

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM MEDIUM
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"),

City of Gardner, Massachusetts

is authorized to discharge from the facility located at

**Gardner Wastewater Treatment Facility
52 Plant Road
East Templeton, MA 01438**

to receiving water named

**Otter River
Connecticut River Watershed**

in accordance with effluent limitations, monitoring requirements and other conditions set forth in this authorization and the Medium WWTF GP (General Permit No. MAG590000).

The Town of Ashburnham is also identified as a Co-permittee related to operation and maintenance of the sewer system in compliance with the Standard Conditions of Part VII and the terms and conditions of Part II.C, Unauthorized Discharges; Part III.A, Operation and Maintenance of the Sewer System (which include conditions regarding the operation and maintenance of the collection systems owned and operated by the municipality); and Part III.B, Alternate Power Source. The permit number assigned to the Town of Ashburnham for purposes of reporting (using NetDMR through EPA's Central Data Exchange, as specified in Part V below) in accordance with the requirements in Parts II.C, Part III.A, and Part III.B of this permit is **MAG59C113**.

The Permittee and Co-permittee are severally liable for their own activities under Parts II.C, III.A and III.B and required reporting under Part V with respect to the portions of the collection system that they own or operate. They are not liable for violations of Parts II.C, III.A and III.B committed by others relative to the portions of the collection system owned and operated by others. Nor are they responsible for any reporting under Part V that is required of other Permittees under Parts II.C, III.A and III.B.

This authorization shall become effective on April 1, 2023.

For applicable attachments see the complete version of the Medium WWTF General Permit:

Part VII – 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

Attachment E – List of Eligible Facilities

Attachment F – Reassessment of Technically Based Industrial Discharge Limits

Attachment G – NPDES Permit Requirement for Industrial Pretreatment Annual Report

Attachment H – PFAS Analyte List

Attachment I – Facility-Specific Permit Terms

Attachment J – Pretreatment Program Development Requirements

I. Applicability and Coverage of the WWTF GP

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

II. General Permit Requirements

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 Otter 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 Parameter	Discharge Limitation			Monitoring Requirement ^{1,2}	
	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ³
Rolling Average Effluent Flow ⁴	5.0 MGD	---	---	Continuous	Recorder
Effluent Flow ⁴	Report MGD	---	Report MGD	Continuous	Recorder
BOD ₅ (April 1 - October 31)	8.7 mg/L 364 lb/day	8.7 mg/L 364 lb/day	Report mg/L	1/Week	Composite
BOD ₅ (November 1 - March 31)	26.2 mg/L 1,093 lb/day	39.3 mg/L 1,640 lb/day	Report mg/L	1/Week	Composite
BOD ₅ Removal	≥ 85 %	---	---	1/Month	Calculation
TSS (April 1 - October 31)	17.4 mg/L 726 lb/day	17.4 mg/L 726 lb/day	Report mg/L	1/Week	Composite
TSS (November 1 - March 31)	26.2 mg/L 1,093 lb/day	39.3 mg/L 1,640 lb/day	Report mg/L	1/Week	Composite
TSS Removal	≥ 85 %	---	---	1/Month	Calculation
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	14 µg/L	---	25 µg/L	5/Week	Grab
Total Aluminum	91 µg/L	---	---	2/Month	Composite
Total Cadmium	0.5 µg/L	---	---	2/Month	Composite

Effluent Characteristic Parameter	Discharge Limitation			Monitoring Requirement ^{1,2}	
	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ³
Total Copper	13.6 µg/L	---	22.0 µg/L	2/Month	Composite
Total Lead	4.4 µg/L	---	---	2/Month	Composite
Total Mercury	1.3 µg/L	---	2.3 µg/L	2/Month	Composite
Total Phosphorus (April 1 – October 31)	0.12 mg/L 5.0 lb/day	---	---	1/Week	Composite
Total Phosphorus (November 1 – March 31)	1.0 mg/L 41.7 lb/day	---	---	2/Month	Composite
Ammonia Nitrogen (June 1 - October 31)	1.0 mg/L	1.0 mg/L	---	2/Month	Composite
Ammonia Nitrogen (November 1 - May 31)	4.4 mg/L	4.4 mg/L	---	2/Month	Composite
Dissolved Oxygen (April 1 - October 31)	≥ 6.0 mg/L			1/day	Grab
Total Kjeldahl Nitrogen ¹¹ (April 1 – October 31)	Report mg/L	---	Report mg/L	1/Week	Composite
(November 1 – March 31)	Report mg/L		Report mg/L	1/Month	Composite
Nitrate + Nitrite ¹¹ (April 1 – October 31)	Report mg/L	---	Report mg/L	1/Week	Composite
(November 1 – March 31)	Report mg/L		Report mg/L	1/Month	Composite
Total Nitrogen ¹¹	Report mg/L Report lb/day	---	Report mg/L	1/Month	Calculation
Rolling Average Total Nitrogen ¹¹	417 lb/day	---	---	1/Month	Calculation
PFAS Analytes ¹²	---	---	Report ng/L	1/Quarter	Composite

Effluent Characteristic Parameter	Discharge Limitation			Monitoring Requirement ^{1,2}	
	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ³
Whole Effluent Toxicity (WET) Testing^{14,15}					
Acute (LC ₅₀) (Test Species: <i>Ceriodaphnia dubia</i> and <i>Pimephales promelas</i>)	---	---	≥ 100%	4/Year	Composite
Chronic (C-NOEC) (Test Species: <i>Ceriodaphnia dubia</i> and <i>Pimephales promelas</i>)	---	---	≥ 78%	4/Year	Composite
Hardness (as CaCO ₃)	---	---	Report mg/L	Same as WET Measurement Frequency and Sample Type	
Ammonia Nitrogen	---	---	Report mg/L		
Total Aluminum	---	---	Report mg/L		
Total Cadmium	---	---	Report mg/L		
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		

Ambient Characteristic ¹⁶	Reporting Requirements		Monitoring Requirements ^{1,2,3}		
	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ⁴
Hardness	---	---	Report mg/L	Same as WET Monitoring Frequency	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		Grab
Total Lead	---	---	Report mg/L		Grab
Total Zinc	---	---	Report mg/L		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

Influent Characteristic	Reporting Requirements			Monitoring Requirements ^{1,2,3}	
	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
PFAS Analytes ¹²	---	---	Report ng/L	1/Quarter	Composite

Sludge Characteristic	Reporting Requirements			Monitoring Requirements ^{1,2,3}	
	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type ⁴
PFAS Analytes ²⁰	---	---	Report ng/g	1/Quarter	Composite 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 MassDEP 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 µg/L, if the ML for a parameter is 50 µg/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.
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.). Continuous monitoring also fulfills the 5/week monitoring frequency.

8. The monthly average limits for bacteria are expressed as a geometric mean.

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 be expressed as colony forming units (cfu) when using the Membrane Filtration method.

9. For total residual chlorine (TRC) limitations and other related requirements, see Part II.B.9 of this permit.

10. N/A

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

See additional requirements in Part III.G of this permit.

The rolling annual total nitrogen limit is an annual average mass-based limit (lb/day), which shall be reported as a rolling 12-month average. The value will be calculated as the arithmetic mean of the monthly average total nitrogen for the reporting month and the monthly average total nitrogen for the previous 11 months. Report both the rolling annual average and the monthly average each month.

See Part III.F below for the compliance schedule applicable to the total nitrogen limit.

12. Report in nanograms per liter (ng/L). This reporting requirement for the listed PFAS parameters takes effect the first full calendar quarter after the effective date of the authorization to discharge under the General Permit. Until there is an analytical method approved in 40 CFR Part 136 for PFAS in wastewater, monitoring shall be conducted using Draft Method 1633.

Additionally, report in NetDMR the results of all other PFAS analytes required to be tested as part of the method as shown in Attachment H. Any parameters that are removed from the method based on multi-lab validation of the method will not be required for reporting and the Permittee may report "NODI: 9" for any such parameters.

13. N/A

14. 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 VII.E. of this permit. The Permittee shall test the daphnid (*Ceriodaphnia dubia*) and the fathead minnow (*Pimephales promelas*). 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 **Attachments 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. The Permittee shall develop and implement a sampling and analysis plan for biannually collecting monthly samples at a location upstream of the facility. Samples shall be collected once per month, from May through September, every even calendar year. 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). This reporting requirement for the listed PFAS parameters takes effect the first full calendar quarter after the effective date of the authorization to discharge under the General Permit. Until there is an analytical method

approved in 40 CFR Part 136 for PFAS in sludge, monitoring shall be conducted using Draft Method 1633.

Additionally, report in NetDMR the results of all other PFAS analytes required to be tested as part of the method, as shown in Attachment H. Any parameters that are removed from the method based on multi-lab validation of the method will not be required for reporting and the Permittee may report “NODI: 9” for any such parameters.

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

B. Other Requirements

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 or chemical nature of the bottom, interfere with the propagation of fish or shellfish, or adversely affect populations of non-mobile or sessile benthic organisms.
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 MassDEP 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. TRC monitoring and limitations only apply to discharges which have been previously chlorinated or which contain residual chlorine. If bacteria limits do not apply during a particular monitoring period and, therefore, chlorine is not utilized, TRC monitoring is not necessary and the Permittee may enter "NODI" code 9 (*i.e.*, conditional monitoring) in the relevant discharge monitoring report.
- c. Additionally, Permittees authorized to conduct disinfection using an alternative to chlorine as the disinfectant are only 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 and the Permittee may enter "NODI" code 9 (*i.e.*, conditional monitoring) in the relevant discharge monitoring report.
- d. 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.
- e. 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. The Permittee must provide verbal notification to EPA within 24 hours of becoming aware of any unauthorized discharge and a report within 5 days, in accordance with Part VII.D.1.e (24-hour reporting). Providing that it contains the information required in Part VII.D.1.e, submission of the MassDEP SSO Reporting Form (described in Part II.C.3 below) may satisfy the requirement for a written report. See Part V 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.

III. 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 VII and the following terms and conditions. The Permittee and Co-permittee shall complete the following activities for the collection system which it owns:

1. Maintenance Staff

The Permittee and Co-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 III.A.5. below.

2. Preventive Maintenance Program

The Permittee and Co-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 III.A.5. below.

3. Infiltration/Inflow

The Permittee and Co-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 III.A.5. below.

4. Collection System Mapping

By October 2023, the Permittee and Co-permittee shall prepare 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

The Permittee and Co-permittee shall develop and implement a Collection System O&M Plan in accordance with Part (b) below.

- a. N/A
- b. The full Collection System O&M Plan shall be completed, implemented and submitted to EPA and the State by April 2023. 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 Overflow Emergency Response Plan 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 and Co-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 31st. The first annual report is due the first March 31st following submittal of the collection system O&M Plan required by Section III.A.5.b. above. 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. 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 and Co-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 VII.E.1 of this permit.

C. Industrial Users

N/A

D. Industrial Pretreatment Programs

1. The Permittee shall develop and enforce specific effluent limits (local limits) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW Treatment Plant's Facilities or operation, are necessary to ensure continued compliance with the POTW's NPDES permit or sludge use or disposal practices. Specific local limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond. Within 90 days of the effective date of the authorization to discharge under the General Permit, the Permittee shall prepare and submit a written technical evaluation to EPA analyzing the need to revise local limits. As part of this evaluation, the Permittee shall assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns. In preparing this evaluation, the Permittee shall complete and submit the attached form (see **Attachment F – Reassessment of Technically Based Industrial Discharge Limits**) with the technical evaluation to assist in determining whether existing local limits need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report. Should the evaluation reveal the need to revise local limits, the Permittee shall complete the revisions within 120 days of notification by EPA and submit the revisions to EPA for approval. The Permittee shall carry out the local limits revisions in accordance with EPA's Local Limit Development Guidance (July 2004).
2. The Permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the Permittee's approved Pretreatment Program, and the General Pretreatment Regulations, 40 CFR Part 403. At a minimum, the Permittee must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):

- a. Carry out inspection, surveillance, and monitoring procedures which will determine independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users shall be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.
 - b. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.
 - c. Obtain appropriate remedies for noncompliance by any industrial user with any pretreatment standard and/or requirement.
 - d. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.
3. The Permittee shall provide EPA and MassDEP with an annual report describing the Permittee's pretreatment program activities for the twelve (12) month period ending 60 days prior to the due date in accordance with 40 CFR § 403.12(i). The annual report shall be consistent with the format described in **Attachment G** (*NPDES Permit Requirement for Industrial Pretreatment Annual Report*) of this permit and shall be submitted by **March 1** of each year.
4. The Permittee must obtain approval from EPA prior to making any significant changes to the industrial pretreatment program in accordance with 40 CFR § 403.18(c).
5. The Permittee must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the Federal Regulations at 40 CFR § 405 et seq.
6. The Permittee must modify its pretreatment program, if necessary, to conform to all changes in the Federal Regulations that pertain to the implementation and enforcement of the industrial pretreatment program. Within 180 days of the effective date of the authorization to discharge under the General Permit the Permittee must provide EPA in writing, proposed changes, if applicable, to the Permittee's pretreatment program deemed necessary to assure conformity with current Federal Regulations. At a minimum, the Permittee must address in its written submission the following areas: (1) Enforcement response plan; (2) revised sewer use ordinances; and (3) slug control evaluations. The Permittee will implement these proposed changes pending EPA Region 1's approval under 40 CFR § 403.18. This submission is separate and distinct from any local limits analysis submission described in Part III.D.1.
7. Beginning the first full calendar year after the effective date of the authorization to discharge under the General Permit, 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
- Known or Suspected PFAS Contaminated Sites
- Fire Fighting Training Facilities
- Airports
- Any Other Known or Expected Sources of PFAS

Until there is an analytical method approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Draft Method 1633. Sampling shall be for the PFAS analytes required to be tested in Method 1633, as shown in Attachment H.

The industrial discharges sampled and the sampling results (including the full lab report) shall be summarized and included in the annual report (see Part III.D.3).

E. 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.¹

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.
8. The Permittee shall submit an annual report containing the information specified in the 40 CFR Part 503 requirements (§ 503.18 (land application), § 503.28 (surface disposal), or § 503.48 (incineration)) by February 19 (see also “EPA Region 1 - NPDES Permit Sludge Compliance Guidance”). Reports shall be submitted electronically using EPA’s Electronic Reporting tool

¹ This guidance document is available upon request from EPA Region 1 and may also be found at:
<http://www3.epa.gov/region1/npdes/permits/generic/sludgeguidance.pdf>

(“NeT”) (see “Reporting Requirements” section below).

F. Schedules of Compliance

1. Total Nitrogen Compliance Schedule

Every April until January 2025, the Permittee shall submit a progress report on the status of the facility upgrade outlining the milestones that the City has achieved. The limit will become effective December 1, 2025.

The limit is a 12-month rolling average limit calculated as the arithmetic mean of the monthly average total nitrogen load for each reporting month and the previous eleven months. Therefore, the rolling average load calculated for the first month of compliance (December 2025) will be based on the arithmetic mean of the monthly average total nitrogen loads for January 2025 through December 2025. Compliance will continue to be measured each month following.

G. Additional Requirements for Facilities Discharging to the Long Island Sound Watershed, the Blackstone River Watershed, the Taunton River Watershed, as well as the Plymouth WWTP and Fairhaven WPCF

1. The Permittee shall continue to optimize the treatment facility operations relative to total nitrogen (TN) removal through measures and/or operational changes designed to enhance the removal of nitrogen in order to minimize the annual average mass discharge of total nitrogen.
2. The Permittee shall submit an annual report to EPA and the State, by February 1st of each year, that summarizes activities related to optimizing nitrogen removal efficiencies, documents the annual nitrogen discharge load from the facility, and tracks trends relative to the previous calendar year and the previous five (5) calendar years. If, in any year, the treatment facility discharges of TN on an average annual basis have increased, the annual report shall include a detailed explanation of the reasons why TN discharges have increased, including any changes in influent flows/loads and any operational changes. The report shall include all supporting data.

H. Submittal of Facility-Specific Information

Each permittee shall perform three full pollutant scans consistent with the requirements of NPDES Form 2A, Tables B and C, using a representative composite sample once per quarter in the final 3 full calendar quarters of the 5-year permit term. The results for all three scans shall be summarized and submitted as a single electronic attachment to the DMR for the final full calendar quarter before the expiration date of the General Permit (in accordance with Part V.2 below). This submittal shall also include the following information that EPA has deemed necessary for development of the next reissuance of this General Permit:

- Provide the current average daily volume of inflow and infiltration (I/I)
- Provide an updated Flow Diagram or Schematic for the WWTF
- Provide a summary and schedule for any ongoing or planned facility upgrades

- Provide a list of Significant Industrial Users and Categorical Industrial Users contributing flow to the system (including average volume contributed from each)
- Provide a summary of sewage sludge treatment and disposal practices (including disposal method, disposal amount in dry metric tons, name and address of any third-party contractor, etc.).

I. 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. Notwithstanding any other provision of the 2022 Federal NPDES Permit to the contrary, monitoring results of the influent, effluent, and sludge for PFAS compounds shall be reported to MassDEP electronically, at massdep.npdes@mass.gov, or as otherwise specified, within 30 days after they are received.
2. Pursuant to M.G.L. c. 21, §§ 26-53, and 314 CMR 3.00 and 4.00, including 314 CMR 3.11(2)(a)6., and in order to ensure the maintenance of surface waters free from pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife, in accordance with 314 CMR 4.05(5)(e), MassDEP has determined that it is necessary that the permittee commence annual monitoring of all Significant Industrial Users^{2,3} discharging into the POTW consistent with the 2022 NPDES General Permit in accordance with the table below. Notwithstanding any other provision of the 2022 NPDES General Permit to the contrary, monitoring results shall be reported to MassDEP electronically at massdep.npdes@mass.gov within 30 days after they are received.

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

² 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.

³ This requirement applies to all Significant Industrial Users and not just those within the sectors identified by EPA in the NPDES permit.

IV. Obtaining Authorization to Discharge

N/A

V. 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 MassDEP 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 MassDEP. NetDMR is accessible through EPA's Central Data Exchange at <https://cdx.epa.gov/>.

2. Submittal of Reports as NetDMR Attachments

Unless otherwise specified in this permit, the Permittee and Co-permittee shall electronically submit all reports to EPA and MassDEP as NetDMR attachments rather than as hard copies. See Part V.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 Industrial User and Pretreatment Related Reports

- a. Prior to 21 December 2025, all reports and information required of the Permittee in the Industrial Users and Pretreatment Program section of this permit shall be submitted to the Pretreatment Coordinator in EPA Region 1 Water Division (WD). Starting on 21 December 2025, these submittals must be done electronically as NetDMR attachments and/or using EPA's NPDES Electronic Reporting Tool ("NeT"), or another approved EPA system, which will be accessible through EPA's Central Data Exchange at <https://cdx.epa.gov/>. These requests, reports and notices include:

- (1) Annual Pretreatment Reports,

- (2) Pretreatment Reports Reassessment of Technically Based Industrial Discharge Limits Form,

- (3) Revisions to Industrial Discharge Limits,

- (4) Report describing Pretreatment Program activities, and

(5) Proposed changes to a Pretreatment Program

- b. This information shall be submitted to EPA WD as a hard copy at the following address:

**U.S. Environmental Protection Agency
Water Division
Regional Pretreatment Coordinator
5 Post Office Square - Suite 100 (06-03)
Boston, MA 02109-3912**

4. Submittal of Biosolids/Sewage Sludge Reports

By February 19 of each year, the Permittee must electronically report their annual Biosolids/Sewage Sludge Report for the previous calendar year using EPA's NPDES Electronic Reporting Tool ("NeT"), or another approved EPA system, which is accessible through EPA's Central Data Exchange at <https://cdx.epa.gov/>.

5. 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 R1NPDESReporting@epa.gov.

6. Submittal of Sewer Overflow and Bypass Reports and Notices

The Permittee shall submit required reports and notices under Part VII.B.4.c, for bypasses, and Part VII.D.1.e, for sanitary sewer overflows (SSOs) electronically using EPA's NPDES Electronic Reporting Tool ("NeT"), which will be accessible through EPA's Central Data Exchange at <https://cdx.epa.gov/>.

7. State Reporting

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

8. Verbal Reports and Verbal Notifications

- a. Any verbal reports or verbal notifications, if required in Parts I through VII of this General Permit, shall be made to both EPA and to MassDEP. This includes verbal reports and notifications which require reporting within 24 hours (e.g., Part VII.B.4.c.(2), Part VII.B.5.c.(3), and Part VII.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

VI. 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 this General Permit. 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 at R1NPDESReporting@epa.gov and to MassDEP at MassDEP.NPDES@mass.gov.

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.

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.