AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM SMALL WASTEWATER TREATMENT FACILITY GENERAL PERMIT

In compliance with the provisions of the Federal Clean Water Act as amended, 33 U.S.C. §§ 1251 et seq. (the "CWA"),

Town of Upton, Massachusetts

is authorized to discharge from the facility located at

Upton Wastewater Treatment Facility 43 Maple Avenue Upton, MA 01568

to receiving water named

Unnamed tributary of the West River Blackstone Watershed

in accordance with effluent limitations, monitoring requirements and other conditions set forth in this authorization and the Small WWTF GP (General Permit No. MAG580000).

This authorization shall become effective on September 1, 2023.

For applicable attachments see the complete version of the Small WWTF General Permit¹:

Part VIII - Standard Conditions

Attachment A - Freshwater Acute Toxicity Test Procedure and Protocol, February 2011

Attachment B - Freshwater Chronic Toxicity Test Procedure and Protocol, March 2013

Attachment C – Marine Acute Toxicity Test Procedure and Protocol, July 2012

Attachment D - Marine Chronic Toxicity Test Procedure and Protocol, November 2013

I. Applicability and Coverage of the WWTF GP

Supplementary information provided in the complete version of the Small WWTF GP.

¹ https://www.epa.gov/npdes-permits/region-1-final-small-wastewater-treatment-facilities-general-permit

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II. Massachusetts General Permit, Permit No. MAG580000

A. Effluent Limitations and Monitoring Requirements

During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge treated effluent through Outfall Serial Number 001 to an unnamed tributary of the West River. The discharge shall be limited and monitored as specified below at the end of all treatment processes, including disinfection or dechlorination, or at an alternative representative location approved by EPA and the Massachusetts Department of Environmental Protection (MassDEP), that provides a representative sample of the effluent. The receiving water and the influent shall be monitored as specified below.

Table 1. Effluent Limitations and Monitoring Requirements

Effluent Characteristic	Discharge Lin	Discharge Limitation ¹³			Monitoring Requirement ^{1,2}		
Parameter	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ³		
Rolling Average Effluent Flow ⁴	0.4 MGD			Continuous	Recorder		
Effluent Flow ⁴	Report MGD		Report MGD	Continuous	Recorder		
BOD ₅ (May 1 – October 31)	12 mg/L 38 lb/day	20 mg/L 63 lb/day	Report mg/L	1/Week	Composite		
BOD ₅ (November 1 – April 30)	22 mg/L 75 lb/day	34 mg/L 113 lb/day	Report mg/L	1/Week	Composite		
BOD ₅ Removal	≥ 85 %			1/Month	Calculate		
TSS (May 1 – October 31)	12 mg/L 38 lb/day	20 mg/L 63 lb/day	Report mg/L	1/Week	Composite		
TSS (November 1 – April 30)	22 mg/L 75 lb/day	34 mg/L 113 lb/day	Report mg/L	1/Week	Composite		
TSS Removal	≥ 85 %			1/Month	Calculate		
pH Range ⁷		6.5-8.3 S	U.	5/Week	Grab		
<i>Escherichia coli</i> ⁸ (April 1 – October 31)	126 colonies/ 100 mL		409 colonies/100 mL	1/Week	Grab		
Total Residual Chlorine ⁹	11.2 μg/L		19.4 µg/L	5/Week	Grab		
Total Aluminum	88.7 µg/L		542 µg/L	2/Month	Composite		
Total Cadmium	0.19 µg/L		1.1 μg/L	2/Month	Composite		
Total Copper	18.5 µg/L		26.2 µg/L	2/Month	Composite		

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Effluent Characteristic	Discharge Lin	nitation ¹³	Page 3 of 22	Monitoring Re	Requirement ^{1,2}		
Parameter	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ³		
Total Lead	1.6 μg/L			2/Month	Composite		
Total Zinc	75.9 μg/L		75.9 μg/L	2/Month	Composite		
Total Phosphorus ¹⁰ (April 1 – October 31)	0.1 mg/L			2/Month	Composite		
Total Phosphorus (November 1 – March 31)	1.0 mg/L 3.3 lb/day			2/Month	Composite		
Ammonia Nitrogen (June 1 – September 30)	1.4 mg/L			2/Month	Composite		
Ammonia Nitrogen (October 1 – May 31)	4.4 mg/L			2/Month	Composite		
Total Nitrogen ^{11, 13}	Report mg/L Report lb/day		Report mg/L Report lb/day	1/Month	Composite		
Total Kjeldahl Nitrogen ¹¹	Report mg/L		Report mg/L	1/Month	Composite		
Nitrate + Nitrite ¹¹	Report mg/L		Report mg/L	1/Month	Composite		
Perfluorohexanesulfonic acid (PFHxS) ¹²			Report ng/L	2/Year	Composite		
Perfluoroheptanoic acid (PFHpA) ¹²			Report ng/L	2/Year	Composite		
Perfluorononanoic acid (PFNA) ¹²			Report ng/L	2/Year	Composite		
Perfluorooctanesulfonic acid (PFOS) ¹²			Report ng/L	2/Year	Composite		
Perfluorooctanoic acid (PFOA) ¹²			Report ng/L	2/Year	Composite		
Perfluorodecanoic acid (PFDA) ¹²			Report ng/L	2/Year	Composite		
Whole Effluent Toxicity (WET) Testing	1 4,15						
Acute (LC ₅₀) (Test Species: <i>Ceriodaphnia dubia</i>)			≥ 100%	4/Year	Composite		
Chronic (C-NOEC) (Test Species: <i>Ceriodaphnia dubia</i>)			≥98%	4/Year	Composite		
Hardness (as CaCo ₃)			Report mg/L				
Ammonia Nitrogen			Report mg/L		Measurement		
Total Aluminum			Report mg/L	Frequency and Sample Type			
Total Cadmium			Report mg/L				

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Effluent Characteristic	naracteristic Discharge Limitation ¹³		Monitoring Re	Monitoring Requirement ^{1,2}	
Parameter	Average	Average	Maximum Daily	Measurement	Sample Type ³
	Monthly	Weekly		Frequency	
Total Copper			Report mg/L		
Total Lead			Report mg/L		
Total Nickel			Report mg/L		
Total Zinc			Report mg/L		
Total Organic Carbon			Report mg/L		
Total Phosphorus ¹⁹			Report mg/L	See Footnote 19	Composite
				19	

	Reporting Requirements		Monitoring Requi	Monitoring Requirements ^{1,2,3}		
Ambient Characteristic ¹⁶	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ⁴	
Hardness			Report mg/L		Grab	
Ammonia Nitrogen			Report mg/L		Grab	
Total Aluminum			Report mg/L		Grab	
Total Cadmium			Report mg/L		Grab	
Total Copper			Report mg/L		Grab	
Total Nickel			Report mg/L	Same as WET	Grab	
Total Lead			Report mg/L	Monitoring	Grab	
Total Zinc			Report mg/L	Frequency	Grab	
Total Organic Carbon			Report mg/L		Grab	
Dissolved Organic Carbon ¹⁷			Report mg/L		Grab	
pH^{18}			Report S.U.		Grab	
Temperature ¹⁸			Report °C		Grab	
Total Phosphorus ¹⁹			Report mg/L	See Footnote 19	Grab	

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	Reporting Requirements			Monitoring Re	Monitoring Requirements ^{1,2,3}	
Influent Characteristic	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ⁴	
BOD ₅	Report mg/L			2/Month	Composite	
TSS	Report mg/L			2/Month	Composite	
Perfluorohexanesulfonic acid (PFHxS) ¹²			Report ng/L	2/Year	Composite	
Perfluoroheptanoic acid (PFHpA) ¹²			Report ng/L	2/Year	Composite	
Perfluorononanoic acid (PFNA) ¹²			Report ng/L	2/Year	Composite	
Perfluorooctanesulfonic acid (PFOS) ¹²			Report ng/L	2/Year	Composite	
Perfluorooctanoic acid (PFOA) ¹²			Report ng/L	2/Year	Composite	
Perfluorodecanoic acid (PFDA) ¹²			Report ng/L	2/Year	Composite	

	Reporting Requirements			Monitoring Requirements ^{1,2,3}	
Sludge Characteristic	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ⁴
Perfluorohexanesulfonic acid (PFHxS) ²⁰			Report ng/g	2/Year	Grab ²¹
Perfluoroheptanoic acid (PFHpA) ²⁰			Report ng/g	2/Year	Grab ²¹
Perfluorononanoic acid (PFNA) ²⁰			Report ng/g	2/Year	Grab ²¹
Perfluorooctanesulfonic acid (PFOS) ²⁰			Report ng/g	2/Year	Grab ²¹
Perfluorooctanoic acid (PFOA) ²⁰			Report ng/g	2/Year	Grab ²¹
Perfluorodecanoic acid (PFDA) ²⁰			Report ng/g	2/Year	Grab ²¹

Footnotes to Part II.A. Table 1:

- 1. All samples shall be collected in a manner to yield representative data. A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of the week each month. Occasional deviations from the routine sampling program are allowed, but the reason for the deviation shall be documented as an electronic attachment to the applicable discharge monitoring report. The Permittee shall report the results to the Environmental Protection Agency Region 1 (EPA) and the State of any additional testing above that required herein, if testing is in accordance with 40 CFR Part 136.
- 2. In accordance with 40 CFR § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is "sufficiently sensitive" when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.

When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., $< 50 \ \mu g/L$, if the ML for a parameter is 50 $\mu g/L$). For reporting an average based on a mix of values detected and not detected, assign a value of "0" to all non-detects for that reporting period and report the average of all the results.

3. A "grab" sample is an individual sample collected in a period of less than 15 minutes.

A "composite" sample is a composite of at least twenty-four (24) grab samples taken during one consecutive 24-hour period, either collected at equal intervals and combined proportional to flow or continuously collected proportional to flow.

All references to "composite" will be changed to "grab" in the authorization to discharge for any facilities utilizing sand filters or lagoons.

- 4. The limit is a rolling annual average, reported in million gallons per day (MGD), which will be calculated as the arithmetic mean of the monthly average flow for the reporting month and the monthly average flows of the previous eleven months. Also report monthly average and maximum daily flow in MGD.
- 5. N/A

6. N/A

- 7. The pH shall be within the specified range at all times. The minimum and maximum pH sample measurement values for the month shall be reported in standard units (S.U.).
- 8. Bacteria monitoring shall be conducted concurrently with TRC monitoring, if TRC monitoring is required.

For samples tested using the Most Probable Number (MPN) method, the units may be expressed as MPN. The units may also be expressed as colony forming units (cfu) when using the Membrane Filtration method.

- 9. For total residual chlorine (TRC) related requirements, see Part II.B.9 of this authorization.
- 10. See Part IV.E below for compliance schedule applicable to the April-October monthly average phosphorus limit.
- 11. Total Kjeldahl nitrogen and nitrate + nitrite samples shall be collected concurrently. The results of these analyses shall be used to calculate both the concentration and mass loadings of total nitrogen, as follows.

Total Nitrogen (mg/L) = Total Kjeldahl Nitrogen (mg/L) + Nitrate + Nitrite (mg/L)

Total Nitrogen (lbs/day) = [(average monthly Total Nitrogen (mg/L) * total monthly effluent flow (Millions of Gallons (MG)) / # of days in the month] * 8.34

- 12. Report in nanograms per liter (ng/L). Monitoring and reporting shall be done twice per year, once in each 3rd calendar quarter and once in each 4th calendar quarter. This reporting requirement for the listed PFAS parameters takes effect the first full 3rd or 4th calendar quarter following 6 months after EPA notifies the permittee that an EPA multi-lab validated method for wastewater is available.
- 13. The permittee shall operate the treatment facility to reduce the discharge of total nitrogen to the maximum extent possible, using existing treatment equipment at the facility.
- 14. to the maximum extent possible, using existing treatment equipment at the facility. The Permittee shall conduct acute toxicity tests (LC50) and chronic toxicity tests (C-NOEC) in accordance with test procedures and protocols specified in Attachments A and B of this permit. LC50 and C-NOEC are defined in Part VIII.E. of this permit. The Permittee shall test the daphnid (*Ceriodaphnia dubia*). Toxicity test samples shall be collected during the same weeks each time of calendar quarters ending March 31st, June 30th, September 30th, and December 31st. The complete report for each toxicity test shall be submitted as an attachment to the DMR submittal which includes the results for that toxicity test.
- 15. For Part I.A.1., Whole Effluent Toxicity Testing, the Permittee shall conduct the analyses specified in **Attachments A and B**, Part VI. CHEMICAL ANALYSIS for the effluent sample. If toxicity test(s) using the receiving water as diluent show the receiving water to be toxic or unreliable, the Permittee shall follow procedures outlined in **Attachments A and B**,

Section IV., DILUTION WATER. Minimum levels and test methods are specified in **Attachments A and B**, Part VI. CHEMICAL ANALYSIS.

- 16. For Part I.A.1., Ambient Characteristic, the Permittee shall conduct the analyses specified in Attachments A and B, Part VI. CHEMICAL ANALYSIS for the receiving water sample collected as part of the WET testing requirements. Such samples shall be taken from the receiving water at a point immediately upstream of the permitted discharge's zone of influence at a reasonably accessible location, as specified in Attachments A and B. Minimum levels and test methods are specified in Attachment A and B, Part VI. CHEMICAL ANALYSIS.
- 17. Monitoring and reporting for dissolved organic carbon (DOC) are not requirements of the Whole Effluent Toxicity (WET) tests but are additional requirements. The Permittee may analyze the WET samples for DOC or may collect separate samples for DOC concurrently with WET sampling.
- 18. A pH and temperature measurement shall be taken of each receiving water sample at the time of collection and the results reported on the appropriate DMR. These pH and temperature measurements are independent from any pH and temperature measurements required by the WET testing protocols.
- 19. Total phosphorus effluent monitoring shall be conducted concurrently with any whole effluent toxicity testing between April 1st and October 31st (*i.e.*, 2nd and 3rd calendar quarter). Additionally, such Permittees shall develop and implement a sampling and analysis plan for biennially collecting monthly samples at a location upstream of the facility. Samples shall be collected once per month, from May through September, every other calendar year starting on the calendar year following the effective date of this authorization. The Permittee may enter "NODI" code 9 (*i.e.*, conditional monitoring) in the relevant discharge monitoring report during years when monitoring is not required. Sampling shall be conducted on any calendar day that is preceded by at least 72 hours without rainfall, following the last rainfall of 0.1 inches of rainfall or greater. A sampling plan shall be submitted to EPA and the State at least three months prior to the first planned sampling date as part of a Quality Assurance Project Plan for review and State approval.
- 20. Report in nanograms per gram (ng/g).

Monitoring and reporting for PFAS in the sludge of non-lagoon facilities shall be done twice per year, once in each 3rd calendar quarter and once in each 4th calendar quarter. This reporting requirement for the listed PFAS parameters takes effect the first full 3rd or 4th calendar quarter following 6 months after EPA notifies the Permittee that an EPA multi-lab validated method for sludge is available.

21. Sludge sampling shall be as representative as possible based on guidance found at <u>https://www.epa.gov/sites/production/files/2018-11/documents/potw-sludge-sampling-guidance-document.pdf</u>.

B. Other Requirements for Massachusetts Facilities

- 1. The discharge shall not cause a violation of the water quality standards of the receiving water.
- 2. The discharge shall be free from pollutants in concentrations or combinations that, in the receiving water, settle to form objectionable deposits; float as debris, scum or other matter to form nuisances; produce objectionable odor, color, taste or turbidity; or produce undesirable or nuisance species of aquatic life.
- 3. The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical, chemical, or biological nature of the bottom.
- 4. The discharge shall not result in pollutants in concentrations or combinations in the receiving water that are toxic to humans, aquatic life or wildlife.
- 5. The discharge shall be free from floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to the receiving water.
- 6. The discharge shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.
- 7. The Permittee must provide adequate notice to EPA-Region 1 and the State of the following:
 - a. Any new introduction of pollutants into the facility from an indirect discharger which would be subject to Part 301 or Part 306 of the Clean Water Act if it were directly discharging those pollutants or in a primary industry category (see 40 CFR Part 122 Appendix A as amended) discharging process water; and
 - b. Any substantial change in the volume or character of pollutants being introduced into that facility by a source introducing pollutants into the facility at the time of issuance of the permit.
 - c. For purposes of this paragraph, adequate notice shall include information on:
 - (1) The quantity and quality of effluent introduced into the facility; and
 - (2) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility.
- 8. Pollutants introduced into the facility by a non-domestic source (user) shall not pass through the POTW or facility or interfere with the operation or performance of the works.
- 9. Total Residual Chlorine (TRC) limitations and related requirements are specified below:
 - a. N/A

- b. The Permittee shall minimize the use of chlorine while maintaining adequate bacterial control. Monitoring for total residual chlorine (TRC) is only required for discharges which have been previously chlorinated or which contain residual chlorine. For permit limits below 20 μg/L, the compliance level for TRC is 20 μg/L.
- c. Chlorination and dechlorination systems shall include an alarm system for indicating system interruptions or malfunctions. Any interruption or malfunction of the chlorine dosing system that may have resulted in levels of chlorine that were inadequate for achieving effective disinfection, or interruptions or malfunctions of the dechlorination system that may have resulted in excessive levels of chlorine in the final effluent shall be reported with the monthly DMRs. The report shall include the date and time of the interruption or malfunction, the nature of the problem, and the estimated amount of time that the reduced levels of chlorine or dechlorination chemicals occurred.
- d. Permittees authorized to conduct disinfection using an alternative to chlorine as the disinfectant are subject to the TRC limitations and monitoring requirements whenever chlorine is added to the treatment process for disinfection or for other purpose. For the months in which chlorine is not added to the treatment process, the Permittee shall indicate "no discharge" on DMRs using the "NODI" code C.
- e. Facilities shall disinfect year-round unless authorized to disinfect seasonally. Permittees seeking General Permit coverage for discharges into Class B waters may request authorization to conduct disinfection of the discharge on a seasonal basis. If approved, upon receipt of written authorization from EPA and MassDEP to conduct seasonal disinfection, TRC limitations, monitoring, and reporting requirements apply only during the specified disinfection period and whenever chlorine is added to the treatment process outside of the specified disinfection period.

C. Unauthorized Discharges

- 1. This permit authorizes discharges only from the outfall(s) listed in the authorization to discharge from EPA in accordance with the terms and conditions of this permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs), are not authorized by this permit in accordance with Part VIII.D.1.e.(1) (24-hour reporting). See Part VI below for reporting requirements.
- 2. The Permittee must provide notification to the public within 24 hours of becoming aware of any unauthorized discharge, except SSOs that do not impact a surface water or the public, on a publicly available website, and it shall remain on the website for a minimum of 12 months. Such notification shall include the location and description of the discharge; estimated volume; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue.
- 3. Notification of SSOs to MassDEP shall be made on its SSO Reporting Form (which includes MassDEP Regional Office telephone numbers). The reporting form and instruction for its completion may be found on-line at https://www.mass.gov/how-to/sanitary-sewer-overflowbypassbackup-notification.

D. Notification Requirements

The Permittee shall notify all downstream community water systems (if any) of any emergency condition, plant upset, bypass, or other system failure which has the potential to impact the quality of the water to be withdrawn by that community for drinking water purposes. This notification should be made as soon as possible but within four (4) hours, and in the anticipation of such an event, if feasible, without taking away from any response time necessary to alleviate the situation. The Permittee shall follow up with written notification within five (5) days. This notification shall include the reason for the emergency, any sampling information, any visual data recorded, a description of how the situation was handled, and when it would be considered to no longer be an emergency.

E. Additional Requirements for Facilities Discharging to Marine Waters

N/A

F. State 401 Certification Conditions

This Permit has received state water quality certification issued by the State under § 401(a) of the CWA and 40 CFR § 124.53. EPA incorporates the following state water quality certification requirements into the Final Permit:

1. Pursuant to 314 CMR 3.11 (2)(a)6., and in accordance with MassDEP's obligation under 314 CMR 4.05(5)(e) to maintain surface waters free from pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife, beginning the first full third (July through September) or fourth (October through December) calendar quarter after the permittee has been notified by EPA of a multi-lab validated method for wastewater, or by the dates set forth in Appendix A of the draft Massachusetts Small Wastewater Treatment Facilities General Permit Modification, whichever is earlier, the permittee shall conduct monitoring of the influent, effluent, and sludge for PFAS compounds as detailed in the tables below. If EPA's multi-lab validated method is not available by four (4) months prior to the dates set for each in Appendix A of the draft Massachusetts Small Wastewater Treatment Facilities General Permit Modification, the permittee shall contact MassDEP (massdep.npdes@mass.gov) for guidance on an appropriate analytical method. Influent, effluent, and sludge samples shall be sampled twice yearly in the third and fourth quarters, with the exception of facilities that dispose of sludge in onsite lagoons. Facilities that dispose of sludge in onsite lagoons shall conduct a one time characterization of the PFAS content in the sludge during the first full third quarter following notification from EPA that a multi-lab validated method is available. Notwithstanding any other provision of the 2023 Federal NPDES Permit Modification to the contrary, monitoring results shall be reported to MassDEP electronically, at massdep.npdes@mass.gov, or as otherwise specified, within 30 days after they are received. If the permittee is located upstream of the drinking water intake of one or more communities, the permittee shall commence this monitoring beginning in the first full third or fourth quarter following 180 days after the effective date of the permittee's authorization and shall contact MassDEP (massdep.npdes@mass.gov) 90 days prior to starting monitoring for guidance on the appropriate analytical method: Battle Road Farm; Wayland WWMD; MCI Concord; Middlesex School; MCI-Bridgewater and

Oak Point Homes. The following small wastewater treatment facility permittees with design flow less than 0.1 MGD that discharge to marine waters are exempt from all PFAS monitoring requirements: Shore Cliff Maintenance Trust and United States Coast Guard Light Station Boston.

Influent and Effluent

Parameter	Units	Measurement	Sample Type
		Frequency	
Perfluorohexanesulfonic acid (PFHxS)	ng/L	Twice Annually ²	24-hour Composite
Perfluoroheptanoic acid (PFHpA)	ng/L	Twice Annually	24-hour Composite
Perfluorononanoic acid (PFNA)	ng/L	Twice Annually	24-hour Composite
Perfluorooctanesulfonic acid (PFOS)	ng/L	Twice Annually	24-hour Composite
Perfluorooctanoic acid (PFOA)	ng/L	Twice Annually	24-hour Composite
Perfluorodecanoic acid (PFDA)	ng/L	Twice Annually	24-hour Composite

Sludge

Parameter	Units	Measurement	Sample Type
		Frequency	
Perfluorohexanesulfonic acid (PFHxS)	ng/L	Twice Annually	24-hour Composite
Perfluoroheptanoic acid (PFHpA)	ng/L	Twice Annually	24-hour Composite
Perfluorononanoic acid (PFNA)	ng/L	Twice Annually	24-hour Composite
Perfluorooctanesulfonic acid (PFOS)	ng/L	Twice Annually	24-hour Composite
Perfluorooctanoic acid (PFOA)	ng/L	Twice Annually	24-hour Composite
Perfluorodecanoic acid (PFDA)	ng/L	Twice Annually	24-hour Composite

2. The requirements of this paragraph apply solely to municipal and regional wastewater treatment facilities and not to privately owned sanitary wastewater treatment facilities. Pursuant to 314 CMR 3.11 (2)(a)6., and in accordance with MassDEP's obligation under 314 CMR 4.05(5)(e) to maintain surface waters free from pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife, beginning six (6) months after the permittee has been notified by EPA of a multi-lab validated method for wastewater, or by the dates set forth in Appendix A of the draft Massachusetts Wastewater Treatment Facilities General Permit Modification, whichever is earlier, the permittee shall commence annual

² Twice annually is defined as once during the third calendar quarter (July through September) and once during the fourth calendar quarter (October through December).

monitoring of all Significant Industrial Users^{3,4} discharging into the POTW. Monitoring shall be in accordance with the table below. If EPA's multi-lab validated method is not available by twenty (20) months after the effective date permittee's authorization under the 2023 Federal NPDES General Permit Modification, the permittee shall contact MassDEP (<u>massdep.npdes@mass.gov</u>) for guidance on an appropriate analytical method. Notwithstanding any other provision of the 2023 Federal NPDES Small Wastewater Treatment Facility General Permit Modification to the contrary, monitoring results shall be reported to MassDEP electronically at <u>massdep.npdes@mass.gov</u> within 30 days after they are received. If the permittee is the following facility, the permittee shall commence this monitoring beginning one (1) year after the effective date of the permittee's authorization under the 2023 Federal NPDES General Permit Modification and shall contact MassDEP (<u>massdep.npdes@mass.gov</u>) 90 days prior to starting monitoring for guidance on the appropriate analytical method: Wayland WWMDC.

Parameter	Units	Measurement	Sample Type
		Frequency	
Perfluorohexanesulfonic acid (PFHxS)	ng/L	Twice Annually	24-hour Composite
Perfluoroheptanoic acid (PFHpA)	ng/L	Twice Annually	24-hour Composite
Perfluorononanoic acid (PFNA)	ng/L	Twice Annually	24-hour Composite
Perfluorooctanesulfonic acid (PFOS)	ng/L	Twice Annually	24-hour Composite
Perfluorooctanoic acid (PFOA)	ng/L	Twice Annually	24-hour Composite
Perfluorodecanoic acid (PFDA)	ng/L	Twice Annually	24-hour Composite

III. New Hampshire General Permit, Permit No. NHG580000

N/A

³ Significant Industrial User (SIU) is defined at 40 CFR part 403: All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subpart N; **and** any other industrial user that: discharges an average of 25,000 GPD or more of process wastewater to the POTW, contributes a process wastestream that makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW, or designated as such by the POTW on the basis that the industrial users has a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standards or requirement.

⁴ This requirement applies to all Significant Industrial Users and not just those within the sectors identified by EPA in the NPDES permit.

IV. Additional Limitations, Conditions, and Requirements

A. Operation and Maintenance of the Sewer System

Operation and maintenance (O&M) of the sewer system shall be in compliance with the Standard Conditions of Part II and the following terms and conditions. The Permittee shall complete the following activities for the collection system which it owns:

1. Maintenance Staff

The Permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit. Provisions to meet this requirement shall be described in the Collection System O&M Plan required pursuant to Section IV.A.5. below.

2. Preventive Maintenance Program

The Permittee shall maintain an ongoing preventive maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges. Plans and programs to meet this requirement shall be described in the Collection System O&M Plan required pursuant to Section IV.A.5. below.

3. Infiltration/Inflow

The Permittee shall control infiltration and inflow (I/I) into the sewer system as necessary to prevent high flow related unauthorized discharges from their collection systems and high flow related violations of the wastewater treatment plant's effluent limitations. Plans and programs to control I/I shall be described in the Collection System O&M Plan required pursuant to Section IV.A.5. below.

4. Collection System Mapping

The Permittee shall continue to maintain a map of the sewer collection system it owns. The map shall be on a street map of the community, with sufficient detail and at a scale to allow easy interpretation. The collection system information shown on the map shall be based on current conditions and shall be kept up-to-date and available for review by federal, state, or local agencies. Such map(s) shall include, but not be limited to the following:

- a. All sanitary sewer lines and related manholes;
- b. All combined sewer lines, related manholes, and catch basins;
- c. All combined sewer regulators and any known or suspected connections between the sanitary sewer and storm drain systems (e.g. combination manholes);
- d. All outfalls, including the treatment plant outfall(s), CSOs, and any known or suspected SSOs, including stormwater outfalls that are connected to combination manholes;

- e. All pump stations and force mains;
- f. The wastewater treatment facility(ies);
- g. All surface waters (labeled);
- h. Other major appurtenances such as inverted siphons and air release valves;
- i. A numbering system which uniquely identifies manholes, catch basins, overflow points, regulators and outfalls;
- j. The scale and a north arrow; and
- k. The pipe diameter, date of installation, type of material, distance between manholes, and the direction of flow.
- 5. Collection System O&M Plan
 - a. N/A
 - b. N/A

The Permittee shall update and implement the Collection System O&M Plan it has previously submitted to EPA and the State in accordance with Part (c) below. The plan shall be available for review by federal, state, and local agencies upon request.

- c. The Plan shall include:
 - (1) A description of the collection system management goals, staffing, information management, and legal authorities;
 - (2) A description of the collection system and the overall condition of the collection system including a list of all pump stations and a description of recent studies and construction activities;
 - (3) A preventive maintenance and monitoring program for the collection system;
 - (4) Description of sufficient staffing necessary to properly operate and maintain the sanitary sewer collection system and how the operation and maintenance program is staffed;
 - (5) Description of funding, the source(s) of funding and provisions for funding sufficient for implementing the plan;
 - (6) Identification of known and suspected overflows and back-ups, including manholes. A description of the cause of the identified overflows and back-ups, corrective actions taken, and a plan for addressing the overflows and back-ups consistent with the requirements of this permit;
 - (7) A description of the Permittee's programs for preventing I/I related effluent violations and all unauthorized discharges of wastewater, including overflows and

by-passes and the ongoing program to identify and remove sources of I/I. The program shall include an inflow identification and control program that focuses on the disconnection and redirection of illegal sump pumps and roof down spouts;

- (8) An educational public outreach program for all aspects of I/I control, particularly private inflow; and
- (9) An <u>Overflow Emergency Response Plan</u> to protect public health from overflows and unanticipated bypasses or upsets that exceed any effluent limitation in the permit.
- 6. Annual Reporting Requirement

The Permittee shall submit a summary report of activities related to the implementation of its Collection System O&M Plan during the previous calendar year. The report shall be submitted to EPA and the State annually by March 31. The summary report shall, at a minimum, include:

- a. A description of the staffing levels maintained during the year;
- b. A map and a description of inspection and maintenance activities conducted and corrective actions taken during the previous year;
- c. Expenditures for any collection system maintenance activities and corrective actions taken during the previous year;
- d. A map with areas identified for investigation/action in the coming year;
- e. A summary of unauthorized discharges during the past year and their causes and a report of any corrective actions taken as a result of the unauthorized discharges reported pursuant to the Unauthorized Discharges section of this permit; and
- f. In Massachusetts, if the average annual flow in the previous calendar year exceeded 80 percent of the facility's design flow, or there have been capacity-related overflows, the report shall include items in (1) and (2) below.
 - (1) Plans for further potential flow increases describing how the Permittee will maintain compliance with the flow limit and all other effluent limitations and conditions; and
 - (2) A calculation of the maximum daily, weekly, and monthly infiltration and the maximum daily, weekly, and monthly inflow for the reporting year.

B. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the Permittee shall provide an alternative power source(s) sufficient to operate the portion of the publicly owned treatment works it owns and operates, as defined in Part VIII.E.1 of this permit.

C. Industrial Users

1. The Permittee shall submit to EPA and the State the name of any Industrial User (IU) subject to Categorical Pretreatment Standards under 40 CFR § 403.6 and 40 CFR chapter I, subchapter

N (Parts 405-415, 417-430, 432, 447, 449-451, 454, 455, 457-461, 463-469, and 471 as amended) who commences discharge to the facility after the effective date of this permit.

This reporting requirement also applies to any other IU who is classified as a Significant Industrial User which discharges an average of 25,000 gallons per day or more of process wastewater into the facility (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastewater which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the facility; or is designated as such by the Control Authority as defined in 40 CFR § 403.3(f) on the basis that the industrial user has a reasonable potential to adversely affect the wastewater treatment facility's operation, or for violating any pretreatment standard or requirement (in accordance with 40 CFR § 403.8(f)(6)).

- 2. In the event that the Permittee receives originals of reports (baseline monitoring reports, 90day compliance reports, periodic reports on continued compliance, etc.) from industrial users subject to Categorical Pretreatment Standards under 40 CFR § 403.6 and 40 CFR chapter I, subchapter N (Parts 405-415, 417-430, 432-447, 449-451, 454, 455, 457-461, 463-469, and 471 as amended), or from a Significant Industrial User, the Permittee shall forward the originals of these reports within ninety (90) days of their receipt to EPA, and copy the State in accordance with Part VI.2 below.
- 3. Beginning the first full calendar quarter following 6 months after EPA has notified the Permittee that a multi-lab validated method for wastewater is available, the Permittee shall commence annual sampling of the following types of industrial discharges into the POTW:
 - Commercial Car Washes
 - Platers/Metal Finishers
 - Paper and Packaging Manufacturers
 - Tanneries and Leather/Fabric/Carpet Treaters
 - Manufacturers of Parts with Polytetrafluoroethylene (PTFE) or teflon type coatings (i.e. bearings)
 - Landfill Leachate
 - Centralized Waste Treaters
 - Contaminated Sites
 - Fire Fighting Training Facilities
 - Airports
 - Any Other Known or Expected Sources of PFAS

For dischargers in Massachusetts, sampling shall be for the following PFAS chemicals:

Industrial User Effluent	Maximum	Monitoring	Requirements	
Characteristic	Daily	Frequency	Sample Type	
Perfluorohexanesulfonic acid (PFHxS)	Report ng/L	1/year	Composite	
Perfluoroheptanoic acid (PFHpA)	Report ng/L	1/year	Composite	
Perfluorononanoic acid (PFNA)	Report ng/L	1/year	Composite	
Perfluorooctanesulfonic acid (PFOS)	Report ng/L	1/year	Composite	
Perfluorooctanoic acid (PFOA)	Report ng/L	1/year	Composite	
Perfluorodecanoic acid (PFDA)	Report ng/L	1/year	Composite	

The industrial discharges sampled and the sampling results shall be summarized and submitted to EPA and copy the state as an electronic attachment to the March discharge monitoring report due April 15th of the calendar year following the testing.

D. Sludge Conditions

- 1. The Permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices, including EPA regulations promulgated at 40 CFR Part 503, which prescribe "Standards for the Use or Disposal of Sewage Sludge" pursuant to § 405(d) of the CWA, 33 U.S.C. § 1345(d).
- 2. If both state and federal requirements apply to the Permittee's sludge use and/or disposal practices, the Permittee shall comply with the more stringent of the applicable requirements.
- 3. The requirements and technical standards of 40 CFR Part 503 apply to the following sludge use or disposal practices:
 - a. Land application the use of sewage sludge to condition or fertilize the soil
 - b. Surface disposal the placement of sewage sludge in a sludge only landfill
 - c. Sewage sludge incineration in a sludge only incinerator
- 4. The requirements of 40 CFR Part 503 do not apply to facilities which dispose of sludge in a municipal solid waste landfill. 40 CFR § 503.4. These requirements also do not apply to facilities which do not use or dispose of sewage sludge during the life of the permit but rather treat the sludge (e.g., lagoons, reed beds), or are otherwise excluded under 40 CFR § 503.6.
- 5. The 40 CFR Part 503 requirements include the following elements:
 - General requirements
 - Pollutant limitations
 - Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)
 - Management practices
 - Record keeping
 - Monitoring
 - Reporting

Which of the 40 CFR Part 503 requirements apply to the Permittee will depend upon the use or disposal practice followed and upon the quality of material produced by a facility. The EPA Region 1 Guidance document, "EPA Region 1 - NPDES Permit Sludge Compliance Guidance" (November 4, 1999), may be used by the Permittee to assist it in determining the applicable requirements.⁵

6. The sludge shall be monitored for pollutant concentrations (all Part 503 methods) and pathogen reduction and vector attraction reduction (land application and surface disposal) at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year, as follows:

less than 290	1/ year
290 to less than 1,500	1 /quarter
1,500 to less than 15,000	6 /year
15,000 +	1 /month

Sampling of the sewage sludge shall use the procedures detailed in 40 CFR § 503.8.

7. Under 40 CFR § 503.9(r), the Permittee is a "person who prepares sewage sludge" because it "is … the person who generates sewage sludge during the treatment of domestic sewage in a treatment works …." If the Permittee contracts with *another* "person who prepares sewage sludge" under 40 CFR § 503.9(r) – i.e., with "a person who derives a material from sewage sludge" – for use or disposal of the sludge, then compliance with Part 503 requirements is the responsibility of the contractor engaged for that purpose. If the Permittee does not engage a "person who prepares sewage sludge," as defined in 40 CFR § 503.9(r), for use or disposal, then the Permittee remains responsible to ensure that the applicable requirements in Part 503 are met. 40 CFR § 503.7. If the ultimate use or disposal method is land application, the Permittee is responsible for providing the person receiving the sludge with notice and necessary information to comply with the requirements of 40 CFR § 503 Subpart B.

E. Schedules of Compliance

1. The Permittee will have a schedule of compliance of 18 months for the April – October monthly average phosphorus limit of 0.1 mg/L. During the schedule of compliance, the current limit of 0.2 mg/L will remain in effect (April – October) and the Permittee shall monitor at the frequency specified in Table 1.

⁵ This guidance document is available upon request from EPA Region 1 and may also be found at: <u>http://www.epa.gov/region1/npdes/permits/generic/sludgeguidance.pdf</u>

2. Within twelve (12) months of the authorization to discharge under the General Permit, the Permittee shall submit to EPA and the State a status report relative to the process improvements necessary to achieve the permit limit.

F. Additional Requirements for Facilities Discharging to Long Island Sound Watershed

N/A

V. Obtaining Authorization to Discharge

N/A

VI. Monitoring, Record-Keeping, and Reporting Requirements

Unless otherwise specified in this permit, the Permittee shall submit reports, requests, and information and provide notices in the manner described in this section.

1. Submittal of DMRs Using NetDMR

The Permittee shall continue to submit its monthly monitoring data in discharge monitoring reports (DMRs) to EPA and the State no later than the 15th day of the month electronically using NetDMR. When the Permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to EPA or the State. NetDMR is accessible through EPA's Central Data Exchange at <u>https://cdx.epa.gov/</u>.

2. Submittal of Reports as NetDMR Attachments

Unless otherwise specified in this permit, the Permittee shall electronically submit all reports to EPA (and MassDEP for dischargers in Massachusetts) as NetDMR attachments rather than as hard copies. For dischargers in New Hampshire, this includes the NHDES Monthly Operating Reports (MORs). See Part VI.5 for more information on State reporting. Because the due dates for reports described in this permit may not coincide with the due date for submitting DMRs (which is no later than the 15th day of the month), a report submitted electronically as a NetDMR attachment shall be considered timely if it is electronically submitted to EPA using NetDMR with the next DMR due following the report due date specified in this permit.

- 3. Submittal of Requests and Reports to EPA Water Division (WD)
 - a. The following requests, reports, and information described in this permit shall be submitted to the NPDES Applications Coordinator in EPA Water Division (WD):
 - (1) Transfer of permit notice;
 - (2) Request for changes in sampling location;
 - (3) Request for reduction in testing frequency;
 - (4) Request for change in WET testing requirement; and
 - (5) Report on unacceptable dilution water / request for alternative dilution water for WET testing.
 - (6) Report of new industrial user commencing discharge

- (7) Report received from existing industrial user
- (8) Request for extension of compliance schedule
- b. These reports, information, and requests shall be submitted to EPA WD electronically at <u>R1NPDESReporting@epa.gov</u>.
- 4. Submittal of Reports to EPA Enforcement and Compliance Assurance Division (ECAD) in Hard Copy form
 - a. The following notifications and reports shall be signed and dated originals, submitted as hard copy, with a cover letter describing the submission:
 - (1) Written notifications required under Part VIII.B.4.c, for bypasses, and Part VIII.D.1.e, for sanitary sewer overflows (SSOs). Starting on 21 December 2025, such notifications must be done electronically using EPA's NPDES Electronic Reporting Tool ("NeT"), or another approved EPA system, which will be accessible through EPA's Central Data Exchange at <u>https://cdx.epa.gov/</u>.
 - b. This information shall be submitted to EPA ECAD at the following address:

U.S. Environmental Protection Agency Enforcement and Compliance Assurance Division Water Compliance Section 5 Post Office Square, Suite 100 (04-SMR) Boston, MA 02109-3912

5. State Reporting

For dischargers in MA only: Duplicate signed copies of all WET test reports shall be submitted to the Massachusetts Department of Environmental Protection, Division of Watershed Management, at the following address:

Massachusetts Department of Environmental Protection Bureau of Water Resources Division of Watershed Management 8 New Bond Street Worcester, Massachusetts 01606

- 6. Verbal Reports and Verbal Notifications
 - a. Any verbal reports or verbal notifications, if required in Parts I through VIII of this permit, shall be made to both EPA and to the State. This includes verbal reports and notifications which require reporting within 24 hours (e.g., Part VIII.B.4.c.(2), Part VIII.B.5.c.(3), and Part VIII.D.1.e).
 - b. Verbal reports and verbal notifications shall be made to:

EPA ECAD at 617-918-1510

and MassDEP's Emergency Response at 888-304-1133 or NHDES Assigned NPDES Inspector listed below: Central/South NH: 603-271-2985 North/West NH: 603-271-1494 NH Seacoast: 603-271-1493

VII. Administrative Requirements

A. Notice of Termination (NOT) of Discharge or Change of Owner/Operator

Permittees shall notify EPA and the appropriate State agency in writing upon the termination of any discharge(s) authorized by the Small WWTF GP. The NOT shall include the name, mailing address, phone number, and the location of the facility for which the notification is being submitted, the NPDES permit number of the discharge identified by the notice, and an indication of whether the discharge has been eliminated or if the owner/operator of the discharge has changed. The NOT shall be signed in accordance with the signatory requirements of 40 CFR § 122.22. Completed and signed NOTs shall be submitted to EPA and the appropriate State agency at the addresses provided in Part VI above.

B. Continuation of this General Permit After Expiration

If this General Permit is not reissued prior to its expiration date, it will be administratively continued in accordance with the Administrative Procedures Act (5 U.S.C. 558(c)) and 40 CFR § 122.6 and remain in full force and in effect for discharges covered prior to its expiration. The permit application requirement under 40 CFR § 122.6 and Part VIII.A.7 of this permit has been waived for this permit term.

Coverage under this permit will not be available to any facility that is not authorized to discharge under the General Permit before the expiration date.

Any permittee whose authorization to discharge under this General Permit was administratively continued will automatically remain covered by the continued General Permit until the earlier of:

- 1. Authorization to discharge under a reissued permit or a replacement of this permit; or
- 2. The Permittee's submittal of a Notice of Termination; or
- 3. Issuance of an individual permit for the Permittee's discharge; or
- 4. A formal permit decision by EPA not to reissue this General Permit, at which time EPA will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.