VERMONT

Vermont Department of Environmental Conservation
Watershed Management Division
1 National Life Drive, Davis Building 3rd Fl
Montpelier VT 05620-3522

Agency of Natural Resources

[phone] 802-828-1535

Dear GLOBALFOUNDRIES:

Based on comments received for other permits posted publicly near the same time the GLOBALFOUNDRIES NPDES Direct Discharge Permit 3-1295 was posted, the following changes have been made in the Final Permit, and that were not included in the attached Responsiveness Summary for comments received specifically for this permit.

1. Conditions I.B.e was updated to say: "(See required Total Phosphorus monitoring report form WR43-TP to report monthly totals)"

2. Condition I.G.2. was updated to say: "Total Phosphorus shall be reported monthly, via electronic Discharge Monitoring Report and on the WR-43-TP, in the following ways:"

3. Condition I.G.3.c was updated to say: "The Permittee shall annually submit a report to the Secretary as an attachment to the monthly electronic Discharge Monitoring Reporting (DMR) form and the WR-43-TP form that documents." Subsections i-iii were renumbered as the draft permit listed these as continued numbering v-vii from Condition I.G.3.b.

Sincerely,

Jamie Bates
Direct Discharge Analyst (she/her)
Vermont Department of Environmental Conservation
Watershed Management Division, Wastewater Management Program

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

Permit No.: 3-1295
PIN: EJ91-0002
NPDES No.: VT0000400

FINAL
DISCHARGE PERMIT

Facility Name:	GLOBALFOUNDRIES	
Facility Address:	1000 River Road – B966 Essex Junction, VT 05452	
Coordinates:	Lat: 44.4841267	Long: -73.1116762
Expiration Date:	March 31, 2026	
Reapplication Date:	September 30, 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, GLOBALFOUNDRIES U.S. 2 LLC (hereinafter referred to as the "Permittee") is authorized by the Secretary of the Agency of Natural Resources (hereinafter referred to as the "Secretary") to discharge from the GlobalFoundries Facility (hereinafter referred to as the "WWTF" or "Facility") to the Winooski River, in accordance with the following conditions.

This permit shall be effective on July 1, 2021.

Peter Walke, Commissioner
Department of Environmental Conservation

By: _____ Date: 6/24/2021
Amy Polaczyk, Manager
Wastewater Management Program

I. PERMIT SPECIAL CONDITIONS

A. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

1. **Discharge Point S/N 001,** Latitude 44.4773758 and Longitude. -73.095481: During the term of this permit, the Permittee is authorized to discharge from outfall serial number S/N 001 from sanitary and semi-conductor manufacturing treated wastewater to the Winooski River, an effluent for which the characteristics shall not exceed the values listed below. This discharge is also comprised of treated intermittent non-contact cooling water. Such discharges shall be limited and monitored by the Permittee as specified below:

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**				
Flow; Annual Average; Calculated	**12/01-12/31 Annual**	**8.0 MGD Annual Avg**				
BOD, 5-Day; Effluent; 24 Hour Comp	**06/01 – 10/31 Weekly**	**Monitor lbs/day Monthly Avg**				
E. Coli; Effluent; Grab	**Year Round Weekly**					**77 #/100 ml Instant Max**
Nitrogen, Ammonia Total; Effluent; Grab	**Year Round 2 per Month**				**Monitor mg/l Monthly Avg**	**Monitor mg/l Daily Max**
Nitrite Plus Nitrate Total; Effluent; 24 Hour Comp	**11/01 - 05/31 Monthly**		**Monitor lbs/day Daily Max**			**Monitor mg/l Daily Max**
Nitrite Plus Nitrate Total; Effluent; 24 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; 24 Hour Comp	**11/01 - 05/31 Monthly**		**Monitor lbs/day Daily Max**			**Monitor mg/l Daily Max**
Nitrogen, Kjeldahl Total; Effluent; 24 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**
Phosphorus, Total; Effluent; 24 Hour Comp	**Year Round Weekly**				**0.8 mg/l Monthly Avg**	
Phosphorus, Total; Effluent; Calculated	**Year Round Monthly**	**Monitor lbs Annual Total**	**Monitor lbs Monthly Total**		**Monitor % Monthly Total**	
Phosphorus, Total; Annual Average; Calculated	**12/01 - 12/31 Annual**	**4872.0 lbs/yr Annual Total**				

Table continued						
Constituent; Sampling Point and Sample Type	**Season and Sampling Frequency**	**Quantity**	**Quantity**	**Conc.**	**Conc.**	**Conc.**
Suspended Solids, Total; Effluent; 24 Hour Comp	**Year Round Weekly**		**437.0 lbs/day Daily Max**			**10.5 mg/l Daily Max**
Ultimate Oxygen Demand; Effluent; Calculated	**06/01 - 10/31 Weekly**		**2300.0 lbs/day Daily Max**			
Cadmium, Total; Effluent; 24 Hour Comp	**02/01 – 02/28 Semi-Annual**	**0.42 lbs/day Monthly Avg**	**0.62 lbs/day Daily Max**		**0.07 mg/l Monthly Avg**	**0.11 mg/l Daily Max**
Cadmium, Total; Effluent; 24 Hour Comp	**07/01 – 07/31 Semi-Annual**	**0.42 lbs/day Monthly Avg**	**0.62 lbs/day Daily Max**		**0.07 mg/l Monthly Avg**	**0.11 mg/l Daily Max**
Chromium, Trivalent; Effluent; 24 Hour Comp	**02/01 – 02/28 Semi-Annual**	**45.7 lbs/day Monthly Avg**	**66.7 lbs/day Daily Max**		**1.71 mg/l Monthly Avg**	**2.77 mg/l Daily Max**
Chromium, Trivalent; Effluent; 24 Hour Comp	**07/01 – 07/31 Semi-Annual**	**45.7 lbs/day Monthly Avg**	**66.7 lbs/day Daily Max**		**1.71 mg/l Monthly Avg**	**2.77 mg/l Daily Max**
Copper, Total; Effluent; 24 Hour Comp	**Year Round 2 per Month**	**2.6 lbs/day Monthly Avg**	**3.5 lbs/day Daily Max**		**2.07 mg/l Monthly Avg**	**3.38 mg/l Daily Max**
Iron, Total; Effluent; 24 Hour Comp	**Year Round Monthly**				**Monitor mg/l Monthly Avg**	**Monitor mg/l Daily Max**
Lead, Total; Effluent; 24 Hour Comp	**Year Round 2 per Month**	**1.05 lbs/day Monthly Avg**	**1.81 lbs/day Daily Max**		**0.43 mg/l Monthly Avg**	**0.69 mg/l Daily Max**
Nickel, Total; Effluent; 24 Hour Comp	**Year Round 2 per Month**	**22.95 lbs/day Monthly Avg**	**39.66 lbs/day Daily Max**		**2.38 mg/l Monthly Avg**	**3.98 mg/l Daily Max**
Silver, Total; Effluent; 24 Hour Comp	**02/01 – 02/28 Semi-Annual**	**0.66 lbs/day Monthly Avg**	**0.97 lbs/day Daily Max**		**0.24 mg/l Monthly Avg**	**0.43 mg/l Daily Max**
Silver, Total; Effluent; 24 Hour Comp	**07/01 – 07/31 Semi-Annual**	**0.66 lbs/day Monthly Avg**	**0.97 lbs/day Daily Max**		**0.24 mg/l Monthly Avg**	**0.43 mg/l Daily Max**
Zinc, Total; Effluent; 24 Hour Comp	**Year Round 2 per Month**	**37.97 lbs/day Monthly Avg**	**52.68 lbs/day Daily Max**		**1.48 mg/l Monthly Avg**	**2.61 mg/l Daily Max**
Cynide, free (amen. To chlorination) Effluent; Grab	**Year Round Monthly**	**4.77 lbs/day Monthly Avg**	**6.97 lbs/day Daily Max**		**0.65 mg/l Monthly Avg**	**1.2 mg/l Daily Max**
Fluoride; Effluent; 24 Hour Comp	**Year Round 2 per Month**				**17.4 mg/l Monthly Avg**	**28.0 mg/l Daily Max**
Hydrogen Peroxide; Effluent; 24 Hour Comp	**Year Round Weekly**				**10.0 mg/l Monthly Avg**	**15.0 mg/l Daily Max**
Oil and Grease; Effluent; Grab	**02/01 – 02/28 Semi-Annual**	**1734.72 lbs/day Monthly Avg**	**3469.44 lbs/day Daily Max**		**26.0 mg/l Monthly Avg**	**52.0 mg/l Daily Max**
Oil and Grease; Effluent; Grab	**07/01 – 07/31 Semi-Annual**	**1734.72 lbs/day Monthly Avg**	**3469.44 lbs/day Daily Max**		**26.0 mg/l Monthly Avg**	**52.0 mg/l Daily Max**
pH; Effluent; Grab	**Year Round Daily**				**6.5 s.u. Min**	**8.5 s.u. Max**
Total Toxic Organics; Effluent; Grab	**01/01 – 3/31 Quarterly**					**1.37 mg/l Daily Max**
Total Toxic Organics; Effluent; Grab	**04/01 – 6/30 Quarterly**					**1.37 mg/l Daily Max**
Total Toxic Organics; Effluent; Grab	**07/01 – 09/30 Quarterly**					**1.37 mg/l Daily Max**
Total Toxic Organics; Effluent; Grab	**10/01 – 12/30 Quarterly**					**1.37 mg/l Daily Max**

Table continued						
Constituent; Sampling Point and Sample Type	**Season and Sampling Frequency**	**Quantity**	**Quantity**	**Conc.**	**Conc.**	**Conc.**
Whole Effluent Toxicity, NOEL-C; Effluent; Calculated	**01/01 – 02/28 Semi-Annual**				**>7% Instant Max**	
Whole Effluent Toxicity, NOEL-C; Effluent; Calculated	**08/01 – 10/31 Semi-Annual**				**>7% Instant Max**	
Perfluoro-1-hexanesulfonic acid (PFHxS); **Effluent; 24 Hour Comp**	**07/01/2021 – 09/30/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluoro-1-hexanesulfonic acid (PFHxS); **Effluent; 24 Hour Comp**	**10/01/2021 – 12/31/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluoro-1-hexanesulfonic acid (PFHxS); **Effluent; 24 Hour Comp**	**01/01/2022 – 3/31/2022 Quarterly**					**Monitor ug/l Daily Max**
Perfluoro-1-hexanesulfonic acid (PFHxS); **Effluent; 24 Hour Comp**	**04/01/2022 – 6/30/2022 Quarterly**					**Monitor ug/l Daily Max**
Perfluoro-1-hexanesulfonic acid (PFHxS); **Effluent; 24 Hour Comp**	**12/01 – 12/31 Annual beginning 2022**					**Monitor ug/l Daily Max**
Perfluoro-1-octanesulfonic acid (PFOS); **Effluent; 24 Hour Comp**	**07/01/2021 – 09/30/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluoro-1-octanesulfonic acid (PFOS); **Effluent; 24 Hour Comp**	**10/01/2021 – 12/31/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluoro-1-octanesulfonic acid (PFOS); **Effluent; 24 Hour Comp**	**01/01/2022 – 3/31/2022 Quarterly**					**Monitor ug/l Daily Max**
Perfluoro-1-octanesulfonic acid (PFOS); **Effluent; 24 Hour Comp**	**04/01/2022 – 6/30/2022 Quarterly**					**Monitor ug/l Daily Max**
Perfluoro-1-octanesulfonic acid (PFOS); **Effluent; 24 Hour Comp**	**12/01 – 12/31 Annual beginning 2022**					**Monitor ug/l Daily Max**
Perfluoroheptanoic acid (PFHpA); **Effluent; 24 Hour Comp**	**07/01/2021 – 09/30/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluoroheptanoic acid (PFHpA); **Effluent; 24 Hour Comp**	**10/01/2021 – 12/31/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluoroheptanoic acid (PFHpA); **Effluent; 24 Hour Comp**	**01/01/2022 – 3/31/2022 Quarterly**					**Monitor ug/l Daily Max**

Table continued						
Constituent; Sampling Point and Sample Type	**Season and Sampling Frequency**	**Quantity**	**Quantity**	**Conc.**	**Conc.**	**Conc.**
Perfluoroheptanoic acid (PFHpA); **Effluent; 24 Hour Comp**	**04/01/2022 – 6/30/2022 Quarterly**					**Monitor ug/l Daily Max**
Perfluoroheptanoic acid (PFHpA); **Effluent; 24 Hour Comp**	**12/01 – 12/31 Annual beginning 2022**					**Monitor ug/l Daily Max**
Perfluorooctanoic acid (PFOA); **Effluent; 24 Hour Comp**	**07/01/2021 – 09/30/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluorooctanoic acid (PFOA); **Effluent; 24 Hour Comp**	**10/01/2021 – 12/31/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluorooctanoic acid (PFOA); **Effluent; 24 Hour Comp**	**01/01/2022 – 3/31/2022 Quarterly**					**Monitor ug/l Daily Max**
Perfluorooctanoic acid (PFOA); **Effluent; 24 Hour Comp**	**04/01/2022 – 6/30/2022 Quarterly**					**Monitor ug/l Daily Max**
Perfluorooctanoic acid (PFOA); **Effluent; 24 Hour Comp**	**12/01 – 12/31 Annual beginning 2022**					**Monitor ug/l Daily Max**
Perfluorononanoic acid (PFNA); **Effluent; 24 Hour Comp**	**07/01/2021 – 09/30/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluorononanoic acid (PFNA); **Effluent; 24 Hour Comp**	**10/01/2021 – 12/31/2021 Quarterly**					**Monitor ug/l Daily Max**
Perfluorononanoic acid (PFNA); **Effluent; 24 Hour Comp**	**01/01/2022 – 3/31/2022 Quarterly**					**Monitor ug/l Daily Max**
Perfluorononanoic acid (PFNA); **Effluent; 24 Hour Comp**	**04/01/2022 – 6/30/2022 Quarterly**					**Monitor ug/l Daily Max**
Perfluorononanoic acid (PFNA); **Effluent; 24 Hour Comp**	**12/01 – 12/31 Annual beginning 2022**					**Monitor ug/l Daily Max**

2. **Discharge Point S/N 007** located at Latitude 44.477387 and Longitude. -73.0957149: During the term of this permit, the Permittee is authorized to discharge from outfall serial number S/N 007 for potential groundwater seepage, condensate from cooling coils from dehumidifying incoming building air, stormwater from roof/parking lot drains, and truck unload/load stations to the Winooski River, an effluent which shall be monitored to specifications below. The Permittee shall comply with stormwater inspection and monitoring requirements specified in Condition 1.D. of this permit.

Constituent; Sampling Point and Sample Type	Season and Sampling Frequency	Concentration	Concentration
Tetrachloroethylene; Effluent; Grab	**01/01 – 3/31 Quarterly**		**Monitor mg/l Daily Max**
Tetrachloroethylene; Effluent; Grab	**04/01 – 6/30 Quarterly**		**Monitor mg/l Daily Max**
Tetrachloroethylene; Effluent; Grab	**07/01 – 09/30 Quarterly**		**Monitor mg/l Daily Max**
Tetrachloroethylene; Effluent; Grab	**10/01 – 12/30 Quarterly**		**Monitor mg/l Daily Max**
Trichloroethylene; Effluent; Grab	**01/01 – 3/31 Quarterly**		**Monitor mg/l Daily Max**
Trichloroethylene; Effluent; Grab	**04/01 – 6/30 Quarterly**		**Monitor mg/l Daily Max**
Trichloroethylene; Effluent; Grab	**07/01 – 09/30 Quarterly**		**Monitor mg/l Daily Max**
Trichloroethylene; Effluent; Grab	**10/01 – 12/30 Quarterly**		**Monitor mg/l Daily Max**
Vinyl Chloride; Effluent; Grab	**01/01 – 3/31 Quarterly**		**Monitor mg/l Daily Max**
Vinyl Chloride; Effluent; Grab	**04/01 – 6/30 Quarterly**		**Monitor mg/l Daily Max**
Vinyl Chloride; Effluent; Grab	**07/01 – 09/30 Quarterly**		**Monitor mg/l Daily Max**
Vinyl Chloride; Effluent; Grab	**10/01 – 12/30 Quarterly**		**Monitor mg/l Daily Max**
Ethyl Benzene; Effluent; Grab	**01/01 – 3/31 Quarterly**		**Monitor mg/l Daily Max**
Ethyl Benzene; Effluent; Grab	**04/01 – 6/30 Quarterly**		**Monitor mg/l Daily Max**
Ethyl Benzene; Effluent; Grab	**07/01 – 09/30 Quarterly**		**Monitor mg/l Daily Max**
Ethyl Benzene; Effluent; Grab	**10/01 – 12/30 Quarterly**		**Monitor mg/l Daily Max**
Dichloroethene; Effluent; Grab	**01/01 – 3/31 Quarterly**		**Monitor mg/l Daily Max**
Dichloroethene; Effluent; Grab	**04/01 – 6/30 Quarterly**		**Monitor mg/l Daily Max**
Dichloroethene; Effluent; Grab	**07/01 – 09/30 Quarterly**		**Monitor mg/l Daily Max**
Dichloroethene; Effluent; Grab	**10/01 – 12/30 Quarterly**		**Monitor mg/l Daily Max**
Xylene; Effluent; Grab	**01/01 – 3/31 Quarterly**		**Monitor mg/l Daily Max**

Table Continued			
Constituent; Sampling Point and Sample Type	**Season and Sampling Frequency**	**Concentration**	**Concentration**
Xylene; Effluent; Grab	**04/01 – 6/30 Quarterly**		**Monitor mg/l Daily Max**
Xylene; Effluent; Grab	**07/01 – 09/30 Quarterly**		**Monitor mg/l Daily Max**
Xylene; Effluent; Grab	**10/01 – 12/30 Quarterly**		**Monitor mg/l Daily Max**
pH; Effluent; Grab	**01/01 – 3/31 Quarterly**	**6.5 s.u. Min**	**8.5 s.u. Max**
pH; Effluent; Grab	**04/01 – 6/30 Quarterly**	**6.5 s.u. Min**	**8.5 s.u. Max**
pH; Effluent; Grab	**07/01 – 09/30 Quarterly**	**6.5 s.u. Min**	**8.5 s.u. Max**
pH; Effluent; Grab	**10/01 – 12/30 Quarterly**	**6.5 s.u. Min**	**8.5 s.u. Max**

3. **Discharge Points S/N 002 and S/N 011**. During the term of this permit, the Permittee is authorized to discharge from S/N 002 and S/N 011: condensate from cooling coils from dehumidifying incoming building air, stormwater from roof/parking lot drains, building underdrains, truck unload/load stations, and controlled secondary containment basins to the Winooski River. Flows commingle with treated groundwater and vapor extraction well water resulting from activities permitted separately under 3-1559 prior to discharging.

Outfall ID	Latitude	Longitude
S/N 002	44.4790581	-73.0951856
S/N 011	44.4770432	-73.1018723

The Permittee shall comply with inspection and monitoring requirements specified in Condition 1.D. of this permit.

4. **Discharge Points S/N 004, S/N 006, S/N 008, S/N 012, S/N 013, and S/N 017.** During the term of this permit, the Permittee is authorized to discharge potential groundwater seepage and stormwater from roof/parking lot drains, building underdrains, truck unload/load stations, and controlled secondary containment basins to the Winooski River from the following outfall locations:

Outfall ID	Latitude	Longitude
S/N 004	44.4802921	-73.0944371
S/N 006	44.4818737	-73.090985
S/N 008	44.4757775	-73.0966447
S/N 012	44.4776829	-73.1023341
S/N 013	44.4792557	-73.1047941
S/N 017	44.4776568	-73.0933708

The Permittee shall comply with inspection and monitoring requirements specified in Condition 1.D. of this permit.

5. **Discharge Points S/N 009, S/N 010, S/N 014, S/N 015, S/N 016, S/N 018, and S/N 019.** During the term of this permit, the Permittee is authorized to discharge only stormwater runoff from roof/parking lot drains from the following outfall locations:

Outfall ID	Latitude	Longitude
S/N 009	44.4743718	-73.0974427
S/N 010	44.4755204	-73.1014874
S/N 014	44.4810949	-73.1074045
S/N 015	44.481786	-73.1084978
S/N 016	44.4739444	-73.0949246
S/N 018	44.4755608	-73.0942909
S/N 019	44.4832852	-73.110394

The Permittee shall comply with inspection and monitoring requirements specified in Condition 1.D. of this permit.

B. Discharge Special Conditions

a. Samples shall be taken at a representative location prior to discharging to the Winooski River.

b. The pH of the discharge described under Condition 1.A.2 shall be between 6.50 and 8.50 standard units or fall within the background range of the receiving water if it exceeds these limitations. Due to pH variations in natural waters, an effluent sample within ± 0.50 S.U. of background shall be deemed acceptable. Background samples shall be collected upstream of the discharge point. All pH monitoring results shall be included on the monthly discharge Monitoring Report, including any upstream receiving water analyses.

c. Any discharge of stormwater is subject to Condition I.D.

d. The effluent limitation for Ultimate Oxygen Demand (UOD) is based on the Lower Winooski River Wasteload Allocation Order and shall be applicable from June 1st to October 31st annually. Results from the five-day Biochemical Oxygen Demand (BOD_5) and Total Kjeldahl Nitrogen (TKN) monitoring collected from June 1st to October 31st shall be used to calculate UOD with the following formula:

$$\text{UOD (lbs/day)} = [(\text{BOD5 (lbs/day)} \times 1.43) + (\text{TKN (lbs/day)} \times 4.57)]$$

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

[(Monthly Average Phosphorus Concentration) x (Total Monthly Flow) x 8.34]
(*See required Total Phosphorus monitoring report form WR43-TP to report monthly totals*)

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

g. NOEL-C is the concentration of the effluent in a sample that causes No Observed (Chronic) Effect (i.e. mortality or reduced growth to the test population at a 7-day exposure interval of observation).

h. The Permittee shall monitor the effluent from the treatment systems for the five regulated per- and polyfluoroalkyl substances (PFAS) substances listed in Condition I.A.1. at a minimum frequency of once per quarter within the first 12 months from the permit effective date. After the first year, monitoring shall be conducted annually.

U.S. Environmental Protection Agency (EPA) method 537 Version 1.1 shall be used to monitor and analyze PFAS. This method consists of a solid phase extraction and liquid chromatograph/tandem mass spectrographic methods to sample for PFAS. Isotope dilution for QA/QC adjustments to compensate for matrix interferences and related recovery percentages must be implemented. This method was used in the 2019 Summary Report for the Poly- and Perfluoroalkyl Substances at Wastewater Treatment Facilities and Landfill Leachate sampling study and 2019 Summary Report completed by Weston & Sampson Engineers, Inc. on behalf of the Vermont Department of Environmental Conservation. The accepted method shall be used until there is a Clean Water Act (CWA) authorized method for PFAS detection in wastewater effluent available to the public and posted on EPA's CWA methods program website. See https://www.epa.gov/cwa-methods/other-clean-water-act-test-methodschemical and https://www.epa.gov/cwa-methods.

i. The discharge shall be free from substances in kind or quantity that settle to form harmful benthic deposits; float as foam, debris, scum or other visible substances; produce odor, color, 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.

j. The effluent shall not cause visible discoloration of the receiving waters.

k. Escherichia coli (E. coli) grab samples shall be collected between the hours of 6:00 a.m. to 6:00 p.m.

l. These discharges shall not cause erosion or contain sediment which causes or contributes to a violation of water quality standards of the receiving water.

m. Total Toxic Organics (TTO) (Codified at 40 C.F.R. Part 413, 433, 465, 467, 468, 469) shall mean the summation of all quantifiable results observed that are greater than 0.01 mg/l for the toxic organics listed in Attachment D. The sum of TTOs must meet the effluent limitation in Condition I.A.1.

n. 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.

o. Total Nitrogen (TN) shall be reported as pounds TN and calculated as: TN (mg/L) × Total Daily Flow × 8.34; where TN (mg/L) = TKN (mg/L) + NO_x (mg/L).

p. Composite samples for BOD_5, TSS, TP, TKN, and NO_x shall be taken during the hours of 6:00 AM to 6:00 PM unless otherwise specified. Eight hours is the minimum period for the composite. 24 hours is the maximum for the composite.

q. 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.

r. 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%.

s. To ensure 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.

t. 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 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.

C. WASTE MANAGEMENT ZONE

In accordance with the 10 V.S.A Section 1252, this permit hereby establishes a waste management zone that extends from the outfall of the Wastewater Treatment Facility in the Winooski River downstream 1.0 mile.

D. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

The EPA report "Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices" Report number EPA 832-R-92-006 should be used to ensure this Condition is satisfied. The minimum requirements for the SWPPP are described within this section.

1. Deadlines for updated Stormwater Pollution Prevention Plan (SWPPP):
   By no later than 180 days after the effective date of this permit, the Permittee shall update and implement a revised SWPPP. The Plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in stormwater discharges associated with industrial activities.

2. Areas of the Facility Regulated: These areas include but are not limited to ground surfaces immediately adjacent to manufacturing areas, processing or material storage areas; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 C.F.R. § 401) including the stormwater collection system; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and

finished products; and areas where industrial activity has taken place in the past and materials remain and are exposed to stormwater.

a. Regulated stormwater collection system outfalls subject to Condition 1.D.: S/N 002, S/N 004, S/N 006, S/N 007, S/N 008, S/N 009, S/N 010, S/N 011, S/N 012, S/N 013, S/N 014, S/N 015, S/N 016, S/N 017, S/N 018, and S/N 019.

3. The SWPPP shall include a list of pollutant(s) or pollutant constituents associated with each regulated area. This list must include non-stormwater discharges and potential sources of pollutants that may commingle with stormwater discharges associated with regulated areas. Constituents mentioned in the SWPPP, and that are not already listed in Condition I.A.1 and 2 of this permit, may not be subject to effluent limit guidelines.

4. The SWPPP must include a description of existing and potential future stormwater control measures with the applicable schedules and procedures. The Permittee must select, design, install, implement, and document control measures (including best management practices) to minimize pollutant discharges. Such control measures include but are not limited to maintenance, good housekeeping, erosion prevention and sediment control, and spill prevention and response.

5. On an as needed basis, maintenance and/or repairs for control measures must be completed immediately by the Permittee to minimize stormwater pollutant discharges. During such maintenance or repairs, the Permittee shall clean up any contaminated surfaces so that the material will not be discharged during subsequent storm events. The Permittee must notify the Secretary within 30 days of planned, or within 24 hours of any emergency, maintenance or repairs occurring in the stormwater management system. Rationale for modifications, repairs, and maintenance shall be recorded in the SWPPP. Upon review, the Secretary may request additional monitoring and increase the frequency of inspections for the duration of the project.

6. The Permittee must conduct the following inspections and document them in the SWPPP:

a. Dry Weather Routine Facility Inspection: During facility operating hours, the Permittee shall conduct monthly inspections of areas covered by the requirements in this permit. Increased inspection frequency may be appropriate for some types of equipment, processes and stormwater control measures, or areas of the facility with significant activities and materials exposed to stormwater.

   At least once each calendar year, the routine inspection must be conducted during a period when a stormwater discharge is occurring. Inspections must be performed by qualified personnel, or with at least one member of the stormwater pollution prevention team participating. Inspectors must consider the results of visual and analytical monitoring (if any) for the past year when planning and conducting stormwater inspections. During an inspection when there is a stormwater discharge, control measures implemented to comply with effluent limits must be observed to ensure they are functioning correctly. Discharge points listed in Condition I.D.2.a. must also be observed during this inspection. If such discharge locations are inaccessible, nearby downstream locations must be inspected.

b. Wet Weather Visual Inspection: The stormwater management system and locations of areas exposed to precipitation or stormwater, including but not limited to fueling station, industrial vehicle and equipment maintenance and/or cleaning areas, material handling areas, material storage areas, processing areas, and disposal areas, must be visually inspected quarterly during wet weather.

For the discharge points listed in Condition I.D.2.a., the wet weather visual monitoring must be made:

- For a sample in a clean, colorless glass or plastic container, and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and the Permittee must document why it was not possible to take the sample within the first 30 minutes.
- In the case of snowmelt, samples must be taken during a period with a measurable discharge from the site; and
- For storm events, on discharges that occur at least 72 hours (three days) from the previous discharge. The 72-hour (three-day) storm interval does not apply if less than a 72-hour (three-day) interval is representative for local storm events during the sampling period.
- Visually inspect or observe the sample for the following water quality characteristics:
    - Color;
    - Odor;
    - Clarity (diminished);
    - Floating solids;
    - Settled solids;
    - Suspended solids;
    - Foam;
    - Oil sheen; and
    - Other obvious indicators of stormwater pollution.

The Permittee has multiple discharge points/outfalls and may develop an inspection plan for how each stormwater outfall will be inspected at least once per quarter. This plan may include a rotating inspection schedule within a single quarter in order to meet the dry weather routine facility inspection and wet weather visual inspection requirements. In the event outfalls were not observed during the quarter due to lack of runoff from precipitation events or snow melt resulting in a discharge, then the Permittee must explain why the outfall was not inspected or why no discharge had occurred.

c. The Permittee shall notify the Secretary within 24 hours of any observed issues with the water quality characteristics listed above, resulting from an inspection. Rationale for the issue and a plan to resolve the issue shall be recorded in the SWPPP. Upon review, the Secretary may request additional monitoring and increase the frequency of inspections for the duration of the issue.

7. The SWPPP must include the person(s) or position(s) responsible for inspection, the inspection schedule, specific items to be covered by an inspection for each outfall, and the person(s) or position(s) responsible for maintenance. Records of inspections shall be maintained and kept on file with the Plan.

8. Signature and Plan Review: The SWPPP shall be signed by the Permittee or a properly designated representative. A copy of the SWPPP shall be kept at the facility and shall be made available to the Secretary or a properly designated representative upon request.

9. The Permittee shall amend the SWPPP whenever there is a change in design, construction, operation, or maintenance at the facility which has a significant effect on the potential for the discharge of pollutants to the waters of the State or if the SWPPP cannot achieve the general objectives of controlling pollutants in stormwater discharges associated with industrial activity.

10. The Permittee shall submit the plan according to the following table:

Due Date	Event Description
12/28/2021	The Permittee shall submit the completed SWPPP by this date to the Secretary; 180 days after the effective date.

E. WHOLE EFFLUENT TOXICITY (WET) TESTING ACUTE/CHRONIC

1. Annually, two Whole Effluent Toxicity Tests shall be conducted on S/N 001 and shall consist of the following:

a) One WET test shall be conducted as a one species (*Ceriodaphnia dubia*) chronic WET test and occur between January 1st to February 28th. A hydrogen peroxide analysis shall be conducted on the initial sample, the dilution water, and each aliquot of replenishment water. The results of this test shall be submitted with the appropriate WR-43 discharge monitoring report.

b) One WET test shall be conducted as two species (*Pimpephales promelas* and *Ceriodaphnia dubia*) chronic WET test to occur between August 1st and October 31st. A hydrogen peroxide analysis shall be conducted on the initial sample, the dilution water, and each aliquot of replenishment water. The results of this test shall be submitted with the appropriate WR-43 discharge monitoring report.

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 the 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 sample and report as prescribed below in a manner that assures WET results are: obtained in January or February and submitted to the Secretary by June 30; and (b) obtained in August, September, or October and submitted to the Secretary by December 31.

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

Due Date	Event Description
6/30/2022	The Permittee shall submit *Ceriodaphnia dubia* chronic WET test results from January to February monitoring.
12/31/2022	The Permittee shall submit *Pimpephales promelas* and *Ceriodaphnia dubia* chronic WET test results from August to October monitoring.
6/30/2023	The Permittee shall submit *Ceriodaphnia dubia* chronic WET test results from January to February monitoring.
12/31/2023	The Permittee shall submit *Pimpephales promelas* and *Ceriodaphnia dubia* chronic WET test results from August to October monitoring.
6/30/2024	The Permittee shall submit *Ceriodaphnia dubia* chronic WET test results from January to February monitoring.
12/31/2024	The Permittee shall submit *Pimpephales promelas* and *Ceriodaphnia dubia* chronic WET test results from August to October monitoring.
6/30/2025	The Permittee shall submit *Ceriodaphnia dubia* chronic WET test results from January to February monitoring.
12/31/2025	The Permittee shall submit *Pimpephales promelas* and *Ceriodaphnia dubia* chronic WET test results from August to October monitoring.

F. POWER FAILURE

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the Permittee shall either:

1. Provide an alternative power source sufficient to operate the wastewater control facilities, or if such alternative power source is not in existence, or

2. Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

Due Date	Event Description
12/31/2021	The Permittee shall notify the Secretary of alternative power sources available and/or production controls in place that the Permittee plans to use in the event there is power failure at the facility.

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 and on the WR-43-TP, in the following ways:

1. 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)

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

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

4. 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: % = Running Total Annual Pounds / Annual TP Permit Limit × 100

3. Phosphorus Optimization Plan

a. Within 120 days of the permit effective date, 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 phosphorous 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 and the WR-43-TP form 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.

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.

b) 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.

c) 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.

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

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

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

g) 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

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

i) The Permittee shall report according to the following table:

Due Date	Event Description
10/29/2021	The Permittee shall submit a POP and implement optimization techniques to achieve reductions in TP 120 days after the permit effective date.
12/28/2021	The Permittee shall commence implementation of the POP 60 days after submitting to the Secretary.
1/31/2022	The Permittee shall submit an annual report that documents TP trends and optimization techniques.
1/31/2023	The Permittee shall submit an annual report that documents TP trends and optimization techniques for the previous year.
1/31/2024	The Permittee shall submit an annual report that documents TP trends and optimization techniques for the previous year.
1/31/2025	The Permittee shall submit an annual report that documents TP trends and optimization techniques for the previous year.

H. 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.
12/31/2022	The Permittee shall submit a passing Laboratory Proficiency Test.
12/31/2023	The Permittee shall submit a passing Laboratory Proficiency Test.
12/31/2024	The Permittee shall submit a passing Laboratory Proficiency Test.
12/31/2025	The Permittee shall submit a passing Laboratory Proficiency Test.

I. BIOCIDE CHEMICAL USAGE REPORT

1. The Permittee shall track biocide chemical class, types, and amounts used at the facility on a semi-annual basis.

2. Usage of such chemicals shall be in accordance with the label pursuant to 40 C.F.R. § 156.10(i)(2)(ii) to prevent and control negative impacts to the receiving water. Chemical amounts and treatment durations shall not exceed specific product label, or chemical Safety Data Sheet, requirements.

3. Annual reports shall include the following information:
a) The active ingredient or type of chemical used at the facility.
b) The total quantity in pounds or concentration in ug/L or mg/L used within the reporting period.
c) An indicator for whether doses applied are treated prior to discharging.
d) A description for whether the dosing and duration of chemical used exceeded the product label requirements at any time during the reporting period.
e) Any changes in the types of biocide chemicals used and their corresponding maximum dose values.
f) Each biocide chemical type included in the report shall have a corresponding chemical Safety Data Sheet attachment.

4. The Permittee shall report on biocide chemical usage according to the following table:

Due Date	Event Description
6/30/2022	The Permittee shall submit the Biocide Chemical Semi-Annual Report.
12/31/2022	The Permittee shall submit the Biocide Chemical Semi-Annual Report.
6/30/2023	The Permittee shall submit the Biocide Chemical Semi-Annual Report.
12/31/2023	The Permittee shall submit the Biocide Chemical Semi-Annual Report.
6/30/2024	The Permittee shall submit the Biocide Chemical Semi-Annual Report.
12/31/2024	The Permittee shall submit the Biocide Chemical Semi-Annual Report.
6/30/2025	The Permittee shall submit the Biocide Chemical Semi-Annual Report.

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 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

Pursuant to 40 C.F.R. § 124.5, the Secretary may modify, revoke and reissue, or terminate for cause, in whole or in part, the authorization to discharge under this permit. These actions may be taken for the reasons specified in 40 C.F.R. § 122.62 (modification or revocation and reissuance) and § 122.64 (termination), including:

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

b. There are material and substantial alterations or additions to the permitted facility or activity;

c. New information is received that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance;

d. To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions;

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

f. Reallocation of WLA under the LC TMDL;

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

h. Development of effluent limitation guidelines based on the final Clean Water Act (CWA) authorized method for PFAS detection in wastewater effluent.

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 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 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 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 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 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 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 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 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 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 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 submitted notices as required under 40 C.F.R. § 122.41(m)(3):

(i) Anticipated bypass. If the Permittee 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 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.

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's discharge is covered under an emergency pollution permit under the provisions of 10 V.S.A. § 1268. The Permittee 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 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's 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, within 30 days of the date on which the Permittee is 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 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 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 to reduce and eliminate the non-complying discharge; and

(v) Steps to be taken by the Permittee 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 (sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, outfall pipe), 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 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 (e) 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 (e) 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 (d) or (e) 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.

III. 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.

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.

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 of daily 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.

ATTACHMENT D

Total Toxic Organics (TTO)
The term "total toxic organics" in Condition I.A.1 and I.B.m. shall mean the sum of the concentrations for each of the following toxic organic compounds, which are found in the discharge (S/N 001) at a concentration greater than ten micrograms per liter (10 ug/1). The permittee will be required to report the analysis for those individual toxic organics listed below that are greater than ten micrograms per liter.

1,2,4-trichlorobenzene	dibutyl phthalate
chloroform*	anthracene
1,2-dichlorobenzene	butyl benzyl phthalate
1,3-dichlorobenzene	1,2-diphenylhydrazine
1,4-dichlorobenzene	1,1-dichloroethylene
ethylbenzene	2,4,6-trichloropheno1
1,1, I-trichloroethane	carbon tetrachloride
methylene chloride	1,2-dichloroethane
naphthalene	1,1,2-trichloroethane
2-nitrophenol	dichlorobromomethane
phenol	trichloroethylene
bis (2-ethylhexyl) phthalate	toluene
tetrachloroethylene	isophorone
2-chlorophenol	4-nitrophenol
pentachlorophenol	2,4-dichlorophenol

*Chloroform has been detected in the intake water, obtained from the Champlain Water District, in concentrations of 0.065 ppm. The source is chlorine used to disinfect the drinking water supply. The intake concentrations will continue to be included in the TTO calculations. Both the concentrations of chloroform from the intake water and from the permittee's wastewater will be shown on monthly monitoring reports. This will more accurately represent the permittee's actual contribution of chloroform to the wastewater discharge.