

EXHIBIT D

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§ 26-53)

**Town of Uxbridge
Sewer Commission**

is authorized to discharge from the facility located at

**Uxbridge Wastewater Treatment Facility
80 River Road
Uxbridge, MA 01569**

to receiving water named

Blackstone River

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.


This permit shall become effective on the first day of the calendar month immediately following sixty days after signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date.


This permit supersedes the permit issued on September 30, 1999 and effective on October 30, 1999.

This permit consists of 18 pages in Part I including effluent limitations, monitoring requirements, and state permit conditions, **Attachment A** (Freshwater Acute Toxicity Test Procedure and Protocol, February 2011), and 25 pages in Part II, Standard Conditions.

Signed this ^{17th} day of June, 2013



Ken Moraff, Acting Director
Office of Ecosystem Protection
Environmental Protection Agency
Region 1
Boston, MA



David Ferris, Director
Massachusetts Wastewater Management Program
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A.1 During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge treated wastewater from outfall **001** to the Blackstone River. Such discharge shall be limited and monitored by the permittee as specified below.

- a. *Reduced Flow Limits* – the permittee’s discharge shall be limited as specified below for the period in which the facility’s annual average discharge is at or below an annual average flow limit of 1.25 MGD. If and when the permittee becomes aware that increased flows or planned connections/extensions of the sewer system may result in an exceedance of the 1.25 MGD average annual flow limit, the permittee shall evaluate its flow trends and estimate a projected date at which such exceedance is expected to occur. The permittee shall notify EPA in writing a minimum of 60 days prior to the date it expects to exceed the limit, identifying the date such exceedance is expected to occur. The limits in Part I.A.1.b shall go into effect on the earlier of (i) the date identified by the permittee for exceeding 1.25 MGD annual average flow limit, or (ii) 60 days after the first month in which the 1.25 MGD annual average flow limit is exceeded.

EFFLUENT CHARACTERISTIC	REDUCED FLOW EFFLUENT LIMITS				MONITORING REQUIREMENTS			
	Applicable at Annual Average Flows ≤ 1.25 MGD							
PARAMETER	Mass Limits			Concentration Limits		MEASUREMENT FREQUENCY	SAMPLE TYPE ¹	
	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	AVERAGE MONTHLY	AVERAGE WEEKLY			
FLOW ²	***	***	***	1.25 MGD	***	Continuous	Recorder	
FLOW ²	***	***	***	Report MGD	***	Continuous	Recorder	
BOD ₅ ³ (June 1 to October 31)	209 lbs/day	313 lbs/day	Report lbs/day	20 mg/l	30 mg/l	2/Week	24-Hour Composite ⁴	
BOD ₅ ³ (November 1 to May 31)	313 lbs/day	469 lbs/day	Report lbs/day	30 mg/l	45 mg/l	2/Week	24-Hour Composite ⁴	
TSS ³ (June 1 to October 31)	209 lbs/day	313 lbs/day	Report lbs/day	20 mg/l	30 mg/l	2/Week	24-Hour Composite ⁴	
TSS ³ (November 1 to May 31)	313 lbs/day	469 lbs/day	Report lbs/day	30 mg/l	45 mg/l	2/Week	24-Hour Composite ⁴	
Total Residual Chlorine ^{5,6,7}	***	***	***	0.24 mg/l	***	2/Day ¹⁵	Grab	
Escherichia Coli ^{5,8} (April 1 to October 31)	***	***	***	126 cfu/100 ml	***	2/Week	Grab	
Enterococci ^{8,9}	***	***	***	73 cfu/100 ml	***	1/Week	Grab	
pH RANGE ⁵	6.0 - 8.3 SU See Permit Page 6, Part I.A.1.b.						1/Day	Grab
DISSOLVED OXYGEN ⁵ (April 1 to October 31)	***	***	***	Not less than 5.0 mg/l		1/Week	Grab	

EFFLUENT CHARACTERISTIC	REDUCED FLOW EFFLUENT LIMITS Applicable at Annual Average Flows ≤ 1.25 MGD						MONITORING REQUIREMENTS	
	Mass Limits			Concentration Limits				
PARAMETER	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	MEASUREMENT FREQUENCY	SAMPLE TYPE ¹
TOTAL AMMONIA, as N (June 1 - October 31)	52 lbs/day	104 lbs/day	Report lbs/day	5 mg/l	10 mg/l	Report mg/l	1/Week	24-Hour Composite ⁴
TOTAL AMMONIA, as N (December 1 to April 30)	157 lbs/day	Report lbs/day	Report lbs/day	15 mg/l	Report mg/l	Report mg/l	1/Week	24-Hour Composite ⁴
TOTAL AMMONIA, as N (May 1 -31 and November 1 -30)	104 lbs/day	209 lbs/day	Report lbs/day	10 mg/l	20 mg/l	Report mg/l	1/Week	24-Hour Composite ⁴
TOTAL PHOSPHORUS ¹³ (April 1 - October 31)	4.2 lbs/day	***	***	Report mg/l	***	Report mg/l	2/Week	24-Hour Composite ⁴
TOTAL PHOSPHORUS ¹³ (November 1 - March 31)	10 lbs/day	***	***	1.0 mg/l	***	Report mg/l	2/Month	24-Hour Composite ⁴
ORTHO PHOSPHORUS, DISSOLVED, as P ¹³ (November 1 - March 31)	Report lbs/day	***	***	Report mg/l	***	Report mg/l	2/Month	24-Hour Composite ⁴
TOTAL NITROGEN ¹⁷ (May 1 - October 31)	Report lbs/day	***	***	Report mg/l	***	Report mg/l	2/Week	24-Hour Composite ⁴
Total Nitrate+Nitrite as N Total Kjeldahl Nitrogen	Report lbs/day Report lbs/day			Report mg/l Report mg/l				
TOTAL NITROGEN ¹⁷ (November 1 - April 30)	Report lbs/day	***	***	Report mg/l	***	Report mg/l	1/Week	24-Hour Composite ⁴
Total Nitrate+Nitrite as N Total Kjeldahl Nitrogen	Report lbs/day Report lbs/day			Report mg/l Report mg/l				
TOTAL ALUMINUM	1.81 lbs/day	***	***	87 ug/l	***	Report ug/l	1/Month	24-Hour Composite ⁴
Whole Effluent Toxicity ^{10,11,12}	Acute LC50 ≥ 100%						2/Y ear	24-Hour Composite ⁴
Hardness ¹⁵	***	***	***	***	***	Report mg/l	2/Y ear	24-Hour Composite ⁴
Ammonia Nitrogen as N ¹⁶	***	***	***	***	***	Report mg/l	2/Y ear	24-Hour Composite ⁴

EFFLUENT CHARACTERISTIC	REDUCED FLOW EFFLUENT LIMITS Applicable at Annual Average Flows ≤ 1.25 MGD						MONITORING REQUIREMENTS	
	Mass Limits			Concentration Limits				
PARAMETER	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	MEASUREMENT FREQUENCY	SAMPLE TYPE ¹
Total Recoverable Aluminum ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Cadmium ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Copper ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Nickel ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Lead ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Zinc ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴

b. *Design Flow Limits* – the permittee’s discharge shall be limited as specified below for annual average discharges that exceed 1.25 MGD. The limits in this Part shall go into effect on the earlier of (i) the date identified by the permittee that it expects to exceed the 1.25 mgd annual average flow, or (ii) 60 days after the first month in which the 1.25 MGD annual average flow is exceeded.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS						MONITORING REQUIREMENTS	
	Mass Limits			Concentration Limits				
PARAMETER	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	MEASUREMENT FREQUENCY	SAMPLE TYPE ¹
FLOW ²	***	***	***	2.5 MGD	***	***	Continuous	Recorder
FLOW ²	***	***	***	Report MGD	***	Report MGD	Continuous	Recorder
BOD ₃ (June 1 to October 31)	417 lbs/day	626 lbs/day	Report lbs/day	20 mg/l	30 mg/l	Report mg/l	2/Week	24-Hour Composite ⁴
BOD ₃ (November 1 to May 31)	626 lbs/day	938 lbs/day	Report lbs/day	30 mg/l	45 mg/l	Report mg/l	2/Week	24-Hour Composite ⁴
TSS ³ (June 1 to October 31)	417 lbs/day	626 lbs/day	Report lbs/day	20 mg/l	30 mg/l	Report mg/l	2/Week	24-Hour Composite ⁴
TSS ³ (November 1 to May 31)	626 lbs/day	938 lbs/day	Report lbs/day	30 mg/l	45 mg/l	Report mg/l	2/Week	24-Hour Composite ⁴
Total Residual Chlorine ^{5,6,7}	***	***	***	0.24 mg/l	***	0.42 mg/l	2/Day ¹⁵	Grab
Escherichia Coli ^{5,8}	***	***	***	126 cfu/100 ml	***	409 cfu/100 ml	2/Week	Grab
Enterococci ^{8,9}	***	***	***	73 cfu/100 ml	***	236 cfu/100 ml	1/Week	Grab
PH RANGE ⁵ 6.0 - 8.3 SU See Permit Page 6, Part I.A.1.b.								
DISSOLVED OXYGEN ⁵	***	***	***	Not less than 5.0 mg/l			1/Week	Grab
TOTAL AMMONIA, as N (April 1 to October 31)	104 lbs/day	208.5 lbs/day	Report lbs/day	5 mg/l	10 mg/l	Report mg/l	1/Week	24-Hour Composite ⁴
TOTAL AMMONIA, as N (June 1 - October 31)	104 lbs/day	208.5 lbs/day	Report lbs/day	5 mg/l	10 mg/l	Report mg/l	1/Week	24-Hour Composite ⁴
TOTAL AMMONIA, as N (December 1 to April 30)	313 lbs/day	Report lbs/day	Report lbs/day	15 mg/l	Report mg/l	Report mg/l	1/Week	24-Hour Composite ⁴
TOTAL AMMONIA, as N (May 1-31 and November 1-30)	208.5 lbs/day	417 lbs/day	Report lbs/day	10 mg/l	20 mg/l	Report mg/l	1/Week	24-Hour Composite ⁴

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS						MONITORING REQUIREMENTS	
	Mass Limits			Concentration Limits				
PARAMETER	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	MEASUREMENT FREQUENCY	SAMPLE TYPE ¹
TOTAL PHOSPHORUS ¹³ (April 1 - October 31)	4.2 lbs/day	***	***	0.2 mg/l	***	Report mg/l	2/Week	24-Hour Composite ⁴
TOTAL PHOSPHORUS ¹³ (November 1 - March 31)	21 lbs/day	***	***	1.0 mg/l	***	Report mg/l	2/Month	24-Hour Composite ⁴
ORTHO PHOSPHORUS, DISSOLVED, as P ¹³ (November 1 - March 31)	Report lbs/day	***	***	Report mg/l	***	Report mg/l	2/Month	24-Hour Composite ⁴
TOTAL NITROGEN ¹⁴ (May 1 - October 31)	167 lbs/day	***	***	8 mg/l	***	Report mg/l	2/Week	24-Hour Composite ⁴
Total Nitrate+Nitrite as N Total Kjeldahl Nitrogen	Report lbs/day Report lbs/day	***	***	Report mg/l Report mg/l	***	Report mg/l	1/Week	24-Hour Composite ⁴
TOTAL ALUMINUM	1.81 lbs/day	***	***	87 ug/l	***	Report ug/l	1/Month	24-Hour Composite ⁴
Whole Effluent Toxicity ^{10,11,12}	Acute LC50 ≥ 100%						2/Year	24-Hour Composite ⁴
Hardness ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Ammonia Nitrogen as N ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Aluminum ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Cadmium ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Copper ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Nickel ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Lead ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴
Total Recoverable Zinc ¹⁶	***	***	***	***	***	Report mg/l	2/Year	24-Hour Composite ⁴

Footnotes:

1. All required effluent samples shall be collected at the outlet of the chlorine contact chamber and prior to discharge to the Blackstone River. A routine sampling program shall be developed in which samples are taken at the same location, the same time and the same days each month. Any deviations from the routine sampling program shall be documented in correspondence attached to the applicable discharge monitoring report that is submitted to EPA. All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.
2. The limit is an annual average limit, which shall be reported as a rolling average. The first value will be calculated using the monthly average flow for the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's DMR will report the annual average flow that is calculated from that month and the previous 11 months. The monthly average and maximum daily flows for each month shall also be reported.

The permittee shall notify EPA by letter to the OEP Director, U.S. Environmental Protection Agency, 5 Post Office Square – Suite 100 (OEP06-5), Boston, MA 02109-3912 (with an additional copy to be submitted with its monthly DMR), (i) no later than sixty days before a projected exceedance of the 1.25 MGD annual average flow limit, if and when the permittee's evaluation of flow trends indicates that flows are expected to exceed 1.25 MGD; or (ii) at the time of filing of the first DMR in which the reported annual average flow exceeds 1.25 MGD.

3. Sampling is required for the influent and effluent.
4. A 24-hour composite sample will consist of at least twenty-four (24) grab samples taken during a consecutive 24 hour period (e.g. 7:00 A.M. Monday to 7:00 A.M. Tuesday), either collected at equal intervals and combined proportional to flow or continuously collected proportionally to flow.
5. Required for Massachusetts State Certification.
6. The minimum level (ML) for total residual chlorine (TRC) is defined as 20 ug/l. This value is the minimum level for chlorine using EPA approved methods found in the most currently approved version of Standard Methods for the Examination of Water and Wastewater, Method 4500 CL-E and G, or USEPA Manual of Methods of Analysis of Water and Wastes, Method 330.5. One of these methods must be used to determine total residual chlorine. For effluent limitations less than 20 ug/l, compliance/non-compliance will be determined based on the ML. Sample results of 20 ug/l or less shall be reported in accordance with the discharge monitoring report instructions. This monitoring shall be conducted concurrently with the fecal coliform and/or E.coli sampling described below.
7. The chlorination system shall include an alarm system within one (1) year of the effective date of the permit. Any interruption or malfunction of the chlorine dosing system that may have resulted in levels of chlorine which were inadequate for achieving effective disinfection or 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(s), and the estimated amount of time that the low or high dosage levels of chlorine chemicals occurred.

8. Bacteria samples shall be collected concurrently with a TRC sample.
9. The E. coli limits are Massachusetts State certification requirements. The enterococci limits are a requirement of the U. S. EPA permit and are not a requirement of the Massachusetts Department of Environmental Protection (MassDEP) permit.

The enterococci sample shall be collected currently with one of the E.coli samples during the April to October period. After a minimum of one year, the permittee may request a reduction of enterococci monitoring to winter only, if the monitoring data establishes that E.coli control is adequate to ensure control of enterococcus. The request shall be made in writing to EPA and shall include all concurrent monitoring data collected by the permittee. The permittee shall continue sampling for both E.coli and enterococci between April and October until receiving written approval of its request from EPA.

10. The permittee shall conduct acute toxicity tests two times per year. The permittee shall test the daphnid, Ceriodaphnia dubia, only. Toxicity test samples shall be collected during the months of April and October. The test results shall be submitted by the last day of the month following the completion of the test. The results are due May 31st and November 30th, respectively. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Periods	Submit Results By:	Test Species	Acute Limit LC50
April and October	May 31st November 30th	<u>Ceriodaphnia dubia</u> (Daphnid)	≥ 100%

11. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall either follow procedures outlined in **Attachment A (Toxicity Test Procedure and Protocol) Section IV., DILUTION WATER** in order to obtain an individual approval for use of an alternate dilution water, or the permittee shall follow the Self-Implementing Alternative Dilution Water Guidance, which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. This guidance is found in Attachment G of *NPDES Program Instructions for the Discharge Monitoring Report Forms (DMRs)*, which may be found on the EPA Region I web site at <http://www.epa.gov/Region1/enforcementandassistance/dmr.html>. If this guidance is revoked, the permittee shall revert to obtaining individual approval as outlined in **Attachment A**. Any modification or revocation to this guidance will be transmitted to the permittees. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.

Any tests using alternate dilution water must be run with a minimum of two controls: a receiving water (Blackstone River) control and a toxicity-free alternate dilution water control. Chemical data of the receiving water, including data for all metals listed in the protocol, must be included in the whole effluent toxicity (WET) report.

12. The LC50 is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

13. The maximum daily concentration and loading values for dissolved ortho phosphorus shall be derived from sampling done concurrently with the sampling for total phosphorus.
14. The total nitrogen effluent limitations and monitoring requirements are conditions of the U.S. Environmental Protection Agency (EPA) permit and are not requirements of the MassDEP permit. Sampling must be conducted and reported as specified, beginning on the effective date of the permit. The permittee shall operate the treatment facility to reduce the discharge of total nitrogen during the months of November to April to the maximum extent possible, using all available treatment equipment in place at the facility. The total nitrogen values will be calculated by adding the results of the nitrite and nitrate nitrogen and the total Kjeldahl nitrogen sampling. The addition of a carbon source that may be necessary in order to meet the total nitrogen limit during the months of May through October is not required during the months of November through April.
15. Two samples per day Monday to Friday; one sample per day Saturday, Sunday and holidays.
16. For each whole effluent toxicity test the permittee shall report on the appropriate discharge monitoring report, (DMR), the concentrations of the hardness, ammonia nitrogen as nitrogen, total recoverable aluminum, cadmium, copper, lead, nickel, and zinc found in the 100 percent effluent sample. All these aforementioned chemical parameters shall be determined to at least the minimum quantification level shown in **Attachment A**. Also the permittee should note that all chemical parameter results must still be reported in the appropriate toxicity report.
17. The permittee shall operate the treatment facility to reduce the discharge of total nitrogen to the maximum extent possible using all available treatment equipment in place at the facility. The permittee shall submit an annual report to EPA and the MassDEP 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 year. The total nitrogen values will be calculated by adding the results of the nitrite and nitrate nitrogen and the total Kjeldahl nitrogen sampling.

The total nitrogen effluent limitations and monitoring requirements are conditions of the U.S. Environmental Protection Agency (EPA) permit and are not requirements of the MassDEP permit.

Part I.A.2

- a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- b. The pH of the effluent shall not be less than 6.0 nor greater than 8.3 at any time.
- c. The discharge shall not cause objectionable discoloration of the receiving waters.
- d. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

- e. The permittee's treatment facility shall maintain a minimum of 85 percent removal of total suspended solids, biochemical oxygen demand and carbonaceous biochemical oxygen demand. The percent removal shall be based on monthly average values.
 - f. The permittee shall minimize the use of chlorine while maintaining adequate bacterial control.
 - g. The permittee shall conduct a planning process leading to the completion of a Comprehensive Wastewater Management Plan (CWMP) that shall include consideration of whether a design flow smaller than 2.5 mgd may be appropriate within the planning horizon of the plan. The resulting CWMP shall be completed no later than four (4) years from the effective date of the permit and shall be submitted with the reapplication for the next permit reissuance.
 - h. The results of sampling for any parameter above its required frequency must also be reported.
3. All POTWs must provide adequate notice to the Director of the following:
- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - c. For purposes of this paragraph, adequate notice shall include information on:
 - (1) the quantity and quality of effluent introduced into the POTW; and
 - (2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
4. Prohibitions Concerning Interference and Pass Through:
- Pollutants introduced into POTW's by a non-domestic source (user) shall not pass through the POTW or interfere with the operation or performance of the works.
5. Toxics Control
- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

6. Numerical Effluent Limitations for Toxicants

EPA or MassDEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

B. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfall listed in Part I A.1 of this permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) are not authorized by this permit and shall be reported to EPA and MassDEP in accordance with Section D.1.e.(1) of the General Requirements (Part II) of this permit (Twenty-four hour reporting).

Notification of Sanitary Sewer Overflows (SSOs) to MassDEP shall be made on its SSO Reporting Form (which includes MassDEP Regional Office Telephone numbers). The reporting form and instructions for its completion may be found on-line at <http://www.mass.gov/eea/agencies/massdep/service/approvals/sanitary-sewer-overflow-bypass-backup-notification.html>.

C. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance (O & M) of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions. The permittee is required to 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 C.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 C.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 C.5. below.

4. Collection System Mapping

Within 30 months of the effective date of this permit, the permittee shall prepare a map of the sewer collection system it owns (see page 1 of this permit for the effective date). 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 Operation and Maintenance Plan

The permittee shall develop and implement a Collection System Operation and Maintenance Plan.

- a. Within six (6) months of the effective date of the permit, the permittee shall submit to EPA and MassDEP

- (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; and
 - (3) A schedule for the development and implementation of the full Collection System O & M Plan including the elements in paragraphs b.1. through b.8. below.
- b. The full Collection System O & M Plan shall be submitted and implemented to EPA and MassDEP within twenty-four (24) months from the effective date of this permit. The Plan shall include:
- (1) The required submittal from paragraph 5.a. above, updated to reflect current information;
 - (2) A preventive maintenance and monitoring program for the collection system;
 - (3) Description of sufficient staffing necessary to properly operate and maintain the sanitary sewer collection system and how the operation and maintenance program is staffed;
 - (4) Description of funding, the source(s) of funding and provisions for funding sufficient for implementing the plan;
 - (5) 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;
 - (6) 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; and
 - (7) An educational public outreach program for all aspects of I/I control, particularly private inflow.
 - (8) 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 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 MassDEP 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. If treatment plant flow has reached 80% of the design flow [1.9 MGD] or there have been capacity-related overflows, submit a calculation of the maximum daily, weekly, and monthly infiltration and the maximum daily, weekly, and monthly inflow for the reporting year; and
- f. 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.

7. 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 works¹ it owns and operates.

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 Section 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 including the following elements:

¹ As defined at 40 CFR §122.2, which references the definition at 40 CFR §403.3

- General requirements
- Pollutant limitations
- Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)
- Management practices
- Record keeping
- Monitoring
- Reporting

Which of the 40 C.F.R. 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.²

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

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 Part 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 to the address contained in the

² This guidance document is available upon request from EPA Region 1 and may also be found at: <http://www.epa.gov/region1/updes/permits/generic/sludgeguidance.pdf>

reporting section of the permit. If the permittee engages a contractor or contractors for sludge preparation and ultimate use or disposal, the annual report need contain only the following information:

- Name and address of contractor(s) responsible for sludge preparation, use or disposal
- Quantity of sludge (in dry metric tons) from the POTW that is transferred to the sludge contractor(s), and the method(s) by which the contractor will prepare and use or dispose of the sewage sludge.

E. MONITORING AND REPORTING

The permittee shall submit monitoring data and all other NPDES permit required reports to EPA electronically using NetDMR, a web-based tool that allows permittees to electronically submit discharge monitoring reports (DMRs) and other required reports via a secure internet connection. Specific requirements regarding submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

1. Submittal of Reports Using NetDMR

NetDMR is accessed from: <http://www.epa.gov/netdmr>. DMRs shall be submitted electronically to EPA no later than the 15th day of the month following the completed reporting period. All reports required under the permit shall be submitted to EPA, including the MassDEP Monthly Operations and Maintenance Report, as an electronic attachment to the DMR. A permittee submitting reports using NetDMR is no longer required to submit hard copies of DMRs or other reports to EPA and no longer required to submit hard copies of DMRs to MassDEP. However, permittees shall continue to send hard copies of reports other than DMRs (including Monthly Operation and Maintenance Reports, Toxicity Test Results and Nutrient Optimization Reports) to MassDEP until further notice from MassDEP.

2. Submittal of Reports in Hard Copy Form

While we do not anticipate the need for the permittee to submit hard copies of reports to EPA, any hard copies that are submitted to EPA shall be submitted to the Director at the following address:

**U.S. Environmental Protection Agency
Water Technical Unit (OES04-SMR)
5 Post Office Square - Suite 100
Boston, MA 02109-3912**

Duplicate signed copies of all reports or notifications required above shall be submitted to the State at the following address:

**Massachusetts Department of Environmental Protection
Central Regional Office
Bureau of Resource Protection
627 Main Street
Worcester, Massachusetts 01608**

Toxicity test reports only shall also be submitted to the State at the following address:

**Massachusetts Department of Environmental Protection
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608**

Any verbal reports, if required in Parts I and/or II of this permit, shall be made to both EPA-New England and to MassDEP.

F. STATE PERMIT CONDITIONS

1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and 314 C.M.R. 3.00. With the exception of the nitrogen and winter fecal coliform limits, all of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.
2. This authorization also incorporates the state water quality certification issued by MassDEP under § 401(a) of the Federal Clean Water Act, 40 C.F.R. 124.53, M.G.L. c. 21, § 27 and 314 CMR 3.07. All of the requirements (if any) contained in MassDEP's water quality certification for the permit are hereby incorporated by reference into this state surface water discharge permit as special conditions pursuant to 314 CMR 3.11.
3. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as a NPDES Permit issued

by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.