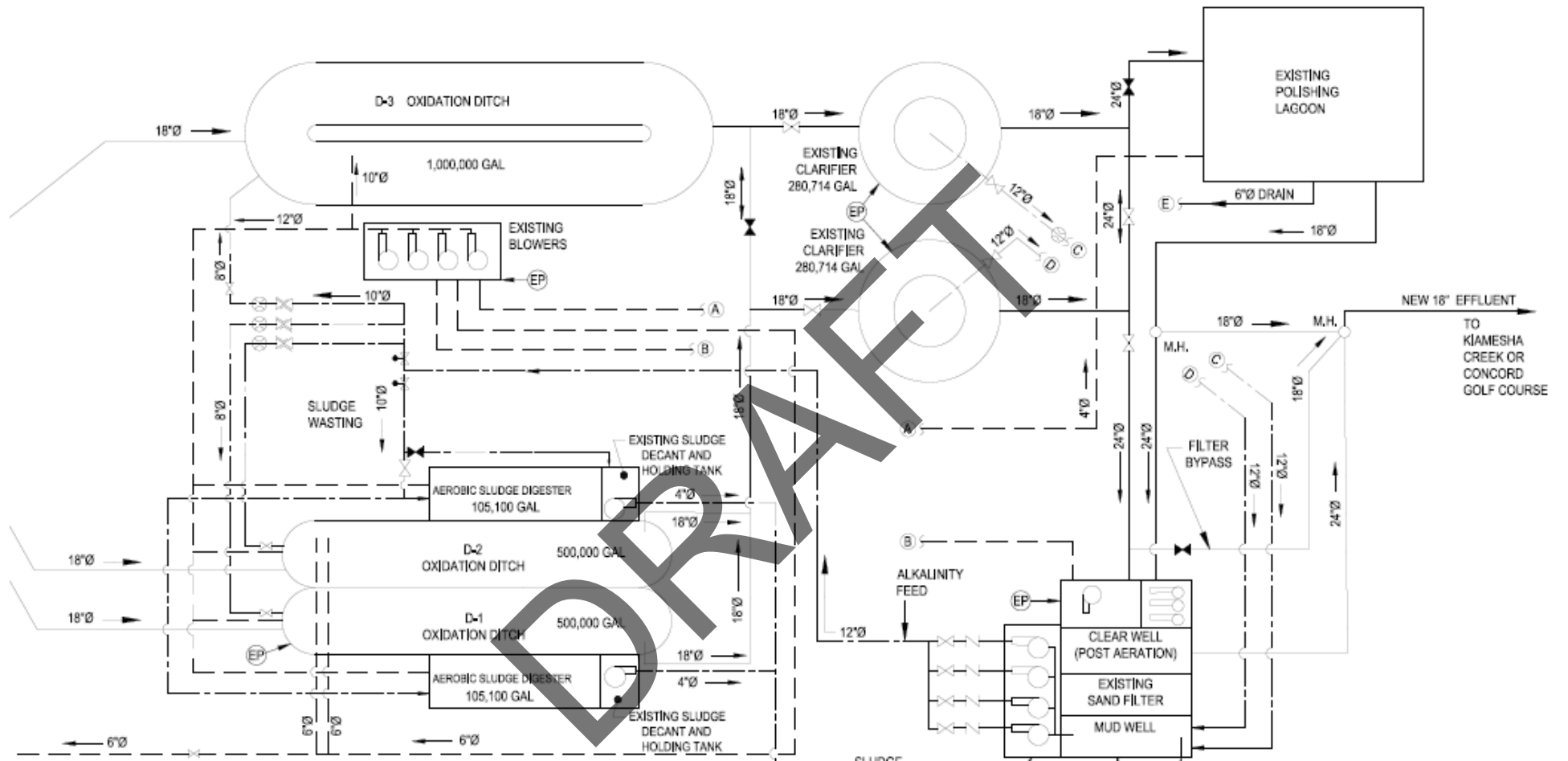
The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:

Influent: After bar screens

Effluent: After the sand filter



MONITORING LOCATIONS (Existing Facility, Cont.)

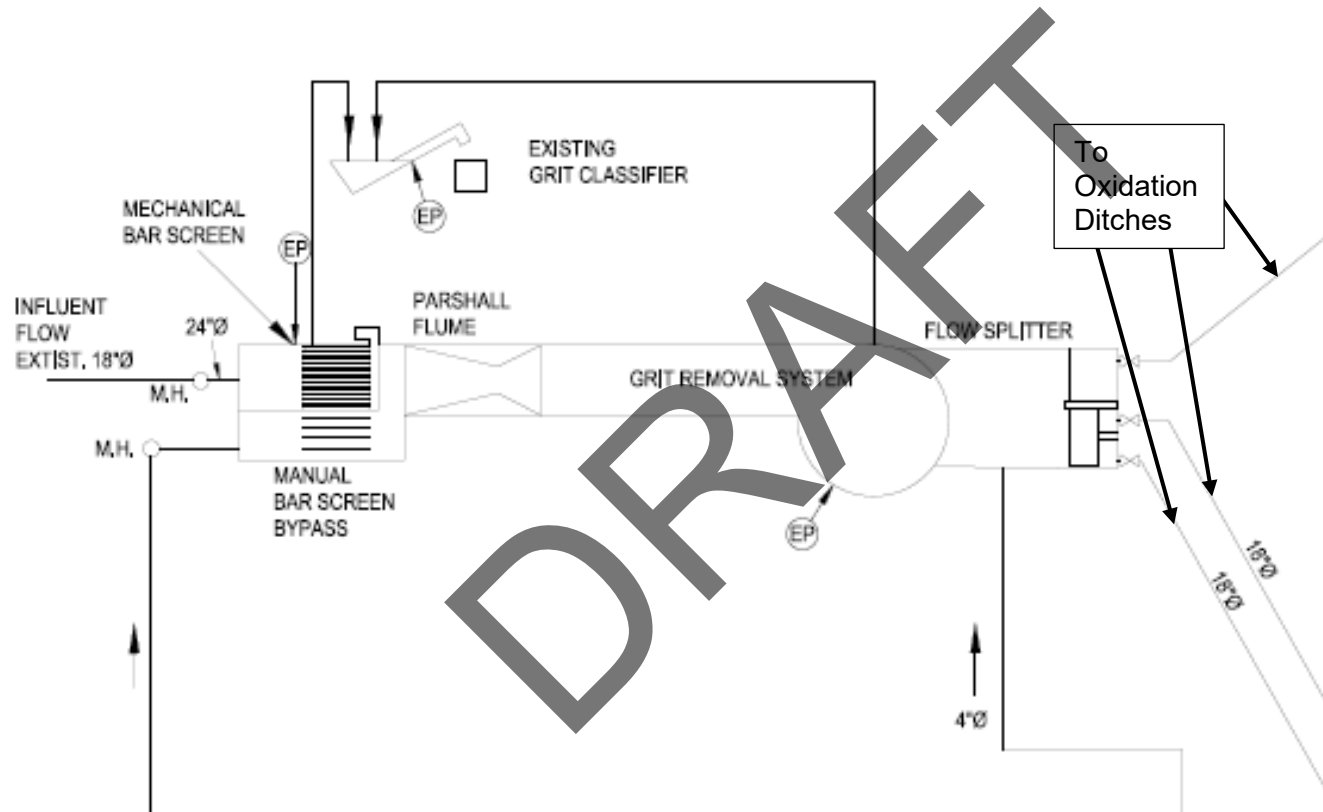


MONITORING LOCATIONS (Proposed Facility)

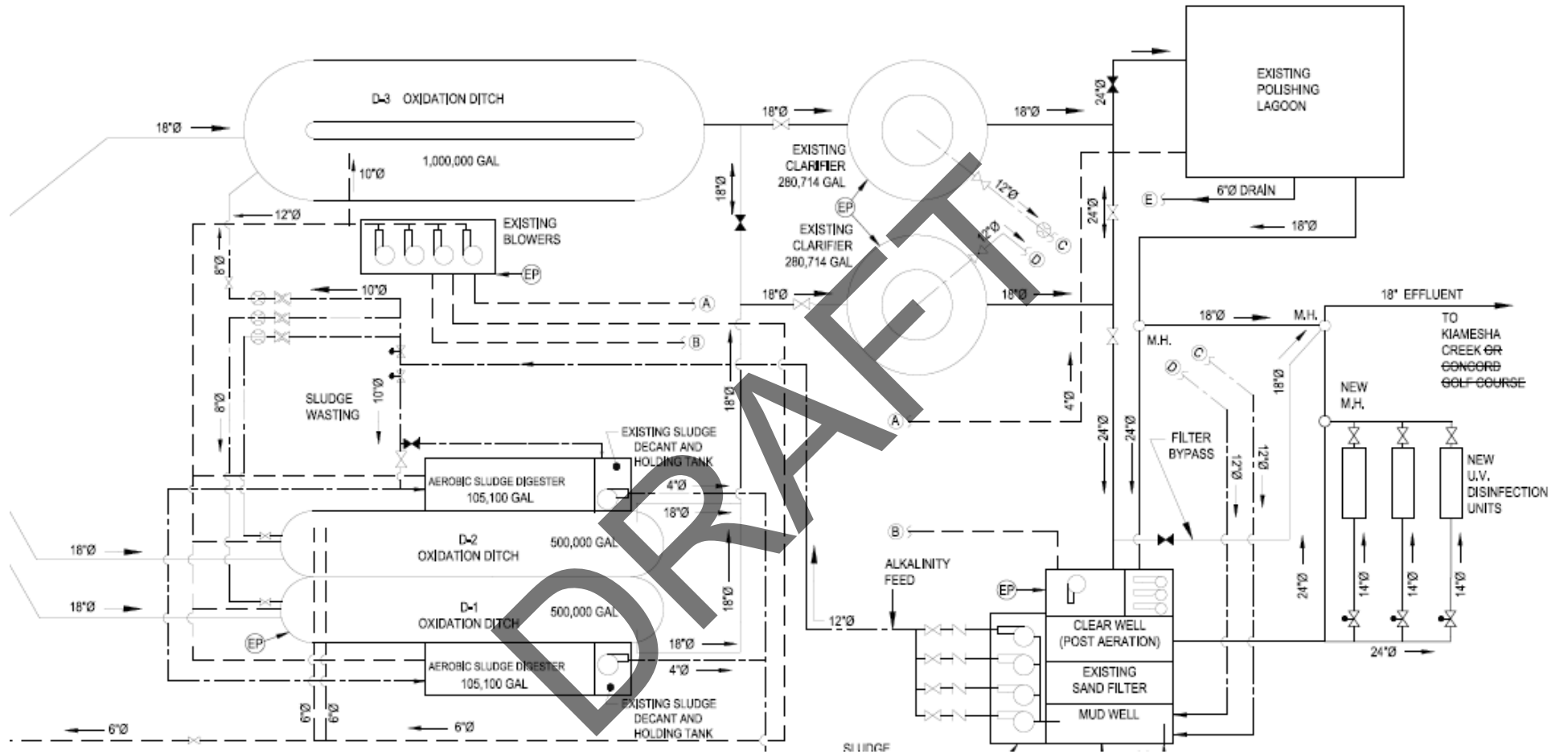
The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:

Influent: After bar screens

Effluent: After the UV disinfection units



MONITORING LOCATIONS (Proposed Facility)



GENERAL REQUIREMENTS

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

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

GENERAL REQUIREMENTS (continued)

2. Notification Requirement for POTWs

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

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

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

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

G. Sludge Management

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

H. SPDES Permit Program Fee

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

I. Water Treatment Chemicals (WTCs)

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

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

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

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

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

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

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

Department of Environmental Conservation
 Regional Water Engineer, Region 3
 100 Hillside Avenue, Suite 1W, White Plains, New York, 10603-2860 Phone: (914) 803-8157

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

- E. Schedule of Additional Submittals:

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

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	Required Action	Due Date
001	<u>WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM</u> The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	December DMR (January 28 th)
001	<u>ANNUAL FLOW CERTIFICATION</u> The permittee shall submit an Annual Flow Certification form each year in accordance with 750-2.9(C)(4). The form shall be attached to the February DMR or submitted through nForm.	February DMR (March 28 th)

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	Required Action	Due Date
001	<u>BIENNIAL POLLUTANT SCAN</u> The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in footnote 6 of the permit limits table.	Retain and submit with next NY-2A Application
001	<u>SHORT-TERM HIGH-INTENSITY MONITORING PROGRAM</u> The permittee shall collect 10 samples representative of normal discharge conditions and treatment operations over a 5-week period for Total Dissolved Solids and Total Unchlorinated Phenols parameters. 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.	EDP + 2 months
001	<u>WHOLE EFFLUENT TOXICITY (WET) TESTING</u> WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period
001	<u>MERCURY - CONDITIONAL EXCLUSION CERTIFICATION</u> Permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status.	January 27, 2027 and every 5 years thereafter
001	<u>MERCURY MINIMIZATION PLAN</u> The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	Maintained Onsite EDP + 12 months, annually thereafter

Unless noted otherwise, the above actions are one-time requirements. The permittee shall submit the results of the above actions to the satisfaction of the Department. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the above submittal(s), unless noted otherwise. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."

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

Permittee: Town of Thompson
Facility: Consolidated Kiamesha Sewer District
SPDES Number: NY 003 0724
USEPA Major/Class 05 Municipal

Date: January 4, 2023 v.1.11
Permit Writer: Alison Wasserbauer
Water Quality Reviewer: Alison Wasserbauer
Full Technical Review

SPDES Permit Fact Sheet

Town of Thompson

Consolidated Kiamesha Sewer

District

NY 003 0724



**Department of
Environmental
Conservation**

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Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal with changes requested by the permittee has been drafted for the Consolidated Kiamesha Sewer District. The changes to the permit are summarized below:

- Updated the cover page format and information, including the permittee contact name and contact information, the facility name and address, and the outfall coordinates;
- Changed flow averaging period per TOGS 1.3.3 and added daily maximum flow monitoring requirements;
- Reduced the summer Ultimate Oxygen Demand (UOD) mass loading limit;
- Added new percent removal requirements for CBOD₅ and TSS;
- Added new monitoring requirements for Total Dissolved Solids (TDS);
- Reduced the summer and winter Ammonia limits;
- Reduced the pH limit range to reflect intermittent stream limits;
- Added new monitoring requirements for Nitrate and Nitrite (as N) and Total Phosphorus per DRBC Special Protection Waters monitoring requirements;
- Reduced the Total Mercury limit per TOGS 1.3.10;
- Revised all limits to reflect two (2) significant figures;
- Added new WET testing requirements;
- Added new requirements for a Biennial Pollutant Scan;
- Added a Special Conditions section for Wastewater Discharges Within the Delaware River Basin Watershed;
- Added a new Stormwater Pollution Prevention Requirements section;
- Updated the Mercury Minimization Program from a High Priority POTW to Type IV;
- Updated the Schedule of Compliance to update the compliance action deadlines for installing disinfection treatment units, added compliance actions for updating the treatment plant to meet the final effluent limits for summer Ammonia, winter Ammonia, and pH, and added new requirements to submit interim status reports;
- Updated the Monitoring Locations section to include an updated treatment plant flow diagram and a proposed treatment plant flow diagram;
- Updated the Recording, Reporting and Additional Monitoring Requirements section with information on NetDMR;
- Added the following requirements in a new Schedule of Submittals:
 - Submission of an annual Water Treatment Chemical (WTC) Report Form;
 - Submission of an Annual Flow Certification form;
 - Submission of Biennial Pollutant Scan with the next NY-2A application;
 - Submission of short-term high intensity monitoring sample results for total dissolved solids and total unchlorinated phenols;
 - Submission of WET testing during calendar years ending in 4 and 9;
 - Submission of the Mercury Conditional Exclusion Certification every five (5) years;
 - Completion of a Mercury Minimization Program Annual Status Report (maintained onsite).

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

Administrative History

- 4/1/2005 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 4/1/2010. The 2005 permit, along with all subsequent modifications, has formed the basis of this proposed permit.
- The 2005 permit was administratively renewed in 2010 and again in 2015. The last permit administrative renewal was effective until 3/31/2020.
- 12/1/2017 The permit was modified to include new disinfection effluent limitations and a new Schedule of Compliance.
- 8/30/2019 The Town submitted a Preliminary Engineering Report (PER) for the construction of units to comply with the new disinfection requirements and for general upgrades to the facility.
- 3/31/2020 The permittee submitted a timely and sufficient application for renewal. Therefore, the 2005 permit remained in effect pursuant to SAPA¹.
- 5/12/2020 The Town of Thompson submitted a request to modify the permit to extend the deadlines within the Schedule of Compliance from the 2017 modification.
- 9/3/2021 The Department issued a Notice of Incomplete Application to the permittee.
- 12/28/2021 The Town of Thompson submitted Engineering Plans and Specifications for the disinfection upgrades and general facility upgrades.
- 1/28/2022 The Town of Thompson submitted a sufficient NY-2A permit application.
- 9/20/2022 The Town of Thompson requested a consolidated schedule of compliance for the disinfection construction and upgrading the facility.

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 publicly owned treatment works that receives flow from domestic users, with effluent consisting of treated sanitary. The collection system consists of separate sewers. The facility does not have any significant industrial users (SIUs).

The existing 2.0 MGD treatment plant consists of:

- Preliminary Treatment: Manual bar screen, grit remover.
- Secondary Treatment: Oxidation ditches, clarifiers.

¹ State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(I)

Permittee: Town of Thompson
Facility: Consolidated Kiamesha Sewer District
SPDES Number: NY 003 0724
USEPA Major/Class 05 Municipal

Date: January 4, 2023 v.1.11
Permit Writer: Alison Wasserbauer
Water Quality Reviewer: Alison Wasserbauer
Full Technical Review

- Tertiary Treatment: Polishing lagoon, sand filter.

The proposed 2.0 MGD treatment plant will consist of:

- Preliminary Treatment: Manual bar screen, grit remover.
- Secondary Treatment: Oxidation ditches, clarifiers.
- Tertiary Treatment: Polishing lagoon, sand filter.
- Disinfection: Ultraviolet (UV) disinfection units.

Sludge is digested aerobically, dewatered or laid onto drying beds, and then hauled to a landfill.

The primary outfall (Outfall 001) is an 18 in. pipe that is located at the bank of Kiamesha Creek and is partially submerged at normal flow conditions.

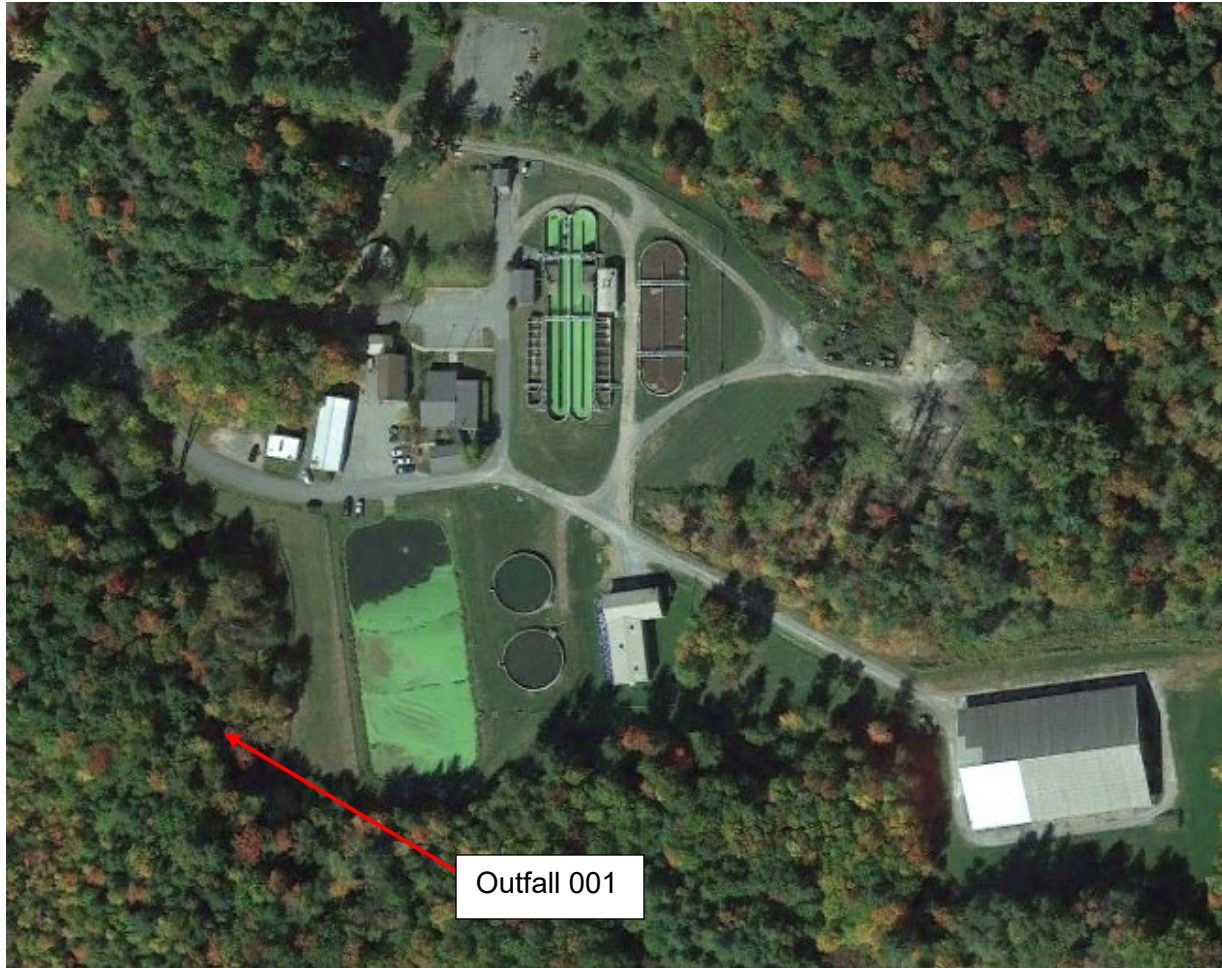
The facility is planning the following upgrades/improvements:

- Adding new UV disinfection treatment units;
- Update plant units including the existing activated sludge process, SCADA system, and solids handling/digestion process;
- Update buildings, electrical, and HVAC.

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
Town of Thompson	NY 003 0724	Separate

Site Overview



Enforcement History

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

Existing Effluent Quality

The [Pollutant Summary Table](#) presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 2/1/2017 to 2/28/2022. [Appendix Link](#)

Interstate Water Pollution Control Agencies

Outfall(s) 001 is located within the Delaware River Basin Commission (DRBC) compact area which means there are additional, area-specific requirements in the SPDES permit. The Department and DRBC have a revised Memorandum of Agreement for shared waterbodies dated March 2016. The agreement states that both the Department and DRBC have authority and existing standards, rules, regulations, and programs to govern activities within the Delaware River Basin. The agreement also sets the "One Process and One Permit" condition where the Department leads the process for wastewater discharges through the issuance of a single SPDES permit that covers all of the standards, rules, and requirements of both parties with the DRBC providing information and requirements to the Department on each facility through the issuance

of individual dockets. For a copy of the MOA, see <https://www.nj.gov/drbc/about/regulations/administrative-agreements.html>. Docket No. D-89-11 CP includes the requirements pertaining to the Consolidated Kiamesha Sewer District and is available upon request [Appendix Link](#)

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4952	Treated Sanitary	Kiamesha Creek, Class C

Reach Description: Kiamesha Creek (D-1-38-3) is a tributary of Sheldrake Stream and is part of the Delaware River Basin watershed. The segment of Kiamesha Creek at the point of discharge is classified as C (6 NYCRR 815.6 – Table I – Item 102). The classification changes to B in Kiamesha Creek approximately 2.2 miles downstream of the discharge (6 NYCRR 815.6 – Table I – Item 101).

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

Impaired Waterbody Information

The Kiamesha Creek segment (PWL No. 1402-0005) is not listed on the 2018 [New York State Section 303\(d\) List](#) of Impaired/TMDL Waters, and therefore, there are no applicable wasteload allocations (WLAs) for this discharge.

Critical Receiving Water Data & Mixing Zone

Intermittent stream effluent limits (ISEL) have been applied because the facility is located at the headwaters of the stream. Consistent with TOGS 1.3.1, the water quality standards will be applied as end-of-pipe limitations with no mixing zone 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

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

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

The requirement for WET testing is new. No previous WET data was available to perform a reasonable potential analysis. Consistent with TOGS 1.3.2, given the dilution available and location outside of the Great Lakes basin, the permit requires chronic WET testing. WET testing action levels of 0.30 TUa and 1.0 TUC have been included in the permit for each species. The acute dilution ratio is less than 3.3 and the acute action level has been set equal to the default value of 0.30 TUa. The chronic action levels represent the chronic dilution ratio. Samples will be

collected quarterly during years ending in 4 and 9.

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)² determination. [Appendix Link](#)

Discharge Notification Act Requirements

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

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

Stormwater Pollution Prevention Requirements

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

BMPs consistent with requirements contained in the NYS MSGP (GP-0-17-004) Sector T, have been included in the permit. This requirement is new.

Mercury³

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

The facility is not located within the Great Lakes Basin and does not have a mercury source. On 1/27/2022, 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. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and will continue to have mercury effluent limitations to satisfy anti-backsliding. The daily max effluent limitation will decrease from 50 ng/L to 12 ng/L (sampled yearly). The [Schedule of Additional Submittals](#) includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. This requirement is updated from the previous permit.

Biennial Pollutant Scan

Three effluent samples for applicable parameters must be submitted with an NY-2A Application⁴. The permit includes a requirement to perform biennial sampling (once every two years) of the WWTP effluent for the parameters in the NY-2A Application, Tables A – D. This requirement ensures the data is representative of effluent conditions over the permit term and will be available for the next application submittal and permit review. This requirement is new.

² As prescribed by 6 NYCRR Part 617

³ In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

⁴ Pursuant to 40 CFR 122.21(j)(4)(vi).

Schedule(s) of Compliance

A Schedule of Compliance is being included⁵ for the following items ([Appendix Link](#)):

- Submittal of interim compliance status reports.
- Submittal of an approvable Preliminary Engineering Report (PER) which identifies a preferred alternative that will allow the facility to comply with the final effluent limitations for Fecal Coliform, pH, and Ammonia (as N). The PER must meet the requirements of the EFC/DEC Engineering Report Outline.
 - A major modification to the treatment facility or operations is needed and will take a significant amount of time to properly plan, design, fund, and construct.
 - The permittee has been advancing the project but experienced delays to fully evaluate the facility and prepare a comprehensive upgrade project in conjunction with the disinfection upgrade.
- Submittal of approvable Design Documents, including a Basis of Design Report (BODR), Plans & Specifications, and a Construction Schedule to comply with final effluent limitations for Fecal Coliform, pH, and Ammonia (as N).
 - A major modification to the treatment facility or operations is needed and will take a significant amount of time to properly plan, design, fund, and construct.
 - The permittee has been advancing the project but experienced delays to fully evaluate the facility and prepare a comprehensive upgrade project in conjunction with the disinfection upgrade.

Schedule(s) of Additional Submittals

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

- Submission of an annual Water Treatment Chemical (WTC) Report Form;
- Submission of an Annual Flow Certification form;
- Submission of Biennial Pollutant Scan with the next NY-2A application;
- Submission of short-term high intensity monitoring sample results for total dissolved solids and total unchlorinated phenols;
- Submission of WET testing during calendar years ending in 4 and 9;
- Submission of the Mercury Conditional Exclusion Certification every five (5) years;
- Completion of a Mercury Minimization Program Annual Status Report (maintained onsite).

⁵ Pursuant to 6 NYCRR 750-1.14

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	41° 39' 41" N	74° 39' 49.5" W	Kiamesha Creek	C	D-1-38-3 PWL: 1402-0005	14 / 02	62 ⁶	-	-	-	2.0	-	-	-

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	Description of Wastewater: Treated Sanitary														
		Type of Treatment: Manual bar screen, grit remover, oxidation ditches, clarifiers, polishing lagoon, sand filter														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ⁷	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: Existing discharge data from February 1, 2017 to February 28, 2022 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.																
Flow Rate	MGD	Monthly Avg	Monitor	0.40 Actual Average	60 / 0	2.0	TOGS 1.3.3	Narrative						6NYCRR 703.2	-	TBEL
		12 MRA	2.0	0.40 Actual Average	60 / 0	-	TOGS 1.3.3									
Consistent with TOGS 1.3.3, the 12-month rolling average (12 MRA) flow limit is being discontinued while a monthly average flow limitation equal to the average daily design capacity of the treatment plant is specified.																
pH	SU	Minimum	6.0	6.0 Actual Min	60 / 0	6.0	TOGS 1.3.3 / DRBC ⁸	-	-	6.5 – 8.5	Range	6.5 - 8.5	6NYCRR 703.3	-	WQBEL	
		Maximum	9.0	8.9 Actual Max	60 / 0	9.0										
Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given that adequate dilution is not available, an effluent limitation equal to the WQS is appropriate.																
Temperature	°F	Daily Max	Monitor	64 Actual Average	60 / 0	Monitor	750-1.13 Monitor	-	Narrative				6NYCRR 704.2	-	TBEL	

⁶ Ambient hardness data obtained from RIBS Site ID 14-KIAM-0.1.

⁷ Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

⁸ Docket No. D-89-11 CP

Permittee: Town of Thompson
 Facility: Consolidated Kiamesha Sewer District
 SPDES Number: NY 003 0724
 USEPA Major/Class 05 Municipal

Date: January 4, 2023 v.1.11
 Permit Writer: Alison Wasserbauer
 Water Quality Reviewer: Alison Wasserbauer
 Full Technical Review

Outfall #	Description of Wastewater: Treated Sanitary														
	Type of Treatment: Manual bar screen, grit remover, oxidation ditches, clarifiers, polishing lagoon, sand filter														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁷	# 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		
Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit.															
Dissolved Oxygen (DO)	mg/L	Daily Min	7.0	7.0 Actual Min	60 / 0	7.0	Antibacksliding	-	5.6	4.0 mg/L	Narrative	7.0	TOGS 1.3.1	-	TBEL
	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 effluent limitations represent the highest degree of treatment that can reasonably be achieved by a wastewater treatment facility treating domestic type waste. The TBELs are sufficient to protect water quality.														
Ultimate Oxygen Demand (UOD)	mg/L	Daily Max	15.3	214	22 / 3	15	DRBC	-	See Dissolved Oxygen	No RP	6NYCRR 703.3	-	-	TBEL	
	lbs/d	Daily Max	260	878	25 / 0	250	Antibacksliding	-		-					
The TBELs reflect limitations set in the DRBC docket (Docket No. D-89-11 CP). The downstream summer DO concentration was modeled using Streeter-Phelps equations assuming a discharge at the existing summertime UOD limit of 15.3 mg/L and an ISEL DO concentration of 7.0 mg/L. Streeter Phelps modeling showed that DO standards are maintained and the TBELs are protective of water quality. With the summer ammonia limit revised, the required CBOD ₅ concentration required to maintain the current summer UOD limit remains under the required 5.0 mg/L ISEL concentration in TOGS 1.3.1 for discharges to streams where little to no streamflow is available for dilution. Therefore, the summertime UOD TBEL will continue.															
Ultimate Oxygen Demand (UOD)	mg/L	Daily Max	32	96	16 / 19	32	DRBC	-	See Dissolved Oxygen	No RP	6NYCRR 703.3	-	-	TBEL	
	lbs/d	Daily Max	530	816	15 / 20	530	Antibacksliding	-		-					
The TBELs reflect limitations set in the DRBC docket (Docket No. D-89-11 CP). The downstream winter DO concentration was modeled using Streeter-Phelps modeling assuming a discharge at the existing wintertime UOD limit of 32 mg/L and an ISEL DO concentration of 7.0 mg/L. Streeter Phelps modeling showed that DO standards are maintained and the TBELs are protective of water quality. Due to monitoring Total Kjeldahl Nitrogen (TKN) year-round for DRBC Upper Delaware Special Protection Waters requirements, UOD limitations equal to the TBELs are specified.															
5-day Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	mg/L	Daily Max	Monitor	18	15 / 10	Monitor	6 NYCRR 750-1.13 / DRBC	-	See Dissolved Oxygen	5.0	TOGS 1.3.1	-	-	TBEL	
	lbs/d	Daily Max	Monitor	93	25 / 0	Monitor	6 NYCRR 750-1.13			83					
	% Rem	Minimum	-	-	-	85	TOGS 1.3.3			-					
The TBELs reflect requirements for antibacksliding, TOGS 1.3.3, and limitations set in the DRBC docket (Docket No. D-89-11 CP). 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. With the summer ammonia limit revised, the required CBOD ₅ concentration required to maintain the current summer UOD limit, as required in the DRBC docket, remains under the required 5.0 mg/L ISEL concentration. Therefore, the limitations equal to the TBELs are specified and are sufficient to protect water quality, including a new percent removal minimum of 85% consistent with TOGS 1.3.3.															
5-day Carbonaceous Biochemical Oxygen	mg/L	Daily Max	Monitor	12	19 / 16	Monitor	6 NYCRR 750-1.13 / DRBC	-	See Dissolved Oxygen	5.0	TOGS 1.3.1	-	-	TBEL	
	lbs/d	Daily Max	Monitor	80	34 / 1	Monitor	6 NYCRR 750-1.13			83					

Outfall #	Description of Wastewater: Treated Sanitary														
	Type of Treatment: Manual bar screen, grit remover, oxidation ditches, clarifiers, polishing lagoon, sand filter														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁷	# 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		
Demand (CBOD ₅)	% Rem	Minimum	-	-	-	85	TOGS 1.3.3								
Nov. 1 st – May 31 st	The TBELs reflect TOGS 1.3.3 and limitations set in the DRBC docket (Docket No. D-89-11 CP). The downstream DO concentration was modeled using the Streeter-Phelps equations (see winter UOD narrative for details on the modeling assumptions). Monitoring of CBOD ₅ has been continued to support permit limitations for UOD. Consistent with TOGS 1.3.3, a percent removal minimum of 85% is also specified. The TBELs are sufficient to protect water quality.														
Total Suspended Solids (TSS)	mg/L	Daily Max	10	29	18 / 42	10	Antibacksliding / DRBC	-	Narrative		10	TOGS 1.3.1	-	TBEL	
	lbs/d	Daily Max	170	97	60 / 0	170	Antibacksliding								
	% Rem	Minimum	-	-	-	85	TOGS 1.3.3								
The TBELs reflect requirements for antibacksliding, TOGS 1.3.3, and limitations set in the DRBC docket (Docket No. D-89-11 CP). Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. The TBEL is sufficiently protective of water quality and effluent limitations equal to the TBEL are specified. Consistent with TOGS 1.3.3, a percent removal minimum of 85% is also specified.															
Settleable Solids	mL/L	Daily Max	0.1	0	60 / 0	0.1	Antibacksliding/ TOGS 1.3.1. B	-	Narrative		-	6NYCRR 703.2	-	TBEL	
	Consistent with TOGS 1.3.1.B discharges to intermittent streams should receive the highest degree of treatment that can reasonably be achieved by practical technology. An effluent limitation equal to 0.1 mL/L daily max is therefore appropriate. The TBEL is sufficiently protective of water quality.														
Total Dissolved Solids	mg/L	Daily Max	-	479	1 / 0	Monitor	6NYCRR750-1.13	-	2700	500	Narrative	500	6NCYRR 703.3	-	TBEL
	The projected instream concentration was calculated using a projected effluent of 479 mg/L as reported on the Application 2A for Outfall 001 and an ambient upstream concentration of 0 mg/L. A multiplier ⁹ of 6.2 was included in calculating the projected instream concentration due to the limited amount of data (1 data point). A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. Due to the limited amount of data, quarterly monitoring is specified per DRBC requirements, and a short-term high intensity monitoring (STHIM) program has been added the schedule of submittals.														
Nitrogen, Ammonia (as N)	mg/L	Monthly Avg	1.4	22	4 / 21	1.4	Antibacksliding	0.082	25	1.2	A(C)	1.2	TOGS 1.1.1	-	WQBEL
	The WQS for Ammonia was determined from TOGS 1.1.1 from a summer pH of 7.7 and a temperature of 25 °C. The pH and temperature of the receiving waterbody were assumed values and consistent with TOGS 1.3.1E. The projected instream concentration was calculated using the maximum reported effluent concentration of 21 mg/L and an ambient upstream concentration of 0.082 mg/L. A multiplier ¹⁰ of 1.3 was applied to the maximum effluent concentration to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL is specified.														
Nitrogen, Ammonia	mg/L	Monthly Avg	2.1	5.4	1 / 34	2.1	Antibacksliding	0.082	5.9	1.9	A(C)	1.9	TOGS 1.1.1	-	WQBEL

⁹ As recommended by EPA's Technical Support Document, Chapter 3.3

¹⁰ As recommended by EPA's Technical Support Document, Chapter 3.3

Permittee: Town of Thompson
 Facility: Consolidated Kiamesha Sewer District
 SPDES Number: NY 003 0724
 USEPA Major/Class 05 Municipal

Date: January 4, 2023 v.1.11
 Permit Writer: Alison Wasserbauer
 Water Quality Reviewer: Alison Wasserbauer
 Full Technical Review

Outfall #	Description of Wastewater: Treated Sanitary														
	Type of Treatment: Manual bar screen, grit remover, oxidation ditches, clarifiers, polishing lagoon, sand filter														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁷	# 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		
(as N) Nov. 1 st – May 31 st	The WQS for Ammonia was determined from TOGS 1.1.1 from a winter pH of 7.7 and a temperature of 10 °C. The pH and temperature of the receiving waterbody were assumed values and consistent with TOGS 1.3.1E. The projected instream concentration was calculated using the maximum reported effluent concentration of 5.4 mg/L and an ambient upstream concentration of 0.082 mg/L. A multiplier ¹¹ of 1.2 was applied to the maximum effluent concentration to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL is specified.														
Total Kjeldahl Nitrogen (as N) (TKN)	mg/L	Daily Max	Monitor	32	45 / 15	Monitor	6 NYCRR 750-1.13 / DRBC	-	See Dissolved Oxygen		-	6NYCRR 703.3	-	TBEL	
Monitoring for TKN is specified for the purpose of UOD calculations as well as to satisfy DRBC Special Protection Waters monitoring requirements.															
Nitrate and Nitrite (as N)	mg/L	Daily Max	-	28	1 / 0	Monitor	DRBC	-	Narrative		No RP	6NYCRR 703.2	-	TBEL	
Monitoring for Nitrate and Nitrite is specified for the purpose of DRBC Special Protection Waters monitoring requirements.															
Total Phosphorus	mg/L	Daily Max	-	1.8	1 / 0	Monitor	DRBC	-	Narrative		No RP	6NYCRR 703.2	-	TBEL	
Consistent with TOGS 1.3.6, and as there is no request for a flow expansion, an effluent limitation for total phosphorus is not required. Monitoring for Total Phosphorus is specified for the purpose of DRBC Special Protection Waters monitoring requirements.															
Total Mercury	ng/L	Daily Max	50	6.6	16 / 0	50	Antibacksliding	-	-	0.7	H(FC)	12	TOGS 1.3.10	-	WQBEL
See Mercury section of this factsheet .															
Coliform, Fecal	#/100 mL	30d Geo Mean	200	-	-	200	TOGS 1.3.3	-	Narrative			6NYCRR 703.4	-	TBEL	
		7d Geo Mean	400	-	-	400	TOGS 1.3.3	-							
Consistent with TOGS 1.3.3, effluent disinfection is required seasonally from May 1st - October 31st, due to the class of the receiving waterbody. Fecal coliform limits equal to the TBEL are specified.															
Total Residual Chlorine (TRC)	mg/L	Daily Max	0.020	-	-	0.020	Antibacksliding	-	-	0.005	A(C)	0.005	6NYCRR 703.5	0.03	WQBEL
Effluent disinfection is currently required seasonally and will remain a permit requirement. The WQBEL was calculated by multiplying the WQS by the chronic dilution ratio. Due to the low dilution, the calculated WQBEL is less than the TBEL and less than the minimum level of detection. The proposed updated facility will be including UV disinfection units. Therefore, effluent limitations for TRC are only applicable if the permittee uses chlorine for other purposes.															
Additional Pollutants Detected															
	µg/L	Daily Max	-	23	1 / 0	-	-	-	130	5.0	E(FS)	5.0	6NYCRR 703.5	-	STHIM

¹¹ As recommended by EPA's Technical Support Document, Chapter 3.3

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Outfall #	001	Description of Wastewater: Treated Sanitary														
		Type of Treatment: Manual bar screen, grit remover, oxidation ditches, clarifiers, polishing lagoon, sand filter														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & QBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ⁷	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. QBEL	Basis for QBEL			
Total Unchlorinated Phenols			Total Unchlorinated Phenols was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum reported effluent concentration of 23 µg/L and an ambient upstream concentration of 0 µg/L. A multiplier ¹² of 6.2 was included in calculating the projected instream concentration due to the limited amount of data (1 data point). A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. Due to the low amount of data available and no industrial users, a short-term high intensity monitoring (STHIM) program has been added to the schedule of submittals to determine if a QBEL is necessary.													

¹² As recommended by EPA's Technical Support Document, Chapter 3.3

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

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

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

Interstate Water Pollution Control Agencies

Some POTWs may be subject to regulations of interstate basin/compact agencies including: Interstate Sanitation Commission (ISC), International Joint Commission (IJC), Delaware River Basin Commission (DRBC), Ohio River Valley Water Sanitation Commission (ORSANCO), and the Susquehanna River Basin Commission (SRBC). Generally, basin commission requirements focus principally on water quality and not treatment technology. However, interstate/compact agency regulations for the ISC, IJC, DRBC and NYC Watershed contain explicit effluent limits which must be addressed during permit drafting. 6 NYCRR 750-2.1(d) requires SPDES permits for discharges that originate within the jurisdiction of an interstate water pollution control agency, to include any applicable effluent standards or water quality standards (WQS) promulgated by that interstate agency.

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(l) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this factsheet. Consistent with current case law¹³ and USEPA interpretation¹⁴ 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.

¹³ American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

¹⁴ 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)

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

Technology-based Effluent Limitations (TBELs)

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

Water Quality-Based Effluent Limitations (WQBELs)

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

Mixing Zone Analyses

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

"EPA Technical Support Document for Water Quality-Based Toxics Control" (March 1991); EPA Region VIII's "Mixing Zones and Dilution Policy" (December 1994); NYSDEC TOGS 1.3.1, "Total

Maximum Daily Loads and Water Quality-Based Effluent Limitations” (July 1996); “CORMIX v11.0” (2019).

Critical Flows

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

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

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

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

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

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

Whole Effluent Toxicity (WET) Testing:

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

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

Minimum Level of Detection

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

Monitoring Requirements

CWA section 308, 40 CFR 122.44(i), 6 NYCRR 750-1.13, and 750-2.5 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and reporting results on Discharge Monitoring Reports (DMRs). The permit contains the monitoring

requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance and characterize the nature of the discharge of the monitored flow or pollutant. Variable effluent flows and pollutant levels may be required to be monitored at more frequent intervals than relatively constant effluent flow and pollutant levels (6 NYCRR 750-1.13). For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

Other Conditions

Mercury

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

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

Schedules of Compliance

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

Schedule(s) of Additional Submittals

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