AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION
ONE NATIONAL LIFE DRIVE, DAVIS BUILDING, 3rd FLOOR
MONTPELIER, VT 05620-3522

Permit Number: **3-1254**
PIN: **EJ93-0004**
NPDES Number: **VT0100111**

| | |
|---|---|
| Facility Name: | **Essex Junction WWTF** |
| Facility Address: | **35 Cascade St**<br>**Essex Junction VT 05452** |
| Coordinates: | Lat: **44.4810** Long: **-73.1209** |
| Facility Classification: | **5 Domestic Major** |
| Permittee Name: | ***City* of Essex Junction** |
| Permittee Address: | **2 Lincoln Street**<br>**Essex Junction, VT 05452** |

| | | | |
|---|---|---|---|
| Co-Permittee Name: | **Town of Williston** | Co-Permittee Name: | **Town of Essex** |
| Co-Permittee Address: | **722 Williston Road**<br>**Williston, VT 05495** | Co-Permittee Address: | **81 Main Street**<br>**Essex, VT 05452** |

| | |
|---|---|
| Expiration Date: | **June 30, 2026** |
| Reapplication Date: | **December 31, 2025** |

In compliance with the provisions of the Vermont Water Pollution Control Act as amended (10 V.S.A., Chapter 47), the Vermont Water Pollution Control Permit Regulations as amended (Environmental Protection Rules, Chapter 13), and the federal Clean Water Act as amended (33 U.S.C. § 1251 *et seq*.), and implementing federal regulations, the Permittee, the ***City*** of Essex Junction, and Co-Permittees, the Town of Williston, the Town of Essex (hereinafter referred to as the "Permittee and Co-Permittees" or "Permittees") is authorized by the Secretary of the Agency of Natural Resources (hereinafter referred to as the "Secretary") to discharge from the Essex Junction Wastewater Treatment Facility (hereinafter referred to as the "WWTF") to the, Winooski River, in accordance with the following conditions.

This ***amended*** permit shall be effective on ***9/1/2022***.

Julia S. Moore, Secretary
Agency of Natural Resources

By: Date 8/24/2022

Amy Polaczyk, Wastewater Program Manager
Watershed Management Division

# I. PERMIT SPECIAL CONDITIONS

## A. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

1. **Discharge Point S/N 001, Lat. 44.47932, Long. -73.12040:** During the term of this permit, the Permittee is authorized to discharge from outfall S/N 001 of the Essex Junction WWTF to the Winooski River, an effluent for which the characteristics shall not exceed the values listed below:

| **Discharge Monitoring** | | | | | | |
|---|---|---|---|---|---|---|
| **Constituent; Sampling Point and Sample Type** | **Season and Sampling Frequency** | **Quantity** | **Quantity** | **Conc.** | **Conc.** | **Conc.** |
| **Flow; Effluent; Continuous** | **Year Round Daily** | **Monitor mgd Monthly Avg** | | | | |
| **BOD, 5-Day; Effluent; 8 Hour Comp** | **Year Round Weekly** | **688 lbs/day Monthly Avg** | **1032 lbs/day Weekly Avg** | **30 mg/l Monthly Avg** | **45 mg/l Weekly Avg** | **50 mg/l Daily Max** |
| **BOD, 5-Day; Influent; 8 Hour Comp** | **Year Round Monthly** | | | **Monitor mg/l Monthly Avg** | | |
| **Chlorine, Total Residual; Effluent; Grab** | **Year Round Daily** | | | | | **0.1 mg/l Instant Max** |
| **Copper, Total; Effluent; 8 Hour Comp** | **Year Round Monthly** | | **Monitor lbs/day Daily Max** | | | **Monitor mg/l Daily Max** |
| **Copper, Total; Influent; 8 Hour Comp** | **01/01 - 03/31 Quarterly** | | **Monitor lbs/day Daily Max** | | | **Monitor mg/l Daily Max** |
| **Copper, Total; Influent; 8 Hour Comp** | **04/01 - 06/30 Quarterly** | | **Monitor lbs/day Daily Max** | | | **Monitor mg/l Daily Max** |
| **Copper, Total; Influent; 8 Hour Comp** | **07/01 - 09/30 Quarterly** | | **Monitor lbs/day Daily Max** | | | **Monitor mg/l Daily Max** |
| **Copper, Total; Influent; 8 Hour Comp** | **10/01 - 12/31 Quarterly** | | **Monitor lbs/day Daily Max** | | | **Monitor mg/l Daily Max** |

| Discharge Monitoring Continued | | | | | | |
|---|---|---|---|---|---|---|
| **Constituent; Sampling Point and Sample Type** | **Season and Sampling Frequency** | **Quantity** | **Quantity** | **Conc.** | **Conc.** | **Conc.** |
| **E. Coli; Effluent; Grab** | **Year Round Weekly** | | | | | **77 #/100 ml Instant Max** |
| **Nitrite Plus Nitrate Total; Effluent; 8 Hour Comp** | **11/01 - 05/31 Monthly** | | **Monitor lbs/day Daily Max** | | | **Monitor mg/l Daily Max** |
| **Nitrite Plus Nitrate Total; Effluent; 8 Hour Comp** | **06/01 - 10/31 Weekly** | **Monitor lbs/day Monthly Avg** | **Monitor lbs/day Daily Max** | **Monitor mg/l Monthly Avg** | | **Monitor mg/l Daily Max** |
| **Nitrogen, Kjeldahl Total; Effluent; 8 Hour Comp** | **11/01 - 05/31 Monthly** | | **Monitor lbs/day Daily Max** | | | **Monitor mg/l Daily Max** |
| **Nitrogen, Kjeldahl Total; Effluent; 8 Hour Comp** | **06/01 - 10/31 Weekly** | **Monitor lbs/day Monthly Avg** | **Monitor lbs/day Daily Max** | **Monitor mg/l Monthly Avg** | | **Monitor mg/l Daily Max** |
| **Nitrogen, Total; Effluent; Calculated** | **11/01 - 05/31 Monthly** | | **Monitor lbs/day Daily Max** | | | **Monitor mg/l Daily Max** |
| **Nitrogen, Total; Effluent; Calculated** | **06/01 - 10/31 Weekly** | **Monitor lbs/day Monthly Avg** | **Monitor lbs/day Daily Max** | **Monitor mg/l Monthly Avg** | | **Monitor mg/l Daily Max** |
| **pH; Effluent; Grab** | **Year Round Daily** | | | **6.5 s.u. Min** | | **8.5 s.u. Max** |
| **Phosphorus, Total; Effluent; Calculated** | **Year Round Monthly** | **Monitor lbs Annual Total** | **Monitor lbs Monthly Total** | **Monitor % Monthly Total** | | |
| **Phosphorus, Total; Effluent; 8 Hour Comp** | **Year Round Weekly** | | | **0.8 mg/l Monthly Avg** | | |
| **Septage Received; Influent; Recorder Total** | **Year Round Daily** | | **Monitor gallons Monthly Total** | | | |

| Discharge Monitoring Continued | | | | | | |
|---|---|---|---|---|---|---|
| **Constituent; Sampling Point and Sample Type** | **Season and Sampling Frequency** | **Quantity** | **Quantity** | **Conc.** | **Conc.** | **Conc.** |
| **Settleable Solids; Effluent; Grab** | **Year Round Daily** | | | | | **1 ml/l Instant Max** |
| **Suspended Solids, Total; Effluent; 8 Hour Comp** | **Year Round Weekly** | **688 lbs/day Monthly Avg** | **1032 lbs/day Weekly Avg** | **30 mg/l Monthly Avg** | **45 mg/l Weekly Avg** | **50 mg/l Daily Max** |
| **Suspended Solids, Total; Influent; 8 Hour Comp** | **Year Round Monthly** | | | **Monitor mg/l Monthly Avg** | | |
| **Ultimate Oxygen Demand; Effluent; Calculated** | **06/01 - 10/31 Weekly** | | **1820 lbs/day Daily Max** | | | |
| **Zinc; Effluent; 8 Hour Comp** | **Year Round Monthly** | | **Monitor lbs/day Daily Max** | | | **Monitor mg/l Daily Max** |
| **Additional Monitoring** | | | | | | |
| **Constituent; Sampling Point and Sample Type** | **Season and Sampling Frequency** | **Quantity** | **Quantity** | **Conc.** | **Conc.** | **Conc.** |
| **Flow; Annual Average; Calculated** | **12/01 - 12/31 Annual** | **3.3 mgd Annual Avg** | | | | |
| **BOD, 5-Day (%R); Percent Removal; Calculated** | **Year Round Monthly** | | | **85 % Monthly Min** | | |
| **Phosphorus, Total; Annual Average; Calculated** | **12/01 - 12/31 Annual** | **2008 lbs/yr Annual Total** | | | | |
| **Suspended Solids, Total (%R); Percent Removal; Calculated** | **Year Round Monthly** | | | **85 % Monthly Min** | | |

2. **Discharge Sampling Points**

a) Effluent sampling: The effluent sampling shall be taken after the weir following the dechlorination contact tank before discharging to the Winooski River at River Mile 17-2 on the northerly bank.

b) Influent sampling: The influent sample shall be taken in the headworks within the widest opening of the influent channel and after the fine screen, but before the first Equalization Tank (EQ).

3. **Discharge Special Conditions**

a) The Ultimate Oxygen Demand (UOD) limitation is only effective from June 1 through October 31 annually. UOD shall be calculated using the Total Kjeldahl Nitrogen (TKN) load by the following formula:

$$\text{UOD lbs.} = ((\text{BOD lbs.} \times 1.43) + (\text{TKN lbs.} \times 4.57))$$

b) The Permittee shall operate the facility to meet the concentration limitations or pounds limitation, whichever is more restrictive.

c) The monthly average concentrations of Biochemical Oxygen Demand (BOD5) and Total Suspended Solids (TSS) in the effluent shall not exceed 15 percent of the monthly average concentrations of BOD5 and TSS in the influent into the WWTF.

d) Total Annual Pounds of Phosphorus discharged shall be defined as the sum of all the Total Monthly Pounds of Phosphorus discharged for the calendar year. Total Monthly Pounds of Phosphorus discharged shall be calculated as follows:

$$(\text{Monthly Average Phosphorus Concentration}) \times (\text{Total Monthly Flow}) \times 8.34$$

(See required Total Phosphorus monitoring report form WR-43-TP to report monthly totals)

e) Total Nitrogen (TN) shall be monitored and reported as pounds, via a CWA approved method. An example would be using the sum of Nitrate/Nitrite (NOx) and TKN concentrations to find TN, which would by calculated as:

$$\text{Average TN (mg/L)} \times \text{Total Daily Flow (MGD)} \times 8.34\text{; where,}$$

$$\text{TN (mg/L)} = \text{TKN (mg/L)} + \text{NOx (mg/L)}\text{; and where,}$$

$$\text{NOx (mg/L)} = \text{NO3 (mg/L)} + \text{NO2 (mg/L)}$$

f) The Permittee (***City*** of Essex Junction) shall be solely responsible for the proper operation and maintenance of the Permittee's pump stations and collection system, the enforcement of Permittee's sewer use ordinance, and the proper operation and maintenance of the ***City*** of Essex Junction Wastewater Treatment Facility.

The Co-Permittee, Town of Essex, shall be solely responsible for the proper operation and maintenance of that Town's pump stations and collection system, and for the enforcement of that Town's sewer use ordinance.

The Co-Permittee, Town of Williston, shall be solely responsible for the proper operation and maintenance of that Town's pump stations and collection system, and for the enforcement of that Town's sewer use ordinance.

g) The discharge shall be free from substances of any kind or quantity that settle to form harmful benthic deposits; float as foam, debris, scum or other visible substances; produce odor, color, taste or turbidity that is not naturally occurring and would render the surface water unsuitable for its designated uses; result in the dominance of nuisance species; or interfere with recreational activities; or which would cause a violation of the Vermont Water Quality Standards.

h) If the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the permitted flow limitation, the Permittee shall submit to the Secretary projected loadings and a program for maintaining satisfactory treatment levels.

i) Any action on the part of the Secretary in reviewing, commenting upon or approving plans and specifications for the construction of WWTFs shall not relieve the Permittee and Co-Permittees from the responsibility to achieve effluent limitations set forth in this permit and shall not constitute a waiver of, or act of estoppel against any remedy available to the Secretary, the State of Vermont or the federal government for failure to meet any requirement set forth in this permit or imposed by state or federal law.

j) Composite samples for BOD5, Total Suspended Solids (TSS), Total Phosphorus, TKN, NOx, Total Copper, and Total Zinc shall be taken during the hours 6:00 a.m. to 6:00 p.m., unless otherwise specified. Eight hours is the minimum and 24 hours is the maximum period for the composite.

k) Settleable Solids samples shall be collected during the period of peak flow.

l) Escherichia coli (E. coli) grab samples shall be collected between the hours of 6:00 a.m. to 6:00 p.m. E. coli sampling shall coincide with TRC sampling.

m) For the purposes of compliance with this permit, Total Residual Chlorine (TRC) analysis must be completed using a test method in 40 C.F.R. § 136 that achieves a minimum level (ML) no greater than 0.1 mg/L.

TRC monitoring is required whenever chlorine is added to the treatment process and shall be monitored and recorded both prior to and following dechlorination. If there are months when chlorine is not added to the treatment system, a no data indicator (NODI) of 9 “Conditional Monitoring” shall be reported on the monthly discharge monitoring report.

n) The Permittee shall demonstrate the accuracy of the effluent flow measurement device weekly and report the results on the monthly report forms. The acceptable limit of error is ± 10%.

o) Monthly average flow shall be calculated by summing the daily effluent flow for each day in the given month and dividing the sum by the number of days of discharge in that month.

## B. WASTE MANAGEMENT ZONE

In accordance with 10 V.S.A. § 1252, this permit hereby establishes a waste management zone that extends from the outfall of the WWTF in the Winooski River downstream 1.00 mile(s).

## C. ANNUAL CONSTITUENT MONITORING

1. Unless monitoring more frequently than annually, the Permittee shall monitor outfall serial number S/N 001 and submit the results, including units of measurement, as an attachment to the DMR form WR-43 for the month in which the samples were taken for the following parameters:

   Ammonia (as N)

   Dissolved Oxygen

   Oil & Grease

Total Dissolved Solids

2. Grab samples shall be used for Temperature, Ammonia, Dissolved Oxygen, and Oil & Grease. Total Dissolved Solids shall be collected as a composite sample. Samples shall be representative of the seasonal variation in the discharge.

3. In the event this permit is administratively continued pursuant to 3 V.S.A. § 814, the Permittee shall continue annual monitoring of the above parameters on a schedule that assures samples are representative of the seasonal variation in the discharge and report by January 15th each year.

4. The Permittee shall sample and report according to the following table:

| Due Date | Event Description |
|---|---|
| 1/15/2022 | The Permittee shall submit the results from Annual Constituent Monitoring for the previous year. |
| 1/15/2023 | The Permittee shall submit the results from Annual Constituent Monitoring for the previous year. |
| 1/15/2024 | The Permittee shall submit the results from Annual Constituent Monitoring for the previous year. |
| 1/15/2025 | The Permittee shall submit the results from Annual Constituent Monitoring for the previous year. |
| 1/15/2026 | The Permittee shall submit the results from Annual Constituent Monitoring for the previous year. |

## D. COPPER ASSESSMENT

Effluent monitoring data indicate cumulative loading of copper (Cu) to the Lower Winooski River may approach the assimilative capacity of the section of the river downstream of the Essex 19 Dam. To address this issue, the Secretary requires municipal WWTFs discharging to this section of river to collect influent and effluent copper data using a more sensitive method to better assess the scope of the issue and to conduct an Industrial Waste Survey.

1. To assure self-reported data accurately quantifies the amount of copper discharged, effluent copper analyses shall be carried out using a method that assures a Method Detection Limit (MDL) of 0.006 mg/L or lower. This level of detection may be achieved using EPA methods 200.7 and 200.8 listed in 40 C.F.R. Part 136 which have estimated detection limits of 0.0054 mg/L and 0.004 mg/L, respectively.

2. Influent copper shall be measured on a quarterly basis to assess the Cu loading from the collection system as well as hauled wastes received. Sufficiently sensitive test methods shall be employed to assure the influent data collected are quantifiable above the MDL of the test method used.

3. The Permittee and Co-Permittees shall submit to the Secretary the Industrial Waste Survey report that, at a minimum, includes the following:

a) Background Cu concentration expected in the drinking water based on the drinking water utility reports.

b) ***A list of users to whom the WWTF sent a Copper Survey form and copies of any returned forms. The list of users shall be derived by the Permittee or Co-Permittees and the Agency as follows:***

***The list shall include Permitted Significant Industrial Users, if any, waste haulers, and any business requested by the Agency, that the Agency believes may have a reasonable potential to discharge copper into the municipal collection systems in amounts above typical domestic sewage. This list should also include businesses known to the Agency, the Permittee, or either Co-Permittee to be engaged in metal manufacturing and/or metal finishing, textile dyeing, printing, cosmetics and/or soap manufacturing, copper root treatment, or any other process the Agency reasonably believes to discharge elevated amounts of copper into the municipal collection system. Agency staff and the Permittee and Co-Permittees shall coordinate to develop an agreed upon list of industrial users to whom the WWTF shall send the Copper Survey form in advance of the Industrial Waste Survey Report date.***

4. If a new industry that may contribute significant amounts of copper connects to the system, or an existing industry proposes an expansion which has the potential to contribute copper to their discharge, the Permittee and Co-Permittees shall notify the Secretary prior to its connection as required in Condition II.D.2 of this permit.

5. The Permittee and Co-Permittees shall report according to the following table:

| Due Date | Event Description |
|---|---|
| 8/1/2023 | The Permittee and Co-Permittees shall submit results of Industrial Waste Survey. |

## E. EMERGENCY POWER FAILURE PLAN

The Permittee, the ***City*** of Essex, and Co-Permittees, the Town of Essex, and the Town of Williston, submitted Emergency Power Failure Plans for jurisdictional sewage collection system, pump stations, and the treatment facility to the Secretary on November 19, 2004. Condition I.A.3.f. specifies each permittee's jurisdictional coverage under this permit. The Permittee and Co-Permittees shall revise and submit these plans within 180 days of the permit effective date.

1. The Permittee and Co-Permittees shall indicate in writing to the Secretary that in the event the primary source of electric power to the WWTF (including pump stations) fails, the Permittee and Co-Permittees shall either provide an alternative source of power for the operation of its WWTF necessary to achieve compliance with Condition II.B.1.a. of this permit, or demonstrate that the treatment facility has the capacity to store the wastewater volume that would be generated over the duration of the longest power failure that would have affected the facility in the last five years, excluding catastrophic events.

   Any back-up or auxiliary systems, whether from a generating unit located at the WWTF or purchased from an independent source of electricity, must be separate from the existing power source used to operate the WWTF. If a separate unit located at the WWTF is to be used, the Permittee and Co-Permittees shall certify in writing to the Secretary when the unit is completed and prepared to generate power.

2. The determination of treatment system storage capacity shall be submitted to the Secretary upon completion.

3. These Plans may be combined and completed in unison with the requirements of Condition I.F for the Operation, Management, and Emergency Response Plan, such that one Plan covers both Conditions I.E and I.F.

4. The Permittee and Co-Permittees shall report according to the following table:

| Due Date | Event Description |
|---|---|
| 1/28/2022 | The Permittee and Co-Permittees shall submit the revised EPFP within 180 days of the permit effective date. |

## F. OPERATIONS MANAGEMENT EMERGENCY RESPONSE PLAN (OMERP)

1. On July 29, 2010, the Secretary approved the Operation, Management, and Emergency Response Plan (OMERP) for the wastewater treatment facility, jurisdictional sewage pumping stations, sewer line stream crossings and sewage collection system submitted by the Permittee, the ***City*** of Essex Junction. The Permittee shall submit the OMERP within 180 days of the permit effective date.

2. On December 3, 2010, the Secretary approved the OMERP for jurisdictional sewage pumping stations, sewer line stream crossings and sewage collection system submitted by the Co-Permittee, the Town of Essex. The Co-Permittee shall submit the OMERP within 180 days of the permit effective date.

3. On July 2, 2010, the Co-Permittee, the Town of Williston submitted an OMERP for their sewage pumping stations, sewer line stream crossings and sewage collection system. On August 26, 2010 the Secretary provided review comments to the Town detailing the insufficiencies in this Plan that must be corrected before it could be approved. The Town of Williston must complete and submit this Plan in accordance with the schedule below.

4. These Plans may be combined and completed in unison with the requirements of Condition I.E for Emergency Power Failure Plan, such that one Plan covers both Conditions I.E and I.F.

5. Upon approval by the Secretary, these Plans shall be implemented. These plans shall comply with the provisions of 10 V.S.A. § 1278, which require:

   a) Identification of those elements of the facility, including collection systems that are determined to be prone to failure based on installation, age, design, or other relevant factors.

   b) Identification of those elements of the facility identified under subdivision (a) of this subsection which, if one or more failed, would result in a significant release of untreated or partially treated sewage to surface waters of the State.

   c) The elements identified in subdivision (b) of this subsection shall be inspected in accordance with a schedule approved by the Secretary.

   d) An emergency contingency plan to reduce the volume of a detected spill and to mitigate the effect of such a spill on public health and the environment.

6. The Permittee and Co-Permittees shall report according to the following table:

| Due Date | Event Description |
|---|---|
| 11/30/2021 | The Town of Williston shall submit their revised OMERP 3 months from the permit effective date. |
| 1/28/2022 | The ***City*** of Essex Junction and Essex Town shall submit the OMERP within 180 days of the permit effective date. |

## G. PHOSPHORUS OPTIMIZATION PLAN

1. Wasteload Allocation for Phosphorus

This permit includes a total phosphorus (TP) water quality based effluent limitation of consistent with the waste load allocation (WLA) for TP, established by the U.S. Environmental Protection Agency (U.S. EPA) in the 2016 "Phosphorus TMDLs for Vermont Segments of Lake Champlain" (LC TMDL). The Secretary reserves the right to reopen and amend this permit to include an alternate TP limitation or additional monitoring requirements based on the monitoring data, the results of phosphorus optimization activities, or a reallocation of phosphorus wasteload allocations between the Permittee and another WWTF pursuant to the requirements of TMDL and Vermont's "Wasteload Allocation Process" Rule (Environmental Protection Rule, Chapter 17).

2. Total Phosphorus Calculations and Reporting

Total Phosphorus shall be reported monthly, via electronic Discharge Monitoring Report, in the following ways:

a) Monthly Average Phosphorus Concentration = The average concentration of phosphorus discharged this monitoring period. (sum of all daily discharges (mg/l) measured during the month divided by the number of daily discharges measured during the month)

b) Total Monthly Pounds Phosphorus = The total pounds of phosphorus discharged this monitoring period. ((Monthly Average Phosphorus Concentration) x (Total Monthly Flows) x 8.34)

c) Running Total Annual Pounds = The 12-month running annual TP load. (Sum the Total Monthly Pounds results for the immediately preceding 12 months)

d) Comparison (%) of Running Total Annual Pounds to Annual Permit Limitation = The percentage of the Running Total Annual Pounds to the Annual TP Limitation. The comparison shall be calculated as:

$$\% = \text{Running Total Annual Pounds} / \text{Annual TP Permit Limit} \times 100$$

3. Phosphorus Optimization Plan

a) The Permittee shall develop or update (as appropriate) and submit to the Secretary a Phosphorus Optimization Plan (POP) to increase the WWTF's phosphorus removal efficiency by implementing optimization techniques that achieve phosphorus reductions using primarily existing facilities and equipment. The POP shall:

   (i) Be developed by a qualified professional with experience in the operation and/or design of WWTFs in consultation with the WWTF;

   (ii) Evaluate alternative methods of operating the existing WWTF, including operational, process, and equipment changes designed to enhance phosphorus removal. The techniques to be evaluated may include operational process changes to enhance biological and/or chemical ***phosphorus*** removal, incorporation of anoxic/anaerobic zones, septage receiving policies and procedures, and side stream management;

   (iii) Determine which alternative methods of operating the existing WWTF, including operational, process, and equipment changes will be most effective at increasing phosphorus removal; and

   (iv) Include a proposed implementation schedule for those methods of operating the WWTF determined to be most effective at increasing phosphorus removal.

b) The Secretary shall review the POP. The Permittee shall commence implementation of the POP 60 days after submittal to the Secretary, unless the Secretary rejects the POP prior to that date.

c) The Permittee shall annually submit a report to the Secretary as an attachment to the monthly electronic Discharge Monitoring Reporting (DMR) form WR-43 that documents:

(i) The optimization techniques implemented under the POP during the previous year.

(ii) Whether the techniques are performing as expected.

(iii) The phosphorus discharge trends relative to the previous year.

4. Phosphorus Reduction and Elimination Plan (PERP)

a) The WWTF shall have 12 months from the permit effective date to optimize removal of TP.

b) If, after the optimization period, the WWTF's actual, TP loads reach or exceed 80% of the annual mass limit for the WWTF, based on the WWTF's 12-month running annual load calculated using the Running Total Annual Pounds Calculation, the Permittee shall, within 90 days of reaching or exceeding 80% of the annual mass limit for the WWTF, develop and submit to the Secretary a projection based on the WWTF's current operations and expected future loadings of whether it will exceed its annual mass limit during the permit term.

c) If the WWTF is not projected to exceed its annual mass limit within the permit term, the WWTF shall reassess when it is projected to reach its annual mass limit prior to permit renewal and submit that information with its next permit application.

d) If the WWTF is projected to exceed its annual mass limit during the permit term, the Permittee shall submit a Phosphorus Elimination/Reduction Plan (PERP) within 6 months from the date of submittal of the projection submitted under Part 2 of this Section. The PERP shall be submitted to the Secretary to ensure the WWTF continues to comply with its annual mass limit.

e) The PERP shall be treated as an application to amend the permit, and therefore, shall be subject to all public notice, hearing, and comment provisions, in place at the time the plan is submitted, that are applicable to permit amendments. The Permittee shall revise the PERP, if required by the Secretary.

f) The PERP shall be developed by qualified professionals in consultation with the WWTF operator. The PERP shall include:

(i) An evaluation of alternatives to ensure the WWTF's compliance with its annual mass limit;

(ii) An identification of the chosen alternative or alternatives to ensure the WWTF's compliance with its annual mass limit;

(iii) A proposed schedule, including an engineer approved design and construction schedule and, if the chosen alternative or alternatives require a pilot study, a schedule for testing, that shall ensure the WWTF's compliance with its annual mass limit as soon as possible; and

(iv) A financing plan that estimates the costs for implementing the PERP and describes a strategy for financing the project.

5. The Permittee shall report according to the following table:

| Due Date | Event Description |
|---|---|
| 11/29/2021 | The Permittee shall submit a POP and implement optimization techniques to achieve reductions in TP. |
| 1/28/2022 | The Permittee shall commence implementation of the POP 60 days after submitting tothe Secretary. |
| 1/31/2022 | The Permittee shall submit an annual report that documents TP trends and optimization techniques employed in 2021. |
| 1/31/2023 | The Permittee shall submit an annual report that documents TP trends and optimization techniques employed in 2022. |
| 1/31/2024 | The Permittee shall submit an annual report that documents TP trends and optimization techniques employed in 2023. |
| 1/31/2025 | The Permittee shall submit an annual report that documents TP trends and optimization techniques employed in 2024. |
| 1/31/2026 | The Permittee shall submit an annual report that documents TP trends and optimization techniques employed in 2025. |

## F. POLLUTANT SCAN (GREATER THAN 1 MGD)

1. The Permittee shall conduct an effluent analysis of outfall serial number S/N 001 for the pollutants included in Appendix J, Table 2 of 40 CFR Part 122 (see Attachment A) and submit the results to the Secretary.
2. Sampling for Pollutant Scans shall coincide with WET Testing when these occur.
3. In the event this permit is administratively continued pursuant to 3 V.S.A. § 814, the Permittee shall include the results of this effluent analysis with each WET test conducted.
4. The Permittee shall sample and report according to the following table:

| Due Date | Event Description |
|---|---|
| 6/30/2022 | The Permittee shall submit results for January/February Toxic Pollutants Scan. |
| 12/31/2023 | The Permittee shall submit results of the August-October Toxic Pollutants Scan. |
| 6/30/2024 | The Permittee shall submit results for January/February Toxic Pollutants Scan. |

## I. QUALITY ASSURANCE REPORT / PROFICIENCY TESTING

1. In accordance with 10 V.S.A. § 1263.d.2, the Secretary may require a laboratory quality assurance sample program to ensure qualification of laboratory analysts. For purposes of demonstrating compliance with the requirements of this permit regarding adequate laboratory controls and appropriate quality assurance procedures, the Permittee shall conduct and pass an annual laboratory proficiency test, via an accredited laboratory, for the analysis of all pollutant parameters performed within their facility laboratory and reported as required by this permit. This can be carried out as part of an EPA DMR-QA study.

2. In the event this permit is administratively continued pursuant to 3 V.S.A. § 814, the Permittee shall continue to complete annual proficiency tests and report by December 31 each year.

3. The Permittee shall report on quality assurance according to the following table:

| Due Date | Event Description |
|---|---|
| 12/31/2021 | The Permittee shall submit a passing Laboratory Proficiency Test annually. |
| 12/31/2022 | The Permittee shall submit a passing Laboratory Proficiency Test annually. |
| 12/31/2023 | The Permittee shall submit a passing Laboratory Proficiency Test annually. |
| 12/31/2024 | The Permittee shall submit a passing Laboratory Proficiency Test annually. |
| 12/31/2025 | The Permittee shall submit a passing Laboratory Proficiency Test annually. |

## J. WHOLE EFFLUENT TOXICITY (WET) TESTING ACUTE/CHRONIC

1. The Permittee shall conduct two-species (*Pimephales promelas* and *Ceriodaphnia dubia*) modified acute/chronic WET tests (48-hour acute endpoints within a 7-day chronic test) on a composite effluent sample collected from outfall serial number S/N 001. Total Ammonia or Total Kjeldahl Nitrogen shall be measured in the highest concentration of test solution at the beginning of the test. If chlorine is used in the WWTF's system, Total Residual Chlorine shall be measured in the highest concentration of test solution at the beginning of the test.

2. The WET tests shall be conducted according to the procedures and guidelines specified in “Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms” and “Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms” (both documents U.S. EPA October 2002 or, if a newer edition is available, the most recent edition).

3. Based upon the results of these tests or any other toxicity tests conducted, the Secretary reserves the right to reopen and amend this permit to require additional WET testing or a Toxicity Reduction Evaluation.

4. Permittees may request the use of lab water for controls and dilution if:

   a) acquiring receiving water is hazardous due to weather or topography

   b) previous WET tests have shown that receiving water has and poor performance in the lab controls or dilution

   c) requested by permittee and approved by the Secretary

5. In the event this permit is administratively continued pursuant to 3 V.S.A. § 814, the Permittee shall maintain the WET testing frequency established in subsection 6 during such continuance if any of the following apply:

   a) this permit contains a WET limit;

   b) the permitted facility is classified as a major NPDES discharge; or

   c) WET tests conducted during the permit term indicated any acute or chronic toxicity.

6. The Permittee shall sample and report according to the following table:

| Due Date | Event Description |
|---|---|
| 6/30/2022 | The Permittee shall submit results of the January/February WET Test. |
| 12/31/2023 | The Permittee shall submit results of the August - October WET Test. |
| 6/30/2024 | The Permittee shall submit results of the January/February WET Test |
| 12/31/2025 | The Permittee shall submit results of the August - October WET Test. |

## II. GENERAL CONDITIONS

### A. GENERAL REQUIREMENTS

#### 1. Authority

This permit is issued under authority of 10 V.S.A. §§ 1258 and 1259 of the Vermont Water Pollution Control Act, the Vermont Water Pollution Control Permit Regulation (Environmental Protection Rule, Chapter 13), and § 402 of the Clean Water Act, as amended.

#### 2. Operating Fees

This discharge is subject to operating fees as required by 3 V.S.A. § 2822.

#### 3. Duty to Comply

The Permittee and Co-Permittees shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Except as provided in Bypass (Condition II.B.5) and "Emergency Pollution Permits" (Condition II.B.8), nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance.

#### 4. Civil and Criminal Liability

Civil and criminal penalties for non-compliance are provided for in 40 C.F.R. § 122.41(a)(2)-(3) and 10 V.S.A. Chapters 47, 201, and 211. As of the effective date of this permit, the Vermont statutory penalties, which are subject to change, are as follows:

a. Pursuant to 10 V.S.A. Chapter 47, a civil penalty not to exceed $10,000.00 a day for each day of violation.

b. Pursuant to 10 V.S.A. Chapter 47, a fine not to exceed $25,000.00 or imprisonment for not more than six months, or both.

c. Pursuant to 10 V.S.A. Chapter 47, any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained by this permit, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained by this permit, shall upon conviction, be punished by a fine of not more than $10,000.00 or by imprisonment for not more than six months, or by both.

d. Pursuant to 10 V.S.A. Chapter 201, a penalty of not more than $42,500.00 for each determination of a separate violation. In addition, if the Secretary determines that a violation is continuing, the Secretary may assess a penalty of not more than $17,000.00 for each day the violation continues. The maximum amount of penalty assessed under this provision shall not exceed $170,000.00.

e. Pursuant to 10 V.S.A. Chapter 211, a civil penalty of not more than $85,000.00 for each violation. In addition, in the case of a continuing violation, a penalty of not more than $42,500.00 may be imposed for each day the violation continues.

**5. Reopener Clause**

In accordance with 40 C.F.R. § 122.44(c), this permit may be reopened and modified during the life of the permit to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the Clean Water Act. The Secretary may promptly modify or revoke and reissue this permit if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

**6. Permit Modification, Suspension, and Revocation**

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including the following:

a. Violation of any terms or conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. Reallocation of WLA under the LC TMDL;

d. Development of an integrated WWTF and stormwater runoff NPDES permit; or

e. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance shall not stay any permit condition.

**7. Toxic Effluent Standards**

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under § 307(a) of the Clean Water Act for a toxic pollutant which is present in the Permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, then this permit shall be modified or revoked and reissued, pursuant to Condition II.A.6 of this permit, in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

**8. Other Materials**

Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

a. They are not:

(i) Designated as toxic or hazardous under provisions of Sections 307 and 311, respectively, of the Clean Water Act, or

(ii) Known to be hazardous or toxic by the Permittee, except that such materials indicated in (i) and (ii) above may be discharged in certain limited amounts with the written approval of, and under special conditions established by, the Secretary or their designated representative, if the substances will not pose any imminent hazard to the public health or safety;

b. The discharge of such materials will not violate the Vermont Water Quality Standards; and

c. The Permittee is not notified by the Secretary to eliminate or reduce the quantity of such materials entering the water.

**9. Removed Substances**

Collected screenings, sludges, and other solids removed in the course of treatment and control of wastewaters shall be stored, treated, and disposed of in accordance with 10 V.S.A. Chapter 159 and with the terms and conditions of any certification, interim or final, transitional operation authorization, or order issued pursuant to 10 V.S.A. Chapter 159 that is in effect on the effective date of this permit or is issued during the term of this permit.

**10. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

## 11. Duty to Provide Information

The Permittee and Co-Permittees shall provide to the Secretary, within a reasonable time, any information which the Secretary may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also furnish to the Secretary upon request, copies of records required to be kept by this permit.

## 12. Other Information

If the Permittee and Co-Permittees becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Secretary, it shall promptly submit such facts or information.

## 13. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under 10 V.S.A. § 1281.

## 14. Confidentiality

Pursuant to 10 V.S.A. § 1259(b):

Any records or information obtained under this permit program that constitutes trade secrets under 1 V.S.A. § 317(c)(9) shall be kept confidential, except that such records or information may be disclosed to authorized representatives of the State and the United States when relevant to any proceedings under 10 V.S.A. Chapter 47.

Claims for confidentiality for the following information will be denied:

a. The name and address of any permit applicant or Permittee.

b. Permit applications, permits, and effluent data.

c. Information required by application forms, including information submitted on the forms themselves and any attachments used to supply information required by the forms.

## 15. Navigable Waters

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

**16. Property Rights**

Issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

**17. Duty to Reapply**

If the Permittee and Co-Permittees wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The Permittee and Co-Permittees shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

**18. Other State Laws**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

## B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

### 1. Proper Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

a. The Permittee and Co-Permittees shall at all times properly operate and maintain in good working order all facilities and systems of treatment and control (and related appurtenances) installed or used by the Permittee and Co-Permittees to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the Permittee and Co-Permittees only when the operation is necessary to achieve compliance with the conditions of this permit.

b. The Permittee shall provide an adequate operating staff, consistent with the Operator Rule (Environmental Protection Rule, Chapter 4), which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit; and

c. The operation and maintenance of the WWTF shall be performed only by a person or persons holding a valid license to engage in the practice of pollution abatement facility operation.

### 2. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for the Permittee and Co-Permittees in an enforcement action that it would have been necessary to halt or reduce the activity in order to maintain compliance with the conditions of this permit.

**3. Duty to Mitigate**

The Permittee and Co-Permittees shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The Permittee and Co-Permittees shall also take all reasonable steps to minimize or prevent any adverse impact to waters of the State, the environment, or human health resulting from non-compliance with any condition specified in this permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non- complying discharge.

**4. Dry Weather Flows**

Dry weather flows of untreated municipal wastewater from any sanitary or combined sewers are not authorized by this permit and are specifically prohibited by state and federal laws and regulations. If for any reason there is a discharge to waters of the State of dry weather flows of untreated municipal wastewater from any sanitary or combined sewer, the operator of the WWTF or the operator's delegate shall comply with the notice requirements outlined in this permit.

**5. Bypass**

The bypass of facilities (including pump stations) is prohibited, except where authorized under the terms and conditions of an Emergency Pollution Permit issued pursuant to 10 V.S.A. § 1268.

In addition to § 1268 findings, such bypass must meet the following three conditions:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The Permittee and Co-Permittees submitted notices as required under 40 C.F.R. § 122.41(m)(3):

   (i) Anticipated bypass. If the Permittee and Co-Permittees knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

   (ii) Unanticipated bypass. The Permittee and Co-Permittees shall submit notice of an unanticipated bypass as required in Condition II.D.3 (24–hour notice).

**6. Upset**

a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Condition II.B.6.b of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the Permittee can identify the cause(s) of the upset;

(ii) The permitted facility was at the time being properly operated; and

(iii) The Permittee submitted notice of the upset as required in condition II.D.3 (24-hour notice).

(iv) The Permittee complied with any remedial measures required under Condition II.B.3.

c. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

**7. Sewer Ordinance**

The Permittee and Co-Permittees shall have in effect a sewer use ordinance acceptable to the Secretary which, at a minimum, shall:

a. prohibit the introduction by any person into the Permittee and Co-Permittees' sewerage system or WWTF of any pollutant which:

(i) Is a toxic pollutant in toxic amounts as defined in standards issued from time to time under § 307(a) of the Clean Water Act;

(ii) Creates a fire or explosion hazard in the Permittee and Co-Permittees' treatment works;

(iii) Causes corrosive structural damage to the Permittee and Co-Permittees' treatment works, including all wastes with a pH lower than 5.0;

(iv) Contains solid or viscous substances in amounts which would cause obstruction to the flow in sewers or other interference with proper operation of the Permittee and Co-Permittees' treatment works; or

(v) In the case of a major contributing industry, as defined in this permit, contains an incompatible pollutant, as defined in this permit, in an amount or concentration in excess of that allowed under standards or guidelines issued from time to time pursuant to Sections 304, 306, and/or 307 of the Clean Water Act.

b. Require 45 days prior notification to the Permittee and Co-Permittees by any person or persons of a:

(i) Proposed substantial change in volume or character of pollutants over that being discharged into the Permittee and Co-Permittees' treatment works at the time of issuance of this permit;

(ii) Proposed new discharge into the Permittee and Co-Permittees' treatment works of pollutants from any source which would be a new source as defined in § 306 of the Clean Water Act if such source were discharging pollutants; or

(iii) Proposed new discharge into the Permittee and Co-Permittees' treatment works of pollutants from any source which would be subject to § 301 of the Clean Water Act if it were discharging such pollutants.

c. Require any industry discharging into the Permittee and Co-Permittees' treatment works to perform such monitoring of its discharge as the Permittee may reasonably require, including the installation, use, and maintenance of monitoring equipment and monitoring methods, keeping records of the results of such monitoring, and reporting the results of such monitoring to the Permittee. Such records shall be made available by the Permittee to the Secretary upon request.

d. Authorize the Permittee and Co-Permittees' authorized representatives to enter into, upon, or through the premises of any industry discharging into the Permittee and Co-Permittees' treatment works to have access to and copy any records, to inspect any monitoring equipment or method required by this permit, and to sample any discharge into the Permittee's treatment works.

**8. Emergency Pollution Permits**

a. Maintenance activities, or emergencies resulting from equipment failure or malfunction, including power outages, which result in an effluent which exceeds the effluent limitations specified herein, shall be considered a violation of the conditions of this permit, unless the Permittee and Co-Permittees' discharge is covered under an emergency pollution permit under the provisions of 10 V.S.A. § 1268. The Permittee and Co-Permittees' shall notify the Secretary of the emergency situation by the next working day, unless notice is required sooner under Condition II.D.2.

10 V.S.A. § 1268 reads as follows:

When a discharge permit holder finds that pollution abatement facilities require repairs, replacement, or other corrective action in order for them to continue to meet standards specified in the permit, the holder may apply in the manner specified by the Secretary for an emergency pollution permit for a term sufficient to effect repairs, replacements or other corrective action. The Secretary shall proceed in accordance with Chapter 170 of this title. No emergency pollution permit shall be issued unless the applicant certifies and the Secretary finds that:

(i) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the State during the limited period of time of the emergency;

(ii) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;

(iii) the granting of an emergency pollution permit will result in some public benefit;

(iv) the discharge will not be unreasonably harmful to the quality of the receiving waters; and

(v) the cause or reason for the emergency is not due to willful or intended acts or omissions of the applicant.

b. Application shall be made to the Secretary at the following address: Agency of Natural Resources, Department of Environmental Conservation, One National Life Drive, Davis 3, Montpelier VT 05620-3522.

## C. MONITORING REQUIREMENTS

### 1. Monitoring and Records

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

b. Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least 5 years (or longer as required by 40 C.F.R. § 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period shall be extended during the course of unresolved litigation and may be extended by request of the Secretary at any time.

c. Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(vii) The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;

(viii) The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of this permit; and

(ix) For analyses performed by contract laboratories:

(a) The detection level reported by the laboratory for each sample; and

(b) The laboratory analytical report including documentation of the QA/QC and analytical procedures.

(x) When "non-detects" are recorded, the method detection limit shall be reported and used in calculating any time-period averaging for reporting on DMRs.

d. Monitoring must be conducted according to test procedures approved under 40 C.F.R. § 136 unless another method is required under 40 C.F.R. Subchapters N or O.

**2. Quality Control**

a. The Permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

b. The Permittee shall keep records of these activities and shall provide such records upon request of the Secretary.

**3. Right of Entry**

The Permittee and Co-Permittees' shall allow the Secretary, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

a. To enter upon the Permittee and Co-Permittees' premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. To have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;

c. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. To sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

## D. REPORTING REQUIREMENTS

### 1. Facility Modification / Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties pursuant to 10 V.S.A. Chapters 47, 201, and/or 211. Any anticipated facility alterations or expansions or process modifications which will result in new, different, or increased discharges of any pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by advance notice to the Secretary of such changes. This notification applies to pollutants which are subject neither to effluent limitations in this permit, nor to notification requirements for toxic pollutants under 40 C.F.R. § 122.42(a)(1). Following such notice, the permit may be modified, pursuant to Condition II.A.6 of this permit, to specify and limit any pollutants not previously limited.

### 2. Change in Introduction of Pollutants to WWTF

a. The Permittee and Co-Permittees, within 30 days of the date on which the Permittee and Co-Permittees are notified of such discharge, shall provide notice to the Secretary of the following:

(i) Any new introduction of pollutants into the treatment works from a source which would be a new source as defined in § 306 of the Clean Water Act if such source were discharging pollutants;

(ii) Except for such categories and classes of point sources or discharges specified by the Secretary, any new introduction of pollutants into the treatment works from a source which would be subject to § 301 of the Clean Water Act if such source were discharging pollutants; and

(iii) Any substantial change in volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into such works at the time of issuance of the permit.

b. The notice shall include:

(i) The quality and quantity of the discharge to be introduced into the system, and

(ii) The anticipated impact of such change in the quality or quantity of the effluent to be discharged from the WWTF.

### 3. Noncompliance Notification

a. The Permittee and Co-Permittees shall give advance notice to the Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

b. In the event the Permittee and Co-Permittees is unable to comply with any of the conditions of this permit due, among other reasons, to:

(i) Breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units);

(ii) Accidents caused by human error or negligence;

(iii) Any unanticipated bypass or upset which exceeds any effluent limitation in the permit;

(iv) Violation of a maximum day discharge limitation for any of the pollutants listed by the Secretary in this permit; or

(v) Other causes such as acts of nature,

the Permittee shall provide notice as specified in subdivisions c and d of this subsection.

c. Pursuant to 10 V.S.A. § 1295, notice for "untreated discharges," as defined in section III.

(i) Public notice. For "untreated discharges" an operator of the WWTF or the operator's delegate shall as soon as possible, but no longer than one hour from discovery of an untreated discharge from the WWTF, post on a publicly accessible electronic network, mobile application, or other electronic media designated by the Secretary an alert informing the public of the untreated discharge and its location, except that if the operator or his or her delegate does not have telephone or Internet service at the location where he or she is working to control or stop the untreated discharge, the operator or his or her delegate may delay posting the alert until the time that the untreated discharge is controlled or stopped, provided that the alert shall be posted no later than four hours from discovery of the untreated discharge.

(ii) Secretary notification. For "untreated discharges" an operator of the WWTF shall within 12 hours from discovery of an untreated discharge from the WWTF notify the Secretary and the local health officer of the municipality where the facility is located of the untreated discharge. The operator shall notify the Secretary through use of the Department of Environmental Conservation's online event reporting system. If, for any reason, the online event reporting system is not operable, the operator shall notify the Secretary via telephone or e-mail. The notification shall include:

(a) The specific location of each untreated discharge, including the body of water affected. For combined sewer overflows, the specific location of each untreated discharge means each outfall that has discharges during the wet weather storm event.

(b) Except for discharges from the WWTF to a separate storm sewer system, the date and approximate time the untreated discharge began.

(c) The date and approximate time the untreated discharge ended. If the untreated discharge is still ongoing at the time of reporting, the entity reporting the untreated discharge shall amend the report with the date and approximate time the untreated discharge ended within three business days of the untreated discharge ending.

(d) Except for discharges from the WWTF to a separate storm sewer system, the approximate total volume of sewage and, if applicable, stormwater that was released. If the approximate total volume is unknown at the time of reporting, the entity reporting the untreated discharge shall amend the report with the approximate total volume within three business days.

(e) The cause of the untreated discharge and a brief description of the noncompliance, including the type of event and the type of sewer structure involved.

(f) The person reporting the untreated discharge.

d. For any non-compliance not covered under Condition II.D.3.c of this permit, an operator of the WWTF or the operator's delegate shall notify the Secretary within 24 hours of becoming aware of such condition and shall provide the Secretary with the following information, in writing, within five days of becoming aware of such condition:

(i) Cause of non-compliance;

(ii) A description of the non-complying discharge including its impact upon the receiving water;

(iii) Anticipated time the condition of non-compliance is expected to continue or, if such condition has been corrected, the duration of the period of non-compliance;

(iv) Steps taken by the Permittee and Co-Permittees to reduce and eliminate the non-complying discharge; and

(v) Steps to be taken by the Permittee and Co-Permittees to prevent recurrence of the condition of non-compliance.

e. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather.

**4. Planned Changes**

a. The Permittee and Co-Permittees shall give notice to the Secretary as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. § 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements at 40 C.F.R. § 122.42(a)(1).

(iii) 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.

**5. Transfer of Ownership or Control**

This permit is not transferable without prior written approval of the Secretary. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the Permittee shall provide a copy of this permit to the succeeding owner or controller and shall send written notification of the change in ownership or control to the Secretary at least 30 days in advance of the proposed transfer date. The notice to the Secretary shall include a written agreement between the existing and new Permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them. The Permittee shall also inform the prospective owner or operator of their responsibility to make an application for transfer of this permit.

This request for transfer application must include as a minimum:

a. A properly completed application form provided by the Secretary and the applicable processing fee.

b. A written statement from the prospective owner or operator certifying:

(i) The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership;

(ii) The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit; and

(iii) The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.

c. The date of the sale or transfer.

The Secretary may require additional information dependent upon the current status of the facility operation, maintenance, and permit compliance.

**6. Monthly Reporting**

a. The Permittee is required to submit monthly reports of monitoring results and operational parameters on Discharge Monitoring Report (DMR) form WR-43 or through an electronic reporting system made available by the Secretary. Reports are due on the 15th day of each month, beginning with the month following the effective date of this permit.

b. Unless waived by the Secretary, the Permittee shall electronically submit its DMRs via Vermont's on-line electronic reporting system. The Permittee shall electronically submit additional compliance monitoring data and reports specified by the Secretary. When the Permittee submits DMRs using an electronic system designated by the Secretary, which requires attachment of scanned DMRs in PDF format, it is not required to submit hard copies of DMRs. The electronic submittals are submitted through the State of Vermont Agency of Natural Resources' Online Services Portal, or its replacement.

c. If, in any reporting period, there has been no discharge, the Permittee must submit that information by the report due date.

**7. Signature Requirements**

a. All reports shall be signed:

(i) For a corporation. By a responsible corporate officer or a duly authorized representative of that person. For the purpose of this section, a responsible corporate officer means: (1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(ii) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or

(iii)For a municipality, state, or other public agency. By either a principal executive officer or ranking elected official, or a duly authorized representative of that person.

b. For the purposes of subdivision (d) of this subsection, a person is a duly authorized representative only if:

(i) The authorization is made in writing by a person described in subdivision (d) of this subsection;

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, or an individual or position having overall responsibility for environmental matters for the company; and

(iii)The written authorization is submitted to the Secretary.

c. Changes to authorization. If an authorization under subdivision (b) of this subsection is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subdivision (b) of this subsection must be submitted to the Secretary prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under subdivisions (a) or (b) of this subsection shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**8. Additional Monitoring**

If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR form WR-43. Such increased frequency shall also be indicated.

## I. DEFINITIONS

For purposes of this permit, the following definitions shall apply.

**Agency** – means the Vermont Agency of Natural Resources.

**Annual Average** – means the highest allowable average of daily discharges calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar year divided by the number of daily discharges measured during that year.

**Average** – means the arithmetic means of values taken at the frequency required for each parameter over the specified period.

**Bypass** – means the intentional diversion of waste streams from any portion of the treatment facility.

**The Clean Water Act** – means the federal Clean Water Act, as amended (33 U.S.C. § 1251, et seq.).

**Composite Sample** – means a sample consisting of a minimum of one grab sample per hour collected during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportionally to flow over that same time period.

**Daily Discharge** – means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

For pollutants with limitations expressed in pounds the daily discharge is calculated as the total pounds of pollutants discharged over the day.

For pollutants with limitations expressed in mg/L the daily discharge is calculated as the average measurement of the pollutant over the day.

**Discharge** – means the placing, depositing, or emission of any wastes, directly or indirectly, into an injection well or into the waters of the State.

**Grab Sample** – means an individual sample collected in a period of less than 15 minutes.

**Incompatible Substance** – means any waste being discharged into the treatment works which interferes with, passes through without treatment, or is otherwise incompatible with said works or would have a substantial adverse effect on the works or on water quality. This includes all pollutants required to be regulated under the Clean Water Act.

**Instantaneous Maximum** – means a value not to be exceeded in any grab sample.

**Major Contributing Industry** – means one that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under § 307(a) of the Clean Water Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a treatment works or on the quality of effluent from that treatment works.

**Maximum Day** or **Maximum Daily Discharge Limitation** – means the highest allowable "daily discharge" (mg/L, lbs or gallons).

**Mean** – means the arithmetic mean.

**Minimum level (ML)—** the TSD Method Page 111 Section 5.7.3 of EPA-505-2-90-001, March 1991 defines this as the level at which the entire analytical system gives recognizable mass spectra and acceptable calibration points when analyzing for pollutants of concern. This level corresponds to the lowest point at which the calibration curve is determined. EPA recommends that the "compliance level" be defined in the permit as the ML. The ML is not equivalent to the method detection level, which is defined in 40 CFR Part 136 Appendix 6 as the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero and is determined from the analysis of a sample in a given matrix containing the analyte. EPA is not recommending use of the method detection level because quantitation at the method detection level is not as precise as at the ML.

**Monthly Average** or **Average Monthly Discharge Limitation** – means the highest allowable average of daily discharges (mg/L, lbs or gallons) over a calendar month, calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

**NPDES** –means the National Pollutant Discharge Elimination System.

**Secretary** – means the Secretary of the Agency of Natural Resources or the Secretary's duly authorized representative.

**Septage** – means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

**Significant Industrial User** – means an Industrial User subject to categorical pretreatment standards under 40 CFR 403.6 and 40 CFR Chapter I, subchapter N (known as Categorical Industrial User (CIU)); or an Industrial User that discharges an average of 25,000 gallons per day (gpd) or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blowdown wastewater); contributes a process waste stream that makes up 5 percent or more of the average dry-weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority (Secretary) on the basis that the Industrial User has a reasonable potential to adversely affect the POTW's operation; or for violating any pretreatment standard or requirement.

**Untreated Discharge** – means (1) combined sewer overflows from a WWTF; (2) overflows from sanitary sewers and combined sewer systems that are part of a WWTF during dry weather flows, which result in a discharge to waters of the State; (3) upsets or bypasses around or within a WWTF during dry or wet weather conditions that are due to factors unrelated to a wet weather storm event and that result in a discharge of sewage that has not been fully treated to waters of the State; and (4) discharges from a WWTF to separate storm sewer systems.

**Waste** – means effluent, sewage or any substance or material, liquid, gaseous, solid, or radioactive, including heated liquids, whether or not harmful or deleterious to waters.

**Waste Management Zone** – means a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings. Throughout the receiving waters, water quality criteria must be achieved but increased health risks exist in a waste management zone due to the authorized discharge.

**Waters** – means all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs, and all bodies of surface waters, artificial or natural, which are contained within, flow through, or border upon the State or any portion of it.

**Weekly Average** or **Average Weekly Discharge Limitation** – means the highest allowable average ofdaily discharges (mg/L, lbs or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

**Whole Effluent Toxicity (WET)** – means the aggregate toxic effect of an effluent measured directly by a toxicity test.

**Wastewater Treatment Facility (WWTF)** – means a treatment plant, collection system, pump station, and attendant facilities permitted by the Secretary for the purpose of treating domestic, commercial, or industrial wastewater.

## IV. TABLE OF PERMITTED DISCHARGE POINTS

| Discharge ID | Discharge Activity | Discharge Status | Receiving Water | Latitude | Longitude |
|---|---|---|---|---|---|
| 001 | Sanitary Waste Outfall | A | WINOOSKI RIVER | 44.47932 | -73.12040 |

**ATTACHMENT A**

**Appendix J to Part 122 - NPDES Permit Testing Requirements for Publicly Owned Treatment Works (§ 122.21(J))**

**TABLE 1A - EFFLUENT PARAMETERS FOR ALL POTWS**

Biochemical oxygen demand (BOD-5 or CBOD-5)

Fecal coliform

Design Flow Rate

pH

Temperature

Total suspended solids

**TABLE 1 - EFFLUENT PARAMETERS FOR ALL POTWS WITH A FLOW EQUAL TO OR GREATER THAN 0.1 MGD**

Ammonia (as N)

Chlorine (total residual, TRC)

Dissolved oxygen

Nitrate/Nitrite

Kjeldahl nitrogen

Oil and grease Phosphorus

Total dissolved solids

**TABLE 2 - EFFLUENT PARAMETERS FOR SELECTED POTWS**

Hardness

*Metals (total recoverable), cyanide and total phenols*

Antimony

Arsenic

Beryllium

Cadmium

Chromium

Copper

Lead

Mercury

Nickel

Selenium

Silver

Thallium

Zinc

Cyanide

Total phenolic compounds

*Volatile organic compounds*

Acrolein

Acrylonitrile

Benzene

Bromoform

Carbon tetrachloride

Chlorobenzene

Chlorodibromomethane

Chloroethane

2-chloroethylvinyl ether

Chloroform

Dichlorobromomethane

1,1-dichloroethane

1,2-dichloroethane

Trans-1,2-dichloroethylene

1,1-dichloroethylene

1,2-dichloropropane

1,3-dichloropropylene

Ethylbenzene

Methyl bromide

Methyl chloride

Methylene chloride

1,1,2,2-tetrachloroethane

Tetrachloroethylene

Toluene

1,1,1-trichloroethane

1,1,2-trichloroethane

Trichloroethylene

Vinyl chloride

*Acid-extractable compounds*

P-chloro-m-creso

2-chlorophenol

2,4-dichlorophenol

2,4-dimethylphenol

4,6-dinitro-o-cresol

2,4-dinitrophenol

2-nitrophenol

4-nitrophenol

Pentachlorophenol

Phenol

2,4,6-trichlorophenol

*Base-neutral compounds*

Acenaphthene

Acenaphthylene

Anthracene

Benzidine

Benzo(a)anthracene

Benzo(a)pyrene

3,4 benzofluoranthene

Benzo(ghi)perylene

Benzo(k)fluoranthene

Bis (2-chloroethoxy) methane

Bis (2-chloroethyl) ether

Bis (2-chloroisopropyl) ether

Bis (2-ethylhexyl) phthalate

4-bromophenyl phenyl ether

Butyl benzyl phthalate

2-chloronaphthalene

4-chlorophenyl phenyl ether

Chrysene

Di-n-butyl phthalate

Di- n-octyl phthalate

Dibenzo(a,h)anthracene

1,2-dichlorobenzene

1,3-dichlorobenzene

1,4-dichlorobenzene

3,3-dichlorobenzidine

Diethyl phthalate

Dimethyl phthalate

2,4-dinitrotoluene

2,6-dinitrotoluene

1,2-diphenylhydrazine

Fluoranthene

Fluorene

Hexachlorobenzene

Hexachlorobutadiene

Hexachlorocyclo-pentadiene

Hexachloroethane

Indeno(1,2,3-cd) pyrene

Isophorone

Naphthalene

Nitrobenzene

N-nitrosodi-n-propylamine

N-nitrosodimethylamine

N-nitrosodiphenylamine

Phenanthrene

Pyrene

1,2,4, -trichlorobenzene