NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMITS FOR THE DISCHARGE OF WASTEWATER FROM CERTAIN PUBLICLY OWNED TREATMENT WORKS TREATMENT PLANTS (POTW TREATMENT PLANTS) AND OTHER TREATMENT WORKS TREATING DOMESTIC SEWAGE IN THE COMMONWEALTH OF MASSACHUSETTS AND THE STATE OF NEW HAMPSHIRE

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Note: These permits are organized as a single permit and are referred to herein as the "General Permit" or the "POTW GP". The effluent limitations and specific conditions for facilities in Massachusetts (including both Commonwealth and Indian Country Lands) are contained in Part I. Part II contains the effluent limitations and specific conditions for facilities in New Hampshire. Parts III through IX include conditions which are common to both permits.

The following documents are separate attachments to the POTW General Permit:

I. Massachusetts General Permit No. MAG580000 for Minor POTW Treatment Plants (POTW Treatment Plants) and other Treatment Works Treating Domestic Sewage Discharging to Freshwaters and Marine Waters with Dilution Factors of at Least 50.

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), owners and operators of POTW treatment plants and other treatment works primarily treating domestic sewage located in Massachusetts (including both Commonwealth and Indian Country Lands), which discharge treated sanitary wastewater to the classes of waters as designated in the Massachusetts Water Quality Standards, 314 CMR 4.00 et seq.; are authorized to discharge to all waters, unless otherwise restricted, in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the date specified in the Notice of Availability for the Final General Permit published in the Federal Register.

This General Permit and the authorization to discharge supersedes the Publicly Owned Treatment Works General Permit issued on September 14, 2005, and shall expire at midnight, five years from the effective date, which is the date specified in the notice of availability for the Final General Permit, published in the Federal Register.

Signed this day of

Stephen S. Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency
Boston, MA 02109

David Ferris, Director
Massachusetts Wastewater Management Program
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA 02108

A. Effluent Limitations and Monitoring Requirements for Facilities Discharging to Freshwaters

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge treated effluent from a publicly owned treatment works treatment plant (POTW treatment plant) or other treatment plant treating domestic sewage. Each outfall discharging such wastewater shall be limited and monitored as specified below.

Effluent Characteristic	**Units**	**Discharge Limitation**			**Monitoring Requirement[2]**	
Parameter		**Average Monthly**	**Average Weekly**	**Maximum Daily**	**Measurement Frequency**	**Sample Type**
Flow[1] Flow[1]	MGD MGD	Limit Report	-------- --------	Report Report	Continuous Continuous	Recorder Recorder
BOD_5[3,] BOD_5[3]	mg/l lbs/day	30 Limit[4]	45 Limit[4]	Report ------	1/Week 1/Week	24-Hour Composite[5] 24-Hour Composite[5]
$CBOD_5$[3,6] $CBOD_5$[3,6]	mg/l lbs/day	25 Limit[4]	40 Limit[4]	Report ------	1/Week 1/Week	24-Hour Composite[5] 24-Hour Composite[5]
TSS[3] TSS[3]	mg/l lbs/day	30 Limit[4]	45 Limit[4]	Report ------	1/Week 1/Week	24-Hour Composite[5] 24-Hour Composite[5]
pH Range[7]	Standard Units (S.U.)	6.0-9.0			5/Week	Grab

Part I.A. (Continued)

Effluent Characteristic	Units	Discharge Limitation			Monitoring Requirement[2]	
Parameter		**Average Monthly**	**Average Weekly**	**Maximum Daily**	**Measurement Frequency**	**Sample Type**
Escherichia coli[7,8,9, 10] Discharges to Class A Waters	cfu/100 ml	126	------	235	1/Week	Grab
Escherichia coli [7,8,9,10,] Discharges to Class B waters	cfu/100 ml	126	------	409	1/Week	Grab
Total Residual Chlorine[8,11,12,13,14]	mg/l	See Table A	------	See Table A	5/Week	Grab
Total Ammonia Nitrogen[15]	mg/l	Report	------	Report	1/Month	24-Hour Composite[5]
Total Ammonia Nitrogen[15]	lbs/day	Report	------	Report	1/Month	24-Hour Composite[5]
Total Kjeldahl Nitrogen[15]	mg/l	Report	------	Report	1/Month	24-Hour Composite[5]
Total Nitrite[15]	mg/l	Report	------	Report	1/Month	24-Hour Composite[5]
Total Nitrate[15]	mg/l	Report	------	Report	1/Month	24-Hour Composite[5]
Total Nitrogen[15]	mg/l	Report	------	Report	1/Month	24-Hour Composite[5]
Total Nitrogen[15]	lbs/day	Report	------	Report	1/Month	24-Hour Composite[5]

Part I.A. (Continued)

Effluent Characteristic	Units	Discharge Limitation			Monitoring Requirement[2]	
Parameter		**Average Monthly**	**Average Weekly**	**Maximum Daily**	**Measurement Frequency**	**Sample Type**
Whole Effluent Toxicity, Dilution Factor ≤ 100[16,17]	% Effluent	Acute (LC_{50}) = 100%			1/Year	24-Hour Composite[5]
Whole Effluent Toxicity, Dilution Factor > 100 and < 1,000[16,17]	% Effluent	Acute (LC_{50}) ≥ 50%			1/Year	24-Hour Composite[5]
Hardness (as $CaCo_3$)[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Organic Carbon[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Ammonia Nitrogen, as N[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Kjeldahl Nitrogen, as N[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Nitrite Nitrogen[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Nitrate Nitrogen[18]	mg/l	------	------	Report	1/Year	24-hour composit5[5]
Total Phosphorus[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Aluminum[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Cadmium[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Chromium[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Copper[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Lead[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Nickel[18]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Zinc[18]						

Footnotes to Part I.A.:

1. The monthly average flow limitation is an annual average limit which is based on the design flow of the wastewater treatment facility as reported with the notification requirements for permit coverage (see Part V of this permit). This value shall be reported as a rolling average and shall be calculated as the arithmetic mean of the monthly average flow for the reporting month and the monthly average flows of the eleven previous months. The first value submitted following the effective date of the permit shall be calculated using the monthly average flow of the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's discharge monitoring report (DMR) shall report the annual average flow that is calculated from that month and the previous eleven months. The monthly average and daily maximum flows for each month shall also be reported.

2. All required effluent samples taken in compliance with the monitoring requirements of this permit shall be collected at a point that provides a representative sample of the effluent and prior to discharge to the receiving water. Any change in the sampling location must be reviewed and approved in writing by EPA and MassDEP.

   A routine sampling program shall be developed in which samples are collected at the same location, same time, and same days of every month. Any deviations from the routine sampling program shall be documented in correspondence attached to the applicable DMR that is submitted to EPA.

   All samples shall be analyzed using the methods found in 40 CFR § 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR § 136. All samples shall be 24-hour composites unless specified as a grab sample in 40 CFR § 136.

3. Samples shall be collected from the influent and analyzed for BOD_5 (or $CBOD_5$) and TSS twice per month. The arithmetic mean of the results shall be reported as the average monthly value and shall be used to calculate the percent removal of BOD_5 (or $CBOD_5$) and TSS.

4. The average monthly and average weekly BOD_5 (or $CBOD_5$) and TSS mass limitations are specific to each discharge, and shall be calculated using the following equation:

   Mass limitation (lbs/day) = [concentration limit (mg/l) * facility's design flow (MGD)*8.34]

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

6. The $CBOD_5$ limitations apply in lieu of BOD_5 limitations if requested by permittees in their Notice of Intent (NOI) submission and approved by EPA and MassDEP (see Part V.B.1.).

7. State certification requirement.

8. Samples collected for the analysis of *Escherichia coli* (*E. coli*) and total residual chlorine (TRC), as described in footnotes 9-14 below, shall be collected concurrently once per week.

9. The average monthly *E. coli* limitations are expressed as geometric means. Therefore, the average monthly *E. coli* value reported on discharge monitoring reports shall be determined by calculating the geometric mean of the samples collected during each monthly monitoring period.

10. For those facilities authorized to conduct seasonal disinfection, the *E. coli* limitations shall apply from April 1st- October 31st, as well as any additional period that EPA and MassDEP determine to be necessary (see Part V.B.2.). For facilities not authorized to conduct seasonal disinfection, the limitations shall be in effect year-round.

11. Total residual chlorine (TRC) limitations are a function of water quality criteria and the dilution factor calculated for the receiving water at the point of discharge, as shown in Part I.A., Table A of this permit. Dilution factors and applicable TRC limitations will be approved by MassDEP during the review of permittee's NOIs (see Part V.B.1.). Permittees shall be provided with these limitations when notified of authorization to discharge under the permit.

12. Permittees shall collect and analyze at least five TRC grab samples per week. For any week that more than five samples are analyzed, the monthly DMR shall include an attachment documenting the individual grab sample results for that day, the date and time each sample was collected, the analytical method used, and a summary of any operational modifications implemented in response to the sample results. This requirement applies to all samples taken, including screening level and process control samples. All test results utilizing an EPA-approved analytical method shall be used in the calculation and reporting of the monthly average and maximum daily data submitted on the DMR (see Part VIII. Standard Conditions, Section D.1.d.(2)).

    The minimum level (ML) for total residual chlorine is defined as 20 µg/l. EPA defines the minimum level as the level at which the entire analytical system shall give recognizable signal and calibration points. For total residual chlorine, this is the minimum level for chlorine using EPA-approved methods found in Standard Methods for the Examination of Water and Wastewater, 20th Edition, Method 4500CL-E and G. One of these methods must be used to determine total residual chlorine. Sample results of 20 µg/l or less shall be reported as zero on the discharge monitoring report (DMR).

13. 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 as an attachment to the DMR submitted for the month in which the interruption/malfunction occurred. 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.

14. Permittees seeking General Permit coverage for discharges into Class B waters may request authorization to conduct disinfection of the discharge on a seasonal basis in the NOI submitted for permit coverage (see Part V.B.2.). Upon receipt of written authorization from EPA and MassDEP to conduct seasonal disinfection, TRC limitations, monitoring, and reporting requirements apply only during the specified disinfection period and whenever chlorine is added to the treatment process outside of the specified disinfection period.

    Permittees authorized to conduct disinfection using an alternative to chlorine as the disinfectant are subject to the TRC limitations and monitoring requirements whenever chlorine is added to the treatment process for disinfection or for other purpose. For the months in which chlorine is not added to the treatment process, the permittee shall indicate "no discharge" on DMRs using the "NODI" code.

15. Monthly nitrogen monitoring is only required if the discharge is to a receiving water within the Housatonic, Thames, or Connecticut River Watersheds (See Part III.I., Special Conditions). Total kjeldahl nitrogen (TKN), ammonia nitrogen, nitrite nitrogen, and nitrate nitrogen samples shall be collected concurrently. The results of the TKN, total nitrite, and total nitrate nitrogen analyses shall be used to calculate both the concentration and mass loadings of total nitrogen as follows:

    Total nitrogen (mg/l) = total kjeldahl nitrogen + total nitrate nitrogen + total nitrite nitrogen
    Total nitrogen (lbs/day) = [total nitrogen (mg/l) * facility's design flow (MGD) * 8.34]

16. The LC_{50} 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. Likewise, a 50 % limit means that a sample comprised of 50 % effluent shall cause no more than a 50 % mortality rate. These limits are considered to be maximum daily limits.

17. The permittee shall conduct freshwater acute toxicity tests (48 hour) once per year to calculate the acute LC_{50} at the 48-hour exposure interval. Tests shall be conducted using the daphnid, *Ceriodaphnia dubia* (*C. dubia*), as the test species. Tests shall be conducted in accordance with the test procedures and protocols specified in **Attachment A** (Freshwater Acute Toxicity Test Procedure and Protocol, dated December 1995) of this permit. Toxicity test samples shall be collected and the tests completed during the calendar quarter ending September 30th. The test results shall be submitted by October 15th. 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 written approval for the use of an alternate dilution water for future tests, or the permittee shall follow the self-implementing Alternative Dilution Water Guidance which may be used to obtain automatic approval for the use of an alternate dilution water for a retest and to request written approval

to use an alternate dilution water for future tests, including the appropriate species for use with that water. This guidance is found in Attachment G of the *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 obtain an 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**.

18. Analyses of the following parameters shall be conducted on the 100 % effluent sample collected for use in each WET test: hardness, total organic carbon, total ammonia nitrogen, total kjeldahl nitrogen, total nitrite nitrogen, total nitrate nitrogen, total phosphorus, aluminum; and total recoverable cadmium, chromium, copper, lead, nickel, and zinc. Analyses of these parameters shall be conducted in conjunction with each WET test and the results reported on the DMR submitted the month following the completion of the test. The results of these analyses shall also be reported in the WET test report for the calendar quarter in which the tests were conducted.

    All of the aforementioned chemical parameters shall be determined to at least the Minimum Quantification Level as stated in **Attachment** A, Section VI. Chemical Analysis.

Table A. Total Residual Chlorine (TRC) Effluent Limitations for Massachusetts Discharges to Freshwater

Dilution Factor	TRC Limits[1]		Dilution Factor	TRC Limits[1]		Dilution Factor	TRC Limits[1]	
	Average Monthly[2]	Maximum Daily[3]		Average Monthly[2]	Maximum Daily[3]		Average Monthly[2]	Maximum Daily[3]
50	0.55	0.95	64	0.70	1.0	78	0.86	1.0
51	0.56	0.97	65	0.72	1.0	79	0.87	1.0
52	0.57	0.99	66	0.73	1.0	80	0.88	1.0
53	0.58	1.0	67	0.74	1.0	81	0.89	1.0
54	0.59	1.0	68	0.75	1.0	82	0.90	1.0
55	0.60	1.0	69	0.76	1.0	83	0.91	1.0
56	0.62	1.0	70	0.77	1.0	84	0.92	1.0
57	0.63	1.0	71	0.78	1.0	85	0.94	1.0
58	0.64	1.0	72	0.79	1.0	86	0.95	1.0
59	0.65	1.0	73	0.80	1.0	87	0.96	1.0
60	0.66	1.0	74	0.81	1.0	88	0.97	1.0
61	0.67	1.0	75	0.83	1.0	89	0.98	1.0
62	0.68	1.0	76	0.84	1.0	90	0.99	1.0
63	0.69	1.0	77	0.85	1.0	≥91	1.0	1.0

[1]The average monthly and maximum daily TRC limitations are a function of the dilution factor in the receiving water at the point of discharge and the TRC criteria.
[2]Based on a freshwater chronic TRC criterion of 0.011mg/l
[3]Based on a freshwater acute TRC Criterion of 0.019 mg/l

B. Effluent Limitations and Monitoring Requirements for Facilities Discharging to Marine Waters

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge treated effluent from a publicly owned treatment works treatment plant (POTW treatment plant) or other treatment works treating domestic sewage. Each outfall discharging such wastewater shall be limited and monitored as specified below.

Effluent Characteristic	**Units**	**Discharge Limitation**			**Monitoring Requirement**[2]	
Parameter		**Average Monthly**	**Average Weekly**	**Maximum Daily**	**Measurement Frequency**	**Sample Type**
Flow[1] Flow[1]	MGD MGD	Limit Report	-------- --------	Report Report	Continuous Continuous	Recorder Recorder
BOD_5[3] BOD_5[3]	mg/l lbs/day	30 Limit[4]	45 Limit[4]	Report ------	1/Week 1/Week	24-Hour Composite[5] 24-Hour Composite[5]
$CBOD_5$[3] $CBOD_5$[3,6]	mg/l lbs/day	25 Limit[4]	40 Limit[4]	Report ------	1/Week 1/Week	24-Hour Composite[5] 24-Hour Composite[5]
TSS[3] TSS[3]	mg/l lbs/day	30 Limit[4]	45 Limit[4]	Report ------	1/Week 1/Week	24-Hour Composite[5] 24-Hour Composite[5]
pH Range[7]	Standard Units (S.U.)	6.0-9.0			5/Week	Grab

Part I.B. (Continued)

Effluent Characteristic	Units	Discharge Limitation			Monitoring Requirement[2]	
Parameter		**Average Monthly**	**Average Weekly**	**Maximum Daily**	**Measurement Frequency**	**Sample Type**
Fecal Coliform Bacteria[7,8,14]						
Class SA Shellfishing Waters[9]	cfu/100 ml	14	------	43	1/Week	Grab
Class SB Shellfishing Waters[10]	cfu/100 ml	88	------	260	1/Week	Grab
Enterococci[7,8,14]						
Bathing Beach Waters[11,13]	cfu/100 ml	35	------	104	1/Week	Grab
Non-bathing Beach Waters[12 ,13]	cfu/100 ml	35	------	276	1/Week	Grab
Total Residual Chlorine[8,15,16,17,18]	mg/l	See Table B	------	See Table B	5/Week	Grab
Whole Effluent Toxicity, Dilution Factor ≤ 100[19,20,21]	% Effluent	Acute (LC_{50}) = 100%			1/Year	24-Hour Composite[5]
Whole Effluent Toxicity, Dilution Factor > 100 and < 1,000[19,20,21]	% Effluent	Acute (LC_{50}) ≥ 50%			1/Year	24-Hour Composite[5]

Part I.B. (Continued)

Effluent Characteristic	Units	Discharge Limitation			Monitoring Requirement[2]	
Parameter		Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Total Organic Carbon[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Ammonia Nitrogen, as N[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Kjeldahl Nitrogen, as N[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Nitrite Nitrogen[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Nitrate Nitrogen[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Aluminum[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Cadmium[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Chromium[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Copper[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Lead[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Nickel[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]
Total Zinc[22]	mg/l	------	------	Report	1/Year	24-Hour Composite[5]

Footnotes to Part I.B.:

1. The monthly average flow limitation is an annual average limit which is based on the design flow of the wastewater treatment facility as reported with the notification requirements for permit coverage (see Part V of this permit). This value shall be reported as a rolling average and shall be calculated as the arithmetic mean of the monthly average flow for the reporting month and the monthly average flows of the eleven previous months. The first value submitted following the effective date of the permit shall be calculated using the monthly average flow of the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's discharge monitoring report (DMR) shall report the annual average flow that is calculated from that month and the previous eleven months. The monthly average and daily maximum flows for each month shall also be reported.

2. All required effluent samples collected in compliance with the monitoring requirements of this permit shall be collected at a point that provides a representative sample of the effluent and prior to discharge to the receiving water. Any change in the sampling location must be reviewed and approved in writing by EPA and MassDEP.

   A routine sampling program shall be developed in which samples are collected at the same location, same time, and same days of every month. Any deviations from the routine sampling program shall be documented in correspondence attached to the applicable discharge monitoring report (DMR) that is submitted to EPA.

   All samples shall be analyzed using the methods found in 40 CFR § 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR § 136. All samples shall be 24-hour composites unless specified as a grab sample in 40 CFR § 136.

3. Samples shall be collected from the influent and analyzed for BOD_5 (or $CBOD_5$) and TSS twice per month. The arithmetic mean of the results shall be reported as the average monthly value and shall be used to calculate the percent removal of BOD_5 (or $CBOD_5$) and TSS.

4. The average monthly and average weekly BOD_5 (or $CBOD_5$) and TSS mass limitations are specific to each discharge, and are calculated using the following equation:

   Mass limitation (lbs/day) = [concentration limit (mg/l) * facility's design flow (MGD) * 8.34]

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

6. The $CBOD_5$ limitations apply in lieu of BOD_5 limitations if requested by permittees in their Notice of Intent (NOI) submission and approved by EPA and MassDEP (see Part V.B.1.).

7. State certification requirement.

8. Samples collected for the analysis of fecal coliform bacteria, enterococci, and total residual chlorine, as described in footnotes 9-18 below, shall be collected concurrently once per week.

9. Fecal coliform bacteria limitations for discharges to Class SA waters designated for shellfishing.

10. Fecal coliform bacteria limitations for discharges to Class SB waters designated for shellfishing.

11. Enterococci limitations for discharges to Class SA and SB bathing beach waters.

12. Enterococci limitations for discharges to Class SA and SB non-bathing beach waters.

13. The average monthly enterococci limitations are expressed as geometric means. Therefore, the average monthly enterococci value reported on discharge monitoring reports shall be determined by calculating the geometric mean of the samples collected during each monthly monitoring period.

14. For those facilities authorized to conduct seasonal disinfection, the bacteria limitations shall apply from April 1st- October 31st, as well as any additional period that EPA and MassDEP determine to be necessary (see Part V.B.2.). For facilities not authorized to conduct seasonal disinfection, the limitations shall be in effect year-round.

15. Total residual chlorine (TRC) limitations are a function of water quality criteria and the dilution factor calculated for the receiving water at the point of discharge, as shown in Part I.B., Table B of this permit. Dilution factors and applicable TRC limitations will be approved by MassDEP during the review of permittee's NOIs (see Part V.B.2. of this permit). Permittees shall be provided with these limitations when notified of authorization to discharge under the permit.

16. Permittees shall collect and analyze at least five TRC grab samples per week. For any week that more than five samples are analyzed, the monthly DMR shall include an attachment documenting the individual grab sample results for that day, the date and time each sample was collected, the analytical method used, and a summary of any operational modifications implemented in response to the sample results. This requirement applies to all samples taken, including screening level and process control samples. All test results utilizing an EPA-approved analytical method shall be used in the calculation and reporting of the monthly average and maximum daily data submitted on the DMR (see Part VIII., Standard Conditions, Section D.1.d. (2)).

    Total residual chlorine shall be analyzed using a method approved in 40 CFR Part 136 that has a minimal quantitation level equal to the lowest (average monthly) permit limit.

17. 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.

18. Permittees seeking General Permit coverage for discharges into Class B waters, Class SA waters not designated for shellfishing, or Class SB waters not designated for shellfishing, may request authorization to conduct disinfection of the discharge on a seasonal basis in the NOI submitted for permit coverage (see Part V.B.2.). Upon receipt of written authorization from EPA and MassDEP to conduct seasonal disinfection, TRC limitations, monitoring, and reporting requirements apply only during the disinfection period and whenever chlorine is added to the treatment process outside of the specified disinfection period.

    Permittees authorized to conduct disinfection using an alternative to chlorine as the disinfectant are subject to the TRC limitations and monitoring requirements whenever chlorine is added to the treatment process for disinfection or for other purpose. For the months in which chlorine is not added to the treatment process, the permittee shall indicate "no discharge" on DMRs using the "NODI" code.

19. The LC_{50} 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. Likewise, a 50% limit means that a sample comprised of 50% effluent shall cause no more than a 50% mortality rate.

20. The permittee shall conduct marine acute toxicity tests (48-hour) once per year to calculate the acute LC_{50} at the 48 hour exposure interval. Tests shall be conducted using the mysid shrimp, *Mysidopsis bahia* (*M. bahia*), as the test species. Tests shall be conducted in accordance with the test procedures and protocols specified in **Attachment B (**Marine Acute Toxicity Test Procedure and Protocol, dated September 1996) of this permit. Toxicity test samples shall be collected and the tests completed during the calendar quarter ending September 30th. The test results shall be submitted by October 15th.

21. 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 B** (Toxicity Test Procedure and Protocol) Section IV., DILUTION WATER in order to obtain an individual written approval for the use of an alternate dilution water for future tests, or the permittee shall follow the self-implementing Alternative Dilution Water Guidance which may be used to obtain automatic approval for the use of an alternate dilution water for a retest and/or to request written approval to use an alternate dilution water for future tests, including the appropriate species for use with that water. This guidance is found in Attachment G of the *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 obtain an individual approval as outlined in **Attachment B**. 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 B**.

22. Analyses of the following parameters shall be conducted on the 100% effluent sample collected for use in each WET test: total organic carbon, total ammonia nitrogen, total kjeldahl nitrogen, total nitrite nitrogen, total nitrate nitrogen; and total recoverable aluminum, cadmium, chromium, copper, lead, nickel, and zinc. Analyses of these parameters shall be conducted in conjunction with each WET test and the results reported on the DMR submitted the month following the completion of the test. The results of these analyses shall also be reported in the WET test report for the calendar quarter in which the tests were conducted.

    All of the aforementioned chemical parameters shall be determined to at least the Minimum Quantification Level as stated in **Attachment B, Section VI., Chemical Analysis**.

Table B. Total Residual Chlorine Effluent Limitations for Massachusetts Discharges to Marine Waters

Dilution Factor	TRC Limits[1]		Dilution Factor	TRC Limits[1]		Dilution Factor	TRC Limits[1]	
	Average Monthly[2]	Maximum Daily[3]		Average Monthly[2]	Maximum Daily[3]		Average Monthly[2]	Maximum Daily[3]
50	0.38	0.65	78	0.59	1.0	106	0.80	1.0
51	0.38	0.66	79	0.59	1.0	107	0.80	1.0
52	0.39	0.68	80	0.60	1.0	108	0.81	1.0
53	0.40	0.69	81	0.61	1.0	109	0.82	1.0
54	0.41	0.70	82	0.62	1.0	110	0.82	1.0
55	0.41	0.72	83	0.62	1.0	111	0.83	1.0
56	0.42	0.73	84	0.63	1.0	112	0.84	1.0
57	0.43	0.74	85	0.64	1.0	113	0.85	1.0
58	0.44	0.75	86	0.65	1.0	114	0.86	1.0
59	0.44	0.77	87	0.65	1.0	115	0.86	1.0
60	0.45	0.78	88	0.66	1.0	116	0.87	1.0
61	0.46	0.79	89	0.67	1.0	117	0.88	1.0
62	0.47	0.81	90	0.68	1.0	118	0.89	1.0
63	0.47	0.82	91	0.68	1.0	119	0.89	1.0
64	0.48	0.83	92	0.69	1.0	120	0.90	1.0
65	0.49	0.85	93	0.70	1.0	121	0.91	1.0
66	0.50	0.86	94	0.71	1.0	122	0.92	1.0
67	0.50	0.87	95	0.71	1.0	123	0.92	1.0
68	0.51	0.88	96	0.72	1.0	124	0.93	1.0
69	0.52	0.90	97	0.73	1.0	125	0.94	1.0
70	0.53	0.91	98	0.74	1.0	126	0.94	1.0
71	0.53	0.92	99	0.74	1.0	127	0.95	1.0
72	0.54	0.94	100	0.75	1.0	128	0.96	1.0
73	0.55	0.95	101	0.76	1.0	129	0.97	1.0
74	0.56	0.96	102	0.76	1.0	130	0.98	1.0
75	0.56	0.98	103	0.77	1.0	131	0.98	1.0
76	0.57	0.99	104	0.78	1.0	132	0.99	1.0
77	0.58	1.0	105	0.79	1.0	133	1.0	1.0

[1]The average monthly and maximum daily TRC limitations are a function of the dilution factor in the receiving water at the point of discharge and the TRC criteria.
[2]Based on a marine chronic TRC criterion of 0.0075 mg/l
[3]Based on a marine acute TRC criterion of 0.013 mg/l

C. Operation and Maintenance

Operation and maintenance of the sewer system shall be in compliance with the Standard Conditions of Part VIII of this permit and the following terms and conditions:

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.

2. Preventative Maintenance Program

   The permittee shall maintain an ongoing preventative 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.

3. Infiltration/Inflow Control Plan:

   The permittee shall continue to implement a plan for controlling infiltration and inflow (I/I) to the separate sewer system. The plan shall be updated and submitted to EPA and MassDEP **within six months of receiving authorization to discharge under the POTW GP** (see letter sent by certified mail from EPA authorizing discharges under the General Permit for date) and shall describe the permittee's program for preventing infiltration/inflow-related effluent limit violations, and all unauthorized discharges of wastewater, including overflows and bypasses due to excessive infiltration/inflow.

   The plan shall include:

   a. An ongoing program to identify and remove sources of infiltration and inflow. The program shall include the necessary funding level and the source(s) of funding.

   b. An inflow identification and control program that focuses on the disconnection and redirection of illegal sump pumps and roof down spouts. Priority should be given to removal of public and private inflow sources that are upstream from, and potentially contribute to, known areas of sewer system backups and/or overflows

   c. Identification and prioritization of areas that will provide increased aquifer recharge as the result of reduction/elimination of infiltration and inflow to the system.

   d. An educational public outreach program for all aspects of I/I control, particularly private inflow.

   Reporting Requirements:

A summary report of all actions taken to minimize I/I during the previous calendar year shall be submitted to EPA and MassDEP annually, **by March 31**. The summary report shall, at a minimum, include:

a. A map and a description of inspection and maintenance activities conducted and corrective actions taken during the previous year.

b. Expenditures for any infiltration/inflow-related maintenance activities and corrective actions taken during the previous year

c. A map with areas identified for I/I-related investigation/action in the coming year.

d. A calculation of the annual average I/I and the maximum month I/I for the reporting year.

e. A report of any I/I-related corrective actions taken as a result of unauthorized discharges reported pursuant to 314 CMR 3.19(20) and reported pursuant to the Unauthorized Discharges section of this permit.

4. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR §122.2).

D. 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 CMR 3.00. 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.

II. New Hampshire General Permit No. NHG580000 for Publicly Owned Treatment Works Treatment Plants (POTW Treatment Plants) and other Treatment Works Treating Domestic Sewage Discharging to Freshwaters and Marine Waters with Dilution Factors of at Least 50

In compliance with the provisions of the Federal Clean Water Act, as amended (33 U.S.C. 1251 et seq.), the following general permit authorizes discharges of treated sanitary wastewater from publicly owned treatment works treatment plants (POTW treatment plants) and other treatment works primarily treating domestic sewage in New Hampshire to all waters, unless otherwise restricted by the New Hampshire water quality standards, 50 RSA § 485-A:8 and the New Hampshire Code of Administrative Rules, Env-Wq 1700-1709, in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

The State of New Hampshire does not allow discharges to Class A waters under this General Permit.

This permit shall become effective on the date specified in the Notice of Availability for the Final Permit published in the Federal Register.

This General Permit and the authorization to discharge supersedes the Publicly Owned Treatment Works General Permit issued on September 14, 2005, and shall expire at midnight, five years from the effective date, which is the date specified in the Notice of Availability for the final General Permit, published in the Federal Register.

Signed this day of

_____

Stephen S. Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency
Boston, MA 02109

A. Effluent Limitations and Monitoring Requirements for New Hampshire Facilities Discharging to Freshwaters

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge treated effluent from publicly owned treatment works treatment plants (POTW treatment plants) or other treatment works primarily treating domestic sewage. Each outfall discharging such wastewater shall be limited and monitored by the permittee as specified below in Tables A and B in accordance with the type of treatment system. Samples taken in compliance with the monitoring requirements specified below shall be taken at the end of all treatment processes, including disinfection or dechlorination, or at an alternative representative location approved by EPA and the New Hampshire Department of Environmental Services (NHDES), that provides a representative sample of the effluent.

Table A. Effluent Limitations

Effluent Characteristic	**Units**	**Discharge Limitation**		
Parameter		**Average Monthly**	**Average Weekly**	**Maximum Daily**
Flow	MGD	Report	------	Report
BOD_5[2] BOD_5[2]	mg/l lbs/day	30 Limit[3]	45 Limit[3]	50 Limit[3]
$CBOD_5$[2,4] $CBOD_5$[2,4]	mg/l lbs/day	25 Limit[3]	40 Limit[3]	45 Limit[3]
TSS[2] TSS[2]	mg/l lbs/day	30 Limit[3]	45 Limit[3]	50 Limit[3]
pH Range[5] pH Range[5,6]	Standard Units Standard Units	6.0-9.0 6.5-8.0		
Total Residual Chlorine[8,9,10]	mg/l	See Part II.A., Table C	------	See Part II.A., Table C
Escherichia coli, designated beach area[5,11,12]	per100 ml	47	------	88

Part II.A. (Continued)

Table A. Effluent Limitations

Effluent Characteristic	**Units**	**Discharge Limitation**		
Parameter		**Average Monthly**	**Average Weekly**	**Maximum Daily**
Escherichia coli, non-designated beach area[5,11,12]	per 100 ml	126	------	406
Total Ammonia Nitrogen[13]	mg/l	Report	Report	Report
Total Ammonia Nitrogen[13]	lbs/day	Report	Report	Report
Total Kjeldahl Nitrogen[13]	mg/l	Report	Report	Report
Total Nitriten[13]	mg/l	Report	Report	Report
Total Nitraten[13]	mg/l	Report	Report	Report
Total Nitrogen[13]	mg/l	Report	Report	Report
Total Nitrogen[13]	lbs/day	Report	Report	Report
Whole Effluent Toxicity[14]				
Dilution factor ≤ 100	% effluent	Acute (LC_{50}) = 100%		
Dilution factor > 100	% effluent	Acute (LC_{50}) ≥ 50%		
Total Ammonia Nitrogen[17]	mg/l	Report		
Hardness (as $CaCO_3$)[17]	mg/l	Report		
Total Recoverable Aluminum[17]	mg/l	Report		
Total Recoverable Cadmium[17]	mg/l	Report		
Total Recoverable Chromium[17]	mg/l	Report		
Total Recoverable Copper[17]	mg/l	Report		
Total Recoverable Lead[17]	mg/l	Report		
Total Recoverable Nickel[17]	mg/l	Report		
Total Recoverable Zinc[17]	mg/l	Report		

Part II.A. (Continued)

Table B. Monitoring Requirements

	Sand Filters		Lagoons		Other	
Effluent Characteristic	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**
Flow[1]	Continuous	Recorder	Continuous	Recorder	Continuous	Recorder
BOD_5[2] or $CBOD_5$[2]	2/Month	Grab	1/Week	Grab	2/Week	24-Hour Composite
TSS[2]	2/Month	Grab	1/Week	Grab	2/Week	24-Hour Composite
pH	3/Week	Grab	1/Day	Grab	1/Day	Grab
Total Residual Chlorine[7,9,10]	1/Day	Grab	1/Day	Grab	1/Day	Grab
Escherichia coli[7]	1/Week	Grab	2/Week	Grab	3/Week	Grab

Part II.A. (Continued)

Table B. Monitoring Requirements

	Sand Filters		Lagoons		Other	
Effluent Characteristic	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**
Total Ammonia Nitrogen[13] Total Kjeldahl Nitrogen[13] Total Nitrite[13] Total Nitrate[13] Total Nitrogen[13]	1/Month	Grab	1/Month	Grab	1/Month	24-Hour Composite
Whole Effluent Toxicity[15,16]						
<u>Major Facilities</u>						
Dilution Factor ≤ 100[18]	4/Year	Grab	4/Year	Grab	4/Year	24-Hour Composite
Dilution Factor > 100[19]	2/Year	Grab	2/Year	Grab	2/Year	24-Hour Composite
<u>Minor Facilities</u>						
Dilution Factor ≤ 1000[20]	1/Year	Grab	1/Year	Grab	1/Year	24-Hour Composite

Part II.A. (Continued)

Table B. Monitoring Requirements

	Sand Filters		Lagoons		Other	
Effluent Characteristic	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**
Total Ammonia Nitrogen[17] Hardness (as $CaCO_3$)[17] Total Recoverable Aluminum[17] Total Recoverable Cadmium[17] Total Recoverable Chromium[17] Total Recoverable Copper[17] Total Recoverable Lead[17] Total Recoverable Nickel[17] Total Recoverable Zinc[17]	See WET Measurement Frequency and Sample Type		See WET Measurement Frequency and Sample Type		See WET Measurement Frequency and Sample Type	

Footnotes to Part II.A., Tables A and B

1. The effluent flow shall be continuously monitored and recorded using a flow meter and totalizer.

2. The influent concentrations of BOD_5 (or $CBOD_5$) and TSS shall be monitored twice per month, preferably using a 24-hour composite sample. The arithmetic mean of the results shall be reported as the average monthly value.

3. The average monthly and average weekly BOD_5 (or $CBOD_5$) and TSS mass limitations are specific to each discharge, and are calculated using the following equation:

   Mass limitation (lbs/day) = [concentration limit (mg/l) * facility's design flow (MGD) * 8.34]

4. The $CBOD_5$ limitations apply in lieu of BOD_5 limitations if requested by permittees in their Notice of Intent (NOI) submission and approved by EPA and NHDES (see Part V.B.1.).

5. State certification requirement.

6. The pH limit of 6.5-8.0 applies to discharges to receiving waters that are identified in the State of New Hampshire's 303(d) list due to pH impairment.

7. Samples collected for the analysis of *Escherichia coli* (*E. coli*) and total residual chlorine (TRC), as described in footnotes 9-12 below, shall be collected concurrently.

8. Total residual chlorine (TRC) limitations are a function of water quality criteria and the dilution factor calculated for the receiving water at the point of discharge, as shown in Part II.A., Table C of this permit. Dilution factors and applicable TRC limitations will be determined by NHDES and provided to permittees upon NHDES's receipt of a request for this information during the NOI preparation process (see Part V.B.1. of this permit). EPA will confirm the TRC limitation during review of the permittee's NOI for permit coverage. Permittees will be provided with TRC limits when notified of their authorization to discharge under the permit.

9. Permittees authorized to conduct disinfection using an alternative to chlorine as the disinfectant are subject to the TRC limitations and monitoring requirements whenever chlorine is added to the treatment process for disinfection or other purpose. For the months in which chlorine is not added to the treatment process, the permittee shall indicate "no discharge" on DMRs using the "NODI" code.

10. Total residual chlorine shall be analyzed using a method approved in 40 CFR Part 136 that has a minimum level of quantitation at least as low as the minimum (average monthly) permit limit.

11. The permittee shall consult with NHDES to determine whether the discharge is to waters with designated beach area(s), and submit this determination as part of the NOI package (see Part V.B.3.).

12. The average monthly value for *Escherichia coli* (*E. coli*) shall be determined by calculating the geometric mean. Samples shall be analyzed for *E. coli* using an approved method as specified in 40 CFR Part 136, Table I.A. (List of Approved Biological Methods for Wastewater and Sewage Sludge).

13. Monthly nitrogen monitoring is only required if the discharge is to a receiving water within the Connecticut River Watershed (see Part III.I, Special Conditions). Total kjeldahl nitrogen (TKN), ammonia nitrogen, nitrite nitrogen, and nitrate nitrogen samples shall be collected concurrently. The results of the TKN, total nitrite, and total nitrate nitrogen analyses shall be used to calculate both the concentration and mass loadings of total nitrogen, as shown in the following equations:

    Total nitrogen (mg/l) = total kjeldahl nitrogen + total nitrate nitrogen + total nitrite nitrogen
    Total nitrogen (lbs/day) = [total nitrogen (mg/l) * facility's design flow (MGD) * 8.34]

14. The LC_{50} 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. Likewise, a 50% limit means that a sample comprised of 50% effluent shall cause no more than a 50% mortality rate. These limits are considered to be maximum daily limits.

    These limits do not apply to minor facilities with dilution factors greater than 1,000.

15. The permittee shall conduct **freshwater acute** toxicity tests (48-hour) at the frequency specified in Part II.A., Table B, to calculate the acute LC_{50} at the 48-hour exposure interval. The permittee shall conduct the tests using the daphnid, *Ceriodaphnia dubia* (C. *dubia)*, and the fathead minnow, *Pimephales promelas* (*P. promelas*), as test species. Tests shall be conducted in accordance with the test procedures and protocols specified in **Attachment A (**Freshwater Acute Toxicity Test Procedure and Protocol, dated December 1995) of this permit.

16. If toxicity test(s) using the 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 written approval for the use of an alternate dilution water for future tests, or the permittee shall follow the self-implementing Alternative Dilution Water Guidance which may be used to obtain automatic approval for the use of an alternate dilution water for a retest and

to request written approval for the use of an alternate dilution water for future tests, including the appropriate species for use with that water. This guidance is found in Attachment G of the *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 obtain an 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**.

17. For each whole effluent toxicity (WET) test performed, the permittee shall report on the appropriate discharge monitoring report (DMR) the concentrations of ammonia nitrogen as nitrogen, hardness; and total recoverable aluminum, cadmium, chromium, copper, lead, nickel, and zinc detected in the 100 % effluent sample. These results shall also be included in the WET test report for the calendar quarter in which the test was conducted.

    All of the aforementioned chemical parameters shall be determined to at least the Minimum Quantification Level as stated in **Attachment A, Section VI. Chemical Analysis**.

18. For major facilities with dilution factors less than or equal to 100 conducting four toxicity tests per year, toxicity test samples shall be collected and tests completed by the end of the calendar quarters ending March 31st, June 30th, September 30th, and December 31st. WET test results shall be submitted by the 15th day of the month following the end of the calendar quarter in which the tests were conducted (for example, test results for the calendar quarter ending March 31st are due by April 15th).

19. For major facilities with dilution factors greater than 100 conducting two toxicity tests per year, toxicity test samples shall be collected and tests completed by the end of the calendar quarters ending March 31st and September 30th. WET test results shall be submitted by the 15th day of the month following the end of the calendar quarter in which the tests were conducted (for example, test results for the calendar quarter ending March 31st are due by April 15th).

20. For minor facilities with dilution factors less than or equal to 1,000 conducting one toxicity test per year, toxicity test samples shall be collected and tests completed by the end of the calendar quarter ending September 30th. WET test results shall be submitted by October 15th.

Table C. Total Residual Chlorine Limitations for New Hampshire Discharges to Freshwater

Dilution Factor	TRC Limits[1]		Dilution Factor	TRC Limits[1]		Dilution Factor	TRC Limits[1]	
	Average Monthly[2]	Maximum Daily[3]		Average Monthly[2]	Maximum Daily[3]		Average Monthly[2]	Maximum Daily[3]
50	0.55	0.95	64	0.70	1.0	78	0.86	1.0
51	0.56	0.97	65	0.72	1.0	79	0.87	1.0
52	0.57	0.99	66	0.73	1.0	80	0.88	1.0
53	0.58	1.0	67	0.74	1.0	81	0.89	1.0
54	0.59	1.0	68	0.75	1.0	82	0.90	1.0
55	0.60	1.0	69	0.76	1.0	83	0.91	1.0
56	0.62	1.0	70	0.77	1.0	84	0.92	1.0
57	0.63	1.0	71	0.78	1.0	85	0.94	1.0
58	0.64	1.0	72	0.79	1.0	86	0.95	1.0
59	0.65	1.0	73	0.80	1.0	87	0.96	1.0
60	0.66	1.0	74	0.81	1.0	88	0.97	1.0
61	0.67	1.0	75	0.83	1.0	89	0.98	1.0
62	0.68	1.0	76	0.84	1.0	90	0.99	1.0
63	0.69	1.0	77	0.85	1.0	≥ 91	1.0	1.0

[1]The average monthly and maximum daily TRC limitations are a function of the dilution factor in the receiving water at the point of discharge and the TRC criteria.
[2]Based on a freshwater chronic TRC criterion of 0.011mg/l
[3]Based on a freshwater acute TRC criterion of 0.019 mg/l

B. Effluent Limitations and Monitoring Requirements for Facilities Discharging to Marine Waters

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge treated effluent from a publicly owned treatment works treatment plant (POTW treatment plant) or other treatment works treating domestic sewage. Each outfall discharging such wastewater shall be limited and monitored by the permittee as specified below in Tables D and E in accordance with the type of treatment system. Samples taken in compliance with the monitoring requirements specified below shall be taken at the end of all treatment processes, including disinfection or dechlorination, or at an alternative representative location approved by EPA and the New Hampshire Department of Environmental Services (NHDES), that provides a representative sample of the effluent.

Table D. Effluent Limitations

Effluent Characteristic	**Units**	**Discharge Limitation**		
Parameter		**Average Monthly**	**Average Weekly**	**Maximum Daily**
Flow	MGD	Report	------	Report
BOD_5[2] BOD_5[2]	mg/l lbs/day	30 Limit[3]	45 Limit[3]	50 Limit[3]
$CBOD_5$[2,4] $CBOD_5$[2,4]	mg/l lbs/day	25 Limit[3]	40 Limit[3]	45 Limit[3]
TSS[2] TSS[2]	mg/l lbs/day	30 Limit[3]	45 Limit[3]	50 Limit[3]
pH Range[5] pH Range[5,7]	Standard Units Standard Units	6.0-9.0 6.5-8.0		
Total Residual Chlorine[8,9,10]	mg/l	See Part II.B., Table F	------	See Part II.B., Table F

Part II.B. (Continued)

Table D. Effluent Limitations

Effluent Characteristic	**Units**	**Discharge Limitation**		
Parameter		**Average Monthly**	**Average Weekly**	**Maximum Daily**
Total coliform bacteria[5,11,12,13]	per 100 ml	70	------	------
Total coliform bacteria[5,11,12,13]	%	------	------	Report
Fecal coliform bacteria[5,11,14,15]	per 100 ml	14	------	------
Fecal coliform bacteria[5,11,14,15]	%	------	------	Report
Enterococci, in waters utilized for swimming purposes [5,16,17]	per 100 ml	35	------	104
Enterococci, in waters not utilized for swimming purposes [5,16,17]	per 100 ml	Report	------	Report
Whole Effluent Toxicity[18]				
Dilution factor ≤ 100	% effluent	Acute (LC_{50}) = 100%		
Dilution factor > 100	% effluent	Acute (LC_{50}) ≥ 50%		
Total ammonia nitrogen, as N[21]	mg/l	Report		
Total Recoverable Aluminum[21]	mg/l	Report		
Total Recoverable Cadmium[21]	mg/l	Report		
Total Recoverable Chromium[21]	mg/l	Report		
Total Recoverable Copper[21]	mg/l	Report		
Total Recoverable Nickel[21]	mg/l	Report		
Total Recoverable Lead[21]	mg/l	Report		
Total Recoverable Zinc[21]	mg/l	Report		

Part II.B. (continued)

Table E. Monitoring Requirements

	Sand Filters		Lagoons		Other	
Effluent Characteristic	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**
Flow[1]	Continuous	Recorder	Continuous	Recorder	Continuous	Recorder
BOD_5[2] $CBOD_5$[2]	2/Month	Grab	1/Week	Grab	2/Week	24-Hour Composite
TSS[2]	2/Month	Grab	1/Week	Grab	2/Week	24-Hour Composite
pH	3/Week	Grab	1/Day	Grab	1/Day	Grab
Total Residual Chlorine[7,9,10]	2/Day	Grab	2/Day	Grab	2/Day	Grab
Total coliform bacteria or Fecal Coliform Bacteria[7]	1/Day (Major) 5/Week (Minor)	Grab Grab	1/Day (Major) 5/Week (Minor)	Grab Grab	1/Day (Major) 5/Week (Minor)	Grab Grab
Enterococci, in waters used for swimming purposes[7]	1/Day (Major) 5/Week (Minor)	Grab Grab	1/Day (Major) 5/Week (Minor)	Grab Grab	1/Day (Major) 5/Week (Minor)	Grab Grab
Enterococci, in waters not used for swimming purposes[7]	1/Week	Grab	1/Week	Grab	1/Week	Grab

Part II.B. (continued)

Table E. Monitoring Requirements

	Sand Filters		Lagoons		Other	
Effluent Characteristic	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**
Whole Effluent Toxicity[19,20]						
Major Facilities						
Dilution Factor ≤ 100[22]	4/Year	Grab	4/Year	Grab	4/Year	24-Hour Composite
Dilution Factor > 100[23]	2/Year	Grab	2/Year	Grab	2/Year	24-Hour Composite
Whole Effluent Toxicity[19,20]						
Minor Facilities						
Dilution Factor ≤ 1000[24]	1/Year	Grab	1/Year	Grab	1/Year	24-Hour Composite

Part II.B. (Continued)

Table E. Monitoring Requirements

	Sand Filters		Lagoons		Other	
Effluent Characteristic	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**	**Measurement Frequency**	**Sample Type**
Total Ammonia Nitrogen[21] Total Recoverable Aluminum[21] Total Recoverable Cadmium[21] Total Recoverable Chromium[21] Total Recoverable Copper[21] Total Recoverable Lead[21] Total Recoverable Nickel[21] Total Recoverable Zinc[21]	See WET Measurement Frequency and Sample Type		See WET Measurement Frequency and Sample Type		See WET Measurement Frequency and Sample Type	

Footnotes to Part II.B., Tables B and C

1. The effluent flow shall be continuously monitored and recorded using a flow meter and totalizer.

2. The influent concentrations of BOD_5 (or $CBOD_5$) and TSS shall be monitored twice per month, preferably using a 24-hour composite sample. The arithmetic mean of the results shall be reported as the average monthly value.

3. The average monthly and average weekly BOD_5 (or $CBOD_5$) and TSS mass limitations are specific to each discharge, and are calculated using the following equation:

   Mass limitation (lbs/day) = [concentration limit (mg/l) * facility's design flow (MGD) * 8.34]

4. The $CBOD_5$ limitations apply in lieu of BOD_5 limitations if requested by permittees in their Notice of Intent (NOI) submission and approved by EPA and NHDES (see Part V.B.1).

5. State certification requirement.

6. The pH limit of 6.5-8.0 applies to discharges to receiving waters that are identified in the State of New Hampshire's 303(d) list due to pH impairment.

7. Samples collected for the analysis of total residual chlorine and either total coliform or fecal coliform bacteria and enterococci, as described in footnotes 9-17 below, shall be collected concurrently.

8. Total residual chlorine (TRC) limitations are a function of water quality criteria and the dilution factor calculated for the receiving water at the point of discharge, as shown in Part II.B., Table F of this permit. Dilution factors and applicable TRC limitations will be determined by NHDES and provided to permittees upon NHDES's receipt of a request for this information during the NOI preparation process (see Part V.B.1. of this permit). EPA will confirm the TRC limitation during review of the permittee's NOI for permit coverage. Permittees will be provided with TRC limits when notified of their authorization to discharge under the permit.

9. Permittees authorized to conduct disinfection using an alternative to chlorine as the disinfectant are subject to the TRC limitations and monitoring requirements whenever chlorine is added to the treatment process for disinfection or for other purpose. For the months in which chlorine is not added to the treatment process, the permittee shall indicate "no discharge" on DMRs using the "NODI" code.

   Facilities utilizing an alternative to chlorine for disinfection shall monitor the effluent for TRC at least once per day, for each day that chlorine is added to the treatment process. For the months in which chlorine is not used, the "no discharge" code (NODI) shall be included in the DMRs.

10. Total residual chlorine shall be analyzed using a method approved in 40 CFR Part 136 that has a minimum quantitation level of at least as low as the lowest (average monthly) limit in the permit.

11. The permittee is required to meet either fecal coliform bacteria or total coliform bacteria effluent limits for its discharge to tidal waters designated for the growing or taking of shellfish. The permittee shall indicate in the NOI submitted for permit coverage which limits shall apply in its permit (see Part V.B.3.). The permittee is also required to meet enterococci effluent limits or reporting requirements as determined in accordance with footnote 16.

12. The average monthly value for total coliform bacteria shall be determined by calculating the geometric mean of the individual sample results. Not more than 10 percent of the samples collected over a monthly period shall exceed a Most Probable Number (MPN) of 230 per 100 ml for a 5-tube decimal dilution test. Furthermore, all total coliform test results must be submitted as an attachment to the monthly Discharge Monitoring Reports (DMRs).

13. The permittee is required to report two (2) statistics each month. One is the total coliform bacteria geometric mean value, reported as the average monthly value; and the other is the "percentage" of collected samples that exceeds an MPN of 230 per 100 ml for the 5-tube decimal dilution test, reported as the maximum daily value. The latter statistic will be used to judge compliance with that part of the limit that reads "Not more than 10 percent of the collected samples shall exceed an MPN of 230 per 100 ml for a 5-tube decimal dilution test" referenced above.

14. The average monthly value for fecal coliform bacteria shall be calculated and reported as the geometric mean of the individual sample results. Not more than 10 percent of the samples collected over a monthly period shall exceed a Most Probable Number (MPN) of 43 per 100 ml for a 5-tube decimal dilution test. Furthermore, all fecal coliform bacteria test results must be submitted as an attachment to the monthly Discharge Monitoring Reports (DMRs).

15. The permittee is required to report two (2) statistics each month. One is the fecal coliform bacteria geometric mean value, reported as the average monthly value; and the other is the "percentage" of collected samples that exceeds a Most Probable Number (MPN) of 43 per 100 milliliters for the 5-tube decimal dilution test, reported as the maximum daily value. The latter statistic will be used to judge compliance with that part of the limit that reads "Not more than 10 percent of the collected samples shall exceed an MPN of 43 per 100 milliliters for a 5-tube decimal dilution test" referenced above.

16. The permittee shall consult with NHDES to determine whether the tidal water to which the facility discharges is to waters utilized for swimming purposes, and submit this determination as part of the NOI package (see Part V.B.3.).

17. The Average Monthly value for enterococci shall be determined by calculating the geometric mean of the daily sample results.

18. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample comprised of 100% effluent (no dilution) shall cause no more than a 50% mortality rate in the test organisms. Likewise, a 50% limit means that a sample comprised of 50% effluent shall cause no more than a 50% mortality rate in the test organisms. These limits are considered to be maximum daily limits.

    These limits do not apply to minor facilities with dilution factors greater than 1,000.

19. The permittee shall conduct **marine acute** toxicity tests (48-hour) at the frequency specified in Part II.B., Table E, to calculate the acute LC_{50} at the 48-hour exposure interval. The permittee shall conduct the tests using the mysid shrimp, *Mysidopsia bahia* (*M. bahia*), and the inland silverside, *Menida beryllina* (*M. beryllina*), as test species. Tests shall be conducted in accordance with the test procedures and protocols specified in **Attachment B (**Marine Acute Toxicity Test Procedure and Protocol, dated September 1996) of this permit.

20. 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 B** (Toxicity Test Procedure and Protocol) Section IV., DILUTION WATER, in order to obtain an individual written approval for the use of an alternate dilution water for future tests, or the permittee shall follow the self-implementing Alternative Dilution Water Guidance which may be used to obtain automatic approval for the use of an alternate dilution water for a retest and to request written approval to use an alternate dilution water for future tests, including the appropriate species for use with that water. This guidance is found in Attachment G of the *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 obtain an individual approval as outlined in **Attachment B**. 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 B**.

21. For each whole effluent toxicity test performed, the permittee shall report on the appropriate discharge monitoring report (DMR) the concentrations of ammonia nitrogen as nitrogen, and total recoverable aluminum, cadmium, chromium, copper, lead, nickel, and zinc detected in the 100 % effluent sample. These results shall also be included in the WET test report for the calendar quarter in which the test was conducted.

    All of the aforementioned chemical parameters shall be determined to at least the Minimum Quantification Level as stated in **Attachment B, Section VI. Chemical Analysis**.

22. For major facilities with dilution factors less than or equal to 100 conducting four toxicity tests per year, toxicity test samples shall be collected and tests completed by the end of the calendar quarters ending March 31st, June 30th, September 30th, and December 31st. WET test results shall be submitted by the 15th day of the month following the end of the calendar

quarter in which the tests were conducted (for example, test results for the calendar quarter ending March 31st are due by April 15th).

23. For major facilities with dilution factors greater than 100 conducting two toxicity tests per year, toxicity test samples shall be collected and tests completed by the end of the calendar quarters ending March 31st and September 30th. WET test results shall be submitted by the 15th day of the month following the end of the calendar quarter in which the tests were conducted (for example, test results for the calendar quarter ending March 31st are due by April 15th).

24. For minor facilities with dilution factors less than or equal to 1,000 conducting one toxicity test per year, toxicity test samples shall be collected and tests completed by the end of the calendar quarter ending September 30th. WET test results shall be submitted by October 15th.

Table F. Total Residual Chlorine Limitations for New Hampshire Discharges to Marine Waters

Dilution Factor	TRC Limits[1]		Dilution Factor	TRC Limits[1]		Dilution Factor	TRC Limits[1]	
	Average Monthly[2]	Maximum Daily[3]		Average Monthly[2]	Maximum Daily[3]		Average Monthly[2]	Maximum Daily[3]
50	0.38	0.65	67	0.50	0.87	84	0.63	1.0
51	0.38	0.66	68	0.51	0.88	85	0.64	1.0
52	0.39	0.68	69	0.52	0.90	86	0.65	1.0
53	0.40	0.69	70	0.53	0.91	87	0.65	1.0
54	0.41	0.70	71	0.53	0.92	88	0.66	1.0
55	0.41	0.72	72	0.54	0.94	89	0.67	1.0
56	0.42	0.73	73	0.55	0.95	90	0.68	1.0
57	0.43	0.74	74	0.56	0.96	91	0.68	1.0
58	0.44	0.75	75	0.56	0.98	92	0.69	1.0
59	0.44	0.77	76	0.57	0.99	93	0.70	1.0
60	0.45	0.78	77	0.58	1.0	94	0.71	1.0
61	0.46	0.79	78	0.59	1.0	95	0.71	1.0
62	0.47	0.81	79	0.59	1.0	96	0.72	1.0
63	0.47	0.82	80	0.60	1.0	97	0.73	1.0
64	0.48	0.83	81	0.61	1.0	98	0.74	1.0
65	0.49	0.85	82	0.62	1.0	99	0.74	1.0
66	0.50	0.86	83	0.62	1.0	100	0.75	1.0

[1]The average monthly and maximum daily TRC limitations are a function of the dilution factor in the receiving water at the point of discharge and the TRC criteria.
[2] Based on a marine chronic TRC criterion of 0.0075 mg/l
[3]Based on a marine acute TRC criterion of 0.013 mg/l

C. Whole Effluent Toxicity Test Frequency Adjustment

The permittee may submit a written request to EPA for a reduction in the frequency of the required toxicity testing (to not less than once per year), after completing a minimum of four successive toxicity tests of the effluent, all of which must be valid tests and demonstrate compliance with the permit limits. Until written notice is received by certified mail from EPA indicating that the WET testing requirement in the permit has been changed, the permittee shall continue testing at the frequency specified in the permit.

D. Operation and Maintenance

Operation and maintenance of the sewer system shall be in compliance with the General requirements of Part IX of this General Permit 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 General Permit. This requirement shall be described in the Collection System Operation and Maintenance (O&M) Plan required pursuant to Part II.D.5., below.

2. Preventative Maintenance Program

   The permittee shall maintain an ongoing preventative 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. This requirement shall be described in the Collection System O&M Plan required pursuant to Part II.D.5., below.

3. Infiltration and Inflow (I/I)

   The permittee shall control infiltration and inflow (I/I) into the sewer system as necessary to prevent high flow-related unauthorized discharges from its collection system 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 Part II.D.5., below.

4. Collection System Mapping

   Within 30 months of receiving authorization to discharge under the POTW GP (see letter sent by certified mail from EPA authorizing discharges under the General Permit for date), the 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 for 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 system (e.g. combined manholes);

d. All outfalls, including the treatment plant outfall(s), combined sewer overflow outfalls (CSOs), combined manholes, and any known or suspected sanitary sewer overflows (SSOs);

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 shall develop and implement a collection system operation and maintenance plan.

a. **Within six (6) months of receiving authorization to discharge under the POTW GP** (see letter sent by certified mail from EPA authorizing discharges under the General Permit for date)**,** the permittee shall submit to EPA and NHDES:

(1) A description of the collection system management goals, staffing, information management, and legal authorities; and

(2) A description of the overall condition of the collection system including a list of recent studies and construction activities; and

(3) Schedule for the development and implementation of the full Collection System O&M Plan including the elements in paragraphs b.1. through b.7., below.

b. The full Collection System O&M Plan shall be implemented and a copy of the plan submitted to EPA and NHDES **within twenty four (24) months of receiving authorization to discharge under the POTW GP** (see letter sent by certified mail from EPA authorizing discharges under the General Permit for date). The plan shall

include:

(1) The required submittal from paragraph 5.a. above, updated to reflect current information;

(2) A preventative maintenance and monitoring program for the collection system;

(3) Sufficient staffing to properly operate and maintain the sanitary sewer collection system;

(4) Sufficient funding and the source(s) of funding for implementing the plan;

(5) Identification of known and suspected overflows and back-ups, including combined manholes. A description of the cause of the identified overflows and back-ups consistent with the requirements of the General 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 bypasses 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.

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 NHDES **annually, by March 31st**. The first annual report is due the first March 31st following the submittal of the Collection System O&M Plan required by Part II.D.5. of this General Permit. The summary report shall, at a minimum, include:

a. A description of the staffing levels maintained during the previous calendar 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 the wastewater treatment plant's flows have reach 80% of the facility's design flow or if 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.

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 (see Part III.G.).

E. Alternative Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall provide an alternate power source with which to sufficiently operate the publicly owned treatment works, as defined at 40 CFR § 122.2, which references the definition at 40 CFR § 403.3(o).

F. Requirements for Facilities with Effluent Diffusers

The following effluent diffuser conditions apply to facilities that discharge to marine waters:

1. Effluent diffusers shall be maintained when necessary to ensure proper operation. Proper operation means that the plumes from each port shall be balanced relative to each other and that they all have unobstructed flow. Maintenance may include dredging in the vicinity of the diffuser, cleaning out of solids in the diffuser head pipe, removal of debris and repair/replacement of riser ports and pinch valves.

2. Any necessary maintenance dredging must be performed only during the marine construction season authorized by the New Hampshire Fish and Game Department and only after receiving all necessary permits, including those issued by the NHDES Wetlands Bureau, U.S. Coast Guard, and the U.S. Army Corps of Engineers.

3. Permittees shall have a licensed diver or licensed marine contractor inspect and videotape the operation of the diffuser in order to determine whether or not maintenance will need to be performed on the diffuser. The inspection and videotaping shall be performed in accordance with the following schedule, with the first required inspection taking place during the calendar year following the effective date of the permit.

   a. Every year, if no pinch valves have been installed on the riser ports, or

   b. Every two years if pinch valves have been installed on the riser ports.

4. Copies of a report summarizing the results of each diffuser inspection shall be submitted to EPA and NHDES **annually, by December 31st**. Where it is determined that maintenance will be necessary, the permittee shall also provide the proposed maintenance schedule as an attachment to this report.

G. State Permit Conditions

The permittee shall comply with the following conditions, which are included as State certification requirements:

1. The permittee shall not at any time, either alone or in conjunction with any person or persons, cause directly or indirectly the discharge of waste into the said receiving water unless it has been treated in such a manner as will not lower the legislated water quality classification or

interfere with the uses assigned to said water by the New Hampshire Legislature (RSA 485-A:12).

2. This NPDES discharge permit is issued by EPA under federal and State law. Upon final issuance by EPA, the New Hampshire Department of Environmental Services-Water Division (NHDES-WD) may adopt this permit, including all terms and conditions, as a State permit pursuant to RSA 485-A:13.

3. EPA shall have the right to enforce the terms and conditions of this permit pursuant to federal law and NHDES-WD shall have the right to enforce the permit pursuant to State law, if the permit is adopted. 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 the permit as issued by the other agency.

4. Pursuant to New Hampshire Statute RSA 485-A:13, I(c), any person responsible for a bypass or upset at a wastewater treatment facility shall give immediate notice of a bypass or upset to all public or privately owned water systems drawing water from the same receiving water and located within 20 miles downstream of the point of discharge regardless of whether or not it is on the same receiving water or on another surface water to which the receiving water is tributary. Wastewater facility is defined at RSA 485-A:2XIX as the structures, equipment, and processes required to collect, convey, and treat domestic and industrial wastes, and dispose of the effluent and sludge. The permittee shall maintain a list of persons, and their telephone numbers, who are to be notified immediately by telephone in the event of a bypass or upset at the wastewater treatment plant. In addition, written notification, which shall be postmarked within 3 days of the bypass or upset, shall be sent to such persons.

5. Pursuant to New Hampshire Code of Administrative Rules, Env-Wq 703.07(a):

   a. Any person proposing to construct or modify any of the following shall submit an application for a sewer connection permit to the Department:

      (1) Any extension of a collector or interceptor, whether public or private, regardless of flow;

      (2) Any wastewater connection or other discharge in excess of 5,000 gpd;

      (3) Any wastewater connection or other discharge to a WWTP operating in excess of 80 percent design flow capacity based on actual average flow for 3 consecutive months;

      (4) Any industrial wastewater connection or change in existing discharge of industrial wastewater, regardless of quality or quantity; and

      (5) Any sewage pumping station greater than 50 gpm or serving more than one building.

6. For each new or increased discharge of industrial waste to the POTW, the permittee shall submit, in accordance with Env-Ws 904.14(e) an "Industrial Wastewater Discharge Request Application" approved by the permittee in accordance with 904.13(a). The "Industrial Wastewater Discharge Request Application" shall be prepared in accordance with Env-Ws 904.10.

7. Pursuant to Env-Ws 904.17, at a frequency no less than every five years, the permittee shall submit to NHDES:

   a. A copy of its current sewer use ordinance. The sewer use ordinance shall include local limits pursuant to Env-Ws 904.04(a).

   b. A current list of all significant indirect dischargers to the POTW. At a minimum, the list shall include for each significant indirect discharger, its name and address, the name and daytime telephone number of a contact person, products manufactured, industrial processes used, existing pretreatment processes, and discharge permit status;

   c. A list of all permitted indirect dischargers; and

   d. A certification that the municipality is strictly enforcing its sewer use ordinance and all discharge permits it has issued.

8. For facilities discharging to marine waters that use chlorine for disinfection, a recorder which continuously records the chlorine residual prior to dechlorination shall be provided. The minimum, maximum and average daily residual chlorine values, measured prior to dechlorination, shall be submitted with monthly Discharge Monitoring Reports. Charts from the recorder, showing the continuous chlorine residual shall be maintained by the permittee for a period of no less than (5) years.

9. Facilities discharging to marine waters shall immediately notify the Shellfish Section of NHDES-WD of possible high bacteria/virus loading events from the facility or its sewage collection infrastructure. Such events include:

   a. Any lapse or interruption of normal operation of the POTW disinfection system, or other event that results in discharge of sewage from the POTW or sewer infrastructure (pump stations, sewer lines, manholes, etc.) that has not undergone full disinfection as specified in the NPDES permit.

   b. Average Daily flows in excess of the POTW's average daily design flow.

   c. Daily post-disinfection effluent sample results of either 43 fecal coliform/100 ml or greater, or 230 total coliform/100 ml or greater. Notification shall also be made for instances where NPDES-required bacteria sampling is not completed, or where the results of such sampling are invalid.

   d. Notification shall be made to the Shellfish Section of the NHDES-WD using the program's cell phone as well as the program's pager. Upon initial notification of a

possible high bacteria/virus loading event, Shellfish Program staff will determine the most suitable interval for continued notification and updates on an event-by-event basis.

10. In addition to submitting DMRs, monitoring results shall also be summarized for each calendar month and reported on separate Monthly Operating Report Form(s) (MORs), postmarked or submitted electronically using NetDMR, no later than the 15th day of the month following the completed reporting period (also see Part VI.B.).) . Signed and dated MORs, which are not submitted electronically using NetDMR, shall be submitted to NHDES at the following address: (also see **Attachment F):**

New Hampshire Department of Environmental Services (NHDES)
Water Division
Wastewater Engineering Bureau
P.O. Box 95, 29 Hazen Drive
Concord, New Hampshire 03302-0095

Note: THE FOLLOWING PARTS (Part III – Part VIII) INCLUDE COMMON ELEMENTS OF BOTH THE MASSACHUSETTS AND NEW HAMPSHIRE GENERAL PERMITS

III. ADDITIONAL LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. Effluent Quality

1. The discharge shall not cause a violation of the water quality standards of the receiving waters;

2. The discharge shall not cause objectionable discoloration of the receiving waters;

3. The discharge shall be adequately treated to insure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits float as foam, debris, scum, or other visible pollutants. The discharge shall be adequately treated to insure that the surface waters remain free from pollutants which produce odor, color, taste, or turbidity in the receiving waters which is not naturally occurring and which would render it unsuitable for the designated uses.

4. The discharge shall contain neither a visible oil sheen, foam, nor floating solids at any time.

5. The permittee's facility shall maintain a minimum of 85% removal of total suspended solids and either five-day biochemical oxygen demand (BOD_5) or five-day carbonaceous biochemical oxygen demand ($CBOD_5$). The percent removal shall be calculated from the average monthly influent and effluent concentrations.

6. When the effluent discharged (a) from a Massachusetts facility for a period of 90 consecutive days; or (b) from a New Hampshire facility for a period of three consecutive months, exceeds 80 percent of the facility's design flow, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans. Before the design flow will be reached, or whenever treatment necessary to achieve permit limits cannot be assured, the permittee may be required to submit plans for facility improvements.

7. Permittees who use chlorine for disinfection shall minimize the use of chlorine while maintaining adequate bacterial control.

B. Adequate Notification of Pollutants Introduced into the Publicly Owned Treatment Works (POTW) or Other Treatment Works Treating Domestic Sewage

1. All facilities covered by this General Permit shall provide adequate notice to the Director of the following:

a. Any new introduction of pollutants into the facility from an indirect discharger 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 the 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.

C. Prohibitions Concerning Interference and Pass Through

1. Pollutants introduced into the facility by a non-domestic source (user) shall not pass through the facility or interfere with the operation or performance of the facility.

D. Industrial Users

1. The permittee shall submit to EPA and either MassDEP or NHDES-WD the name of any Industrial User (IU) subject to Categorical Pretreatment Standards under 40 CFR § 403.6 and 40 CFR Chapter I, Subchapter N (Parts 405-415, 417-436, 439-440, 443, 446-447, 454-455, 457-461, 463-469, and 471, as amended) who commences discharge to the POTW after the effective date of this permit.

   This reporting requirement also applies to any other IU who discharges an average of 25,000 gallons per day or more of process wastewater into the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastewater which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW; or is designated as such by the Control Authority as defined at 40 CFR § 403.12(a) on the basis that the industrial user has a reasonable potential to adversely affect the wastewater treatment facility's operation, or for violating any pretreatment standard or requirement (in accordance with 40 CFR § 403.8(f)(6)).

2. If, upon review of such information, the Director determines that the permittee must develop an industrial pretreatment program, the permittee will be so notified and will no longer be eligible for coverage under this General Permit.

3. In the event that the permittee receives reports (baseline monitoring reports, 90-day compliance reports, periodic reports on continued compliance, etc.) from industrial users subject to Categorical Pretreatment Standards under 40 CFR § 403.6 and 40 CFR Chapter I, Subchapter N (Parts 405-415, 417-436, 439-440, 443, 446-447, 454-455, 457-461, 463-469, and 471 as amended), the permittee shall forward all copies of these reports within ninety (90)

days of their receipt to EPA and either MassDEP or NHDES-WD at the addresses provided in **Attachment F**.

E. Toxics Control

1. The permittee shall not discharge into the receiving waters any pollutant or combination of pollutants in toxic amounts.

2. No component of the effluent shall result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon promulgation of any such standard, these permits may be revised or amended in accordance with such standards, and the permittee will be notified of such change.

F. Numerical Effluent Limitations for Toxicants

EPA and/or either MassDEP or NHDES may use the results of toxicity tests and chemical analyses conducted pursuant to this General Permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the 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.

G. Unauthorized Discharges

The permittee is authorized to discharge only in accordance with the terms and conditions of this General Permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) and/or combined sewer overflows (CSOs), are not authorized by this permit and shall be reported in accordance with PartVIII., Section D.1.e. (Standard Conditions, Reporting Requirements) of this permit.

H. 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 and with Clean Water Act (CWA) Section 405(d) technical standards.

2. The permittee shall comply with the more stringent of either State or federal (40 CFR Part 503) requirements.

3. The requirements and technical standards (40 CFR Part 503 regulations) apply to facilities which perform one or more of the following uses 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 Fired in a sewage sludge incinerator.

4. The 40 CFR Part 503 conditions do not apply to facilities that place sludge within a municipal solid waste landfill (MSWLF). 40 CFR Part 503 relies on 40 CFR Part 258 criteria, which regulates landfill disposal, for sewage sludge disposed of in a MSWLF. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit, but rather treat the sludge (lagoon reed beds), or are otherwise excluded under 40 CFR Part 503.6.

5. The 40 CFR Part 503 requirements including the following elements:

   a. General Requirements
   b. Pollutant Limitations
   c. Operational Standards (pathogen reduction and vector attraction reduction requirements)
   d. Management Practices
   e. Record Keeping
   f. Monitoring
   g. 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 I guidance document, *EPA Region I - NPDES Permit Sludge Compliance Guidance* (EPA November 4, 1999), may be used by the permittee to assist in determining the applicable requirements.[1]

6. The sludge shall be monitored for pollutant concentrations (all Part 503 methods) and pathogen 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 be conducted using 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

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

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 (see 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 I - NPDES Permit Sludge Compliance Guidance* (EPA November 4, 1994). Reports shall be submitted to the addresses provided in **Attachment F** 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:

   a. Name and address of contractor(s) responsible for sludge preparation, use or disposal

   b. 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.

I. Special Conditions

Owners/operators of facilities discharging to receiving waters tributary to Long Island Sound (i.e., receiving waters within the Thames, Housatonic, and Connecticut River Watersheds), who discharge less than 35 lbs/day of total nitrogen, shall comply with the average monthly and maximum daily reporting requirements for total nitrogen (TN), ammonia nitrogen, total kjeldahl nitrogen (TKN), total nitrite nitrogen (NO_2), and total nitrate nitrogen (NO_3) in either Part I.A. or Part II.A. of this General Permit. Samples collected for the analysis of TKN, NO_2, and NO_3 shall be collected concurrently and the results used to determine the concentration and mass loading values for total nitrogen as shown below:

Total Nitrogen (mg/l) = TKN + NO_2 + NO_3
Total Nitrogen (lbs/day) = Total Nitrogen (mg/l) * design flow (MGD) * 8.34

Discharges to receiving waters tributary to Long Island Sound exceeding 35 lbs/day of total nitrogen are not eligible for coverage under this General Permit, and are required to apply for an individual discharge permit. EPA will initially determine whether facilities discharging to these receiving waters will be required to obtain coverage under an individual permit during the review of NOIs requesting coverage under this General Permit (see Part V.B.1.). However, if at any time, information is received (e.g., monitoring results, water quality reports) that indicates that the quantity of total nitrogen discharged from such facilities exceeds 35 lbs/day, the permittee will be required to apply for an individual permit. Permittees will be provided with written notification from EPA of the requirement to apply for an individual permit.

IV. APPLICABILITY AND COVERAGE OF THE POTW GP

A. Subject Discharges

Publicly owned treatment works and other treatment works that treat domestic sewage are classified as either a "major" or a "minor" discharger. "Major" dischargers are facilities with design flows equal to or greater than 1 million gallons per day (MGD) and any other facilities designated by EPA, in its discretion, as a "major" facility (40 CFR §§ 122.2, 124.2). All other facilities are generally classified as "minor" dischargers. Coverage under the POTW GP is available only to minor facilities in Massachusetts and to major and minor facilities in New Hampshire that meet the requirements of this Part.

B. Geographic Coverage Area

1. *Massachusetts:* Facilities authorized by the Massachusetts POTW General Permit (NPDES Permit No. MAG580000) for discharges in the Commonwealth of Massachusetts, may discharge to all waters of the Commonwealth and Indian Country lands, except as provided in Part IV.C. of this permit, unless otherwise restricted by the Massachusetts Surface Water Quality Standards, 314 CMR § 4.00 (or as revised), including 314 CMR § 4.04(3) (Protection of Outstanding Resource Waters).

2. *New Hampshire:* Facilities authorized by the New Hampshire General Permit (NPDES Permit No. NHG580000) for discharges in the State of New Hampshire, may discharge to all waters of the State of New Hampshire, except as provided in Part IV.C. of this permit, unless otherwise restricted by the New Hampshire State Water Quality Standards at 50 RSA § 485-A:8 and the New Hampshire Code of Administrative Rules, Env-Wq 1700-1709 (or as revised).

C. Specific Discharges Excluded From Coverage

EPA has determined that this General Permit will not be available to:

1. Any facility that is not defined as a POTW (see 40 CFR § 403.3) or other treatment works treating domestic sewage (see 40 CFR § 122.2);

2. Any facility that does not provide secondary treatment to the discharge.

3. Any POTW with an EPA-approved Industrial Pretreatment Program or any POTW required to develop an Industrial Pretreatment Program;

4. Any facility with a dilution factor of less than 50. EPA or the appropriate State agency should be consulted prior to applying for coverage under the POTW GP to confirm the dilution factor (see Part V.B.1.);

5. Any facility that discharges to the territorial sea;

6. Discharges to Outstanding Resource Waters in Massachusetts and New Hampshire:

   a. as defined in the Massachusetts water quality regulations at 314 CMR § 4.06(3), including Public Water Supplies (314 CMR § 4.06(1)(d)(1), which have been designated by the state as Class A waters, unless a variance is granted by the MassDEP, under 314 CMR § 4.04(3)(b); or,

   b. as defined in the New Hampshire water quality regulations at Env-Ws 1708.05(a), unless allowed by the NHDES under Env-Ws 1708.05(b).

7. Discharges to Class A waters in New Hampshire, in accordance with RSA 485-A:8, I. To determine if the proposed receiving water is a Class A waterbody, contact the NHDES at the address provided in **Attachment F** of this permit.

8. Any facility that discharges to Massachusetts Ocean Sanctuaries, as defined at 302 CMR 5.00;

9. Any facility with Combined Sewer Overflows;

10. Any "New Source" as defined in 40 CFR § 122.2;

11. Any facility whose discharge(s) may adversely affect properties listed or eligible for listing in the National Registry of Historic Places under the National Historic Preservation Act of 1966, 16 U.S.C. Sections 470 et seq., as amended (procedures for determining whether this exclusion applies to a facility and additional information on Historic Preservation are provided in Part IV.D.1. and **Attachment C**);

12. Discharges to areas identified as containing threatened or endangered species, or critical habitats of such species, under the Endangered Species Act (ESA), unless the requirements specified in the draft General Permit are satisfied (procedures for determining whether this exclusion applies to a facility and additional information on the ESA are provided in Part IV.D.2. and **Attachment D**);

13. Any owner/operator of a facility that owns or operates a sewage sludge incinerator;

14. Any facility whose new or increased discharge is not in compliance with the State's antidegradation policy;

15. Any facility that has an individual permit that includes water quality-based effluent limitations more stringent than, or for pollutants not addressed by, the POTW GP;

16. The General Permit is not available to any facility discharging to an impaired water where the discharge contains the pollutant that causes or contributes to the impairment for which the receiving water is listed in the States' published 303(d) lists. The impaired waters require a TMDL according to the state's CWA Section 303(d) list. This exclusion does not apply to

facilities discharging: (1) bacteria that is limited by the permit at the applicable water quality criteria or (2) pH within the range equal to the applicable Massachusetts and New Hampshire water quality criteria for pH;

17. Any discharge which is inconsistent with the State Coastal Zone Management Program;

18. Any facility that the Director determines is inappropriate for a General Permit based on, but not limited to, consideration of the following factors:

    a. The variability of the pollutants or pollutant parameters in the effluent (based on chemical-specific information, the type of treatment facility, and the types of industrial contributors);

    b. Existing controls on point or nonpoint sources, including total maximum daily load calculations for the water body segment and the relative contribution of the discharger;

    c. Receiving stream characteristics, including possible or known water quality impairment;

    d. Recommendations from the State;

    e. Other considerations (including but not limited to consultation with the state, a history of toxic impact or compliance problems at the facility) which the Director determines could cause or contribute to adverse water quality impacts; or,

    f. Discharges to a river designated as a Wild and Scenic River (See http://www.rivers.gov/wildriverslist.html for current designations and additional information). Also see http://www.rivers.gov/agencies.html for a listing of State river management agencies.

D. Limitations on Permit Coverage

Facilities located in Massachusetts and New Hampshire that are seeking coverage under this General Permit must certify compliance with the requirements of this permit related to threatened and endangered species and critical habitat under the Endangered Species Act and to historic properties under the National Historical Preservation Act, where applicable.

1. National Historic Preservation Act (NHPA)

   Discharges which adversely affect properties listed or eligible for listing in the National Registry of Historic Places under the National Historic Preservation Act (NHPA) of 1966, 16 U.S.C. Sections 470 et seq. are not authorized to discharge under this General Permit. Applicants must determine whether their discharges have the potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places and, if the potential exists, the applicant must consult with the appropriate agencies prior to submittal of the NOI. Applicants are required to submit the results of any such consultations with the NOI. Electronic listings of National and State Registers of Historic Places are maintained by the National Park Service (www.nr.nps.gov), the Massachusetts Historical Commission

(www.sec.state.ma.us/mhc/mhcidx.htm) and the New Hampshire Division of Historical Resources (www.state.nh.us/nhdhr).

Applicants must also comply with applicable State, tribal and local laws concerning the protection of historic properties and places. Applicants must coordinate with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer and others regarding effects of their discharges on historic properties. Prior to submitting the NOI, the applicant must meet the requirements in **Attachment C**.

2. Endangered and Threatened Species and/or Critical Habitat:

Prior to submitting a Notice of Intent (NOI), operators must demonstrate eligibility with one or more of the Endangered Species Act (ESA) eligibility requirements described in **Attachment D.** Discharges that are located in proximity to an area in which listed endangered or threatened species or critical habitat are present are eligible for coverage under this General Permit only if the facility meets one or more of the criteria in **Attachment D**. All facilities seeking General Permit coverage must certify, in the Notice of Intent submittal, that they meet one or more of the ESA eligibility criteria and maintain any documentation necessary to support its demonstration (see **Attachment D**). A facility that does not meet any of the ESA eligibility criteria must apply for an individual NPDES permit.

The federally-listed endangered dwarf wedgemussel (*Alasmidonta heterodon*), which is listed under the jurisdiction of the U.S. Fish and Wildlife Service, occurs in the following areas in Massachusetts and New Hampshire

a. Connecticut River from Northumberland to Dalton, NH
b. Connecticut River from Lebanon, NH to Charlestown, NH
c. Ashuelot River downstream of the Surry Mountain Dam to Keene, NH
d. South Branch of Ashuelot River in East Swanzey, NH
e. Mill River in Whately and Hatfield, MA.
f. Mill River Diversion in Northampton, MA

The federally-listed endangered shortnose sturgeon (*Acipenser brevirostrum*), which is listed under the jurisdiction of the National Marine Fisheries Service, is found in the following areas of the Merrimack and Connecticut Rivers in Massachusetts: Connecticut River (main stem) downstream of Turners Falls, MA and in the Merrimack River (main stem) below the Essex Dam in Lawrence, MA .

Facilities seeking General Permit coverage should refer to the most recent Endangered and Threatened Species County-Species List in **Attachment F** (note, these listings are periodically updated, so applicants should also refer to the most recent Endangered and Threatened Species County-List, which is available at http://cfpub.epa.gov/npdes/stormwater/esa.cfm).

A discharge to any of the areas listed above or to an area identified in the most current endangered species list is eligible for coverage under this general permit only if the facility meets one or more of the ESA eligibility criteria (Criteria A through D) in **Attachment D.**

3. Discharge Management Program

The permittee must prepare and implement a Discharge Management Program for the facility specific to the requirements in this permit related to historic properties under the NHPA and threatened and endangered species and critical habitat under the ESA. The Discharge Management Program shall be used to maintain documentation and information supporting the eligibility determinations under Part IV.D. of this permit. This documentation shall include, as applicable: (1) a description of any activities and measures required to mitigate or prevent adverse effects on historic properties resulting from a written agreement with a State or Tribal Preservation Officer and the contents of such written agreement, (2) a description of any activities and measures required to mitigate or prevent adverse effects on historic properties that served as the basis for a prior permit authorization, and a copy of such prior authorization; and/or (3) a description of any activities and measures required to prevent adverse effects on threatened or endangered species or critical habitat that served as the basis for a prior permit authorization, and a copy of such prior authorization (see documentation requirements in Part C, Step 3, of **Attachment D**, "Endangered Species Act Review"). The permittee shall make the Discharge Management Program available upon written request to the Director or an authorized representative.

The following measures are to be implemented during the term of this General Permit:

a. Any required activities and measures necessary to mitigate or prevent adverse effects on historic properties, and

b. Any terms and conditions imposed through a prior authorization (see ESA eligibility criteria B through D in **Attachment D**) to ensure the wastewater discharges and discharge-related activities do not pose any adverse effects or jeopardy to threatened or endangered species and/or designated critical habitat.

V. APPLICATION AND NOTICE OF INTENT (NOI) TO REQUST COVERAGE UNDER THE GENERAL PERMIT

A. Eligibility for Coverage

To receive authorization to discharge under the POTW GP, applicants must submit a Notice of Intent (NOI) to both EPA and the appropriate State agency at the addresses provided in **Attachment F.** The NOI must state that the discharge meets the applicable requirements of the General Permit and that the applicant is requesting coverage under the General Permit, as required by Part IV.B. of this permit. A discharge will not be covered until the owner/operator of the facility from which the discharge occurs receives written authorization to discharge under the POTW GP from EPA.

Facility owners/operators must submit a NOI if they are seeking coverage under this General Permit for the first time or if the facility was covered under the expired POTW GP.

Any facility operating under an individual NPDES permit may request that the individual permit be terminated and that coverage under this General Permit be granted, as outlined in 40 CFR Section 122.28(b)(3)(v). When coverage under the General Permit is granted, the individual permit is automatically terminated.

B. NOI Requirements

1. General Notification Requirements

Applicants seeking authorization to discharge under this General Permit for facilities whose discharge(s) are identified in Parts IV.A. and B. of this permit must submit to EPA and the appropriate State agency an accurate, complete, and signed Notice of Intent (NOI). NOIs shall contain the information required in Part V.B. of this permit that applies to the discharge, including:

a. A cover letter requesting authorization to discharge under the POTW GP. The letter must specify which General Permit the applicant is seeking coverage under (either Massachusetts General Permit MAG580000, Part I.A., Minor facilities discharging to Freshwater; or Part I.B., Minor Facilities Discharging to Marine waters; or New Hampshire General Permit NHG580000, Part II.A, Discharges to Fresh Waters, or Part II.B., Discharges to Marine Waters). Owners/operators of facilities discharging to a receiving water that is tributary to Long Island Sound (i.e., a receiving water that is within the Housatonic, Connecticut, or Thames River watersheds) shall indicate this in the cover letter. This letter shall include a statement certifying that the discharge meets the applicable requirements of the General Permit.

b. The NOI shall contain the information required by the NPDES Form 2A Application which pertains to the discharge. Specifically, all applicants are to complete the information in NPDES Form 2A, Part A, items A.1.-A.12. Applicants are also required to complete the information in NPDES Form 2A, Parts B, D, E, and F, as they apply to the discharge.

(1) NPDES Form 2A Effluent Testing Requirements:

(a) Owners/operators of **all facilities** must complete the effluent testing information sections of NPDES Form 2A, Part A.

(b) Owners/operators of **facilities with design flows greater than 0.1 MGD** must complete the effluent testing information sections of NPDES Form 2A, Part B.

(c) Owners/Operators of **facilities with design flows greater than or equal to 1.0 MGD** must complete the effluent testing information sections in NPDES

Form 2A, Part D and E.

(d) For purposes of the general permit, a minimum of one sampling event is required for satisfying the effluent testing information sections of NPDES Form 2A. This sampling event must have been conducted within two years preceding the submittal of the NOI.

c. Any applicant with a complete NPDES Form 2A application on file with EPA and the appropriate State may use the previously-submitted Form 2A in requesting authorization to discharge under the General Permit. In this case, the NOI shall consist of:

(1) A letter requesting authorization to discharge under the General Permit that specifies which General Permit the facility is seeking coverage under, and which states that the discharge meets the applicable requirements of the General Permit (see Part V.B.1.a.).

(2) A copy of the "Application Complete" letter received from EPA, and

(3) Any supplemental information required by the State in which the discharge occurs, as described in Parts V.B.2. and 3, below.

d. The following facility information shall be provided in the NOI: topographic map with the location of the treatment plant and outfall(s); process flow diagram or schematic showing the treatment processes from the headworks to the outfall; the number of discharge points; and the sludge use and disposal practice(s) from one of the following: land application, surface disposal, sewage sludge incineration, and other (submit details).

e. Prior to submitting the NOI, all facilities must confirm the annual 7Q10 flow, design flow, dilution factor, mass loading limitations for BOD_5 (or $CBOD_5$) and TSS; and TRC limits with either MassDEP or NHDES (see **Attachment F** for contact information). The State will confirm this information in writing. A copy of the State's written confirmation must be submitted with the NOI. All facilities must calculate their design BOD_5 (or $CBOD_5$) and TSS loading limitations and include those calculations as part of their NOI (See Part I and Part II. of this General Permit or **Appendix B** of the fact sheet for information on these calculations).

f. Applicants may request $CBOD_5$ limitations in place of BOD_5 limitations in their NOI submission.

g. Applicants whose facilities use alternate disinfection methods to chlorine shall provide this information in the NOI.

h. Applicants seeking coverage under this General Permit must certify in its NOI that each discharge for which it is seeking coverage meets one or more of the National Historic Preservation Act eligibility criteria in **Attachment C,** including all of the documentation necessary to support the eligibility demonstration, and indicate whether the state Historic

Preservation Officer or Tribal Historic Preservation Officer was involved in the determination of eligibility.

i. Applicants coverage under this General Permit, including facilities discharging or proposing to discharge into areas where endangered and/or threatened species or critical habitat of such species have been identified, must certify in its NOI that each discharge for which it is seeking coverage meets one or more of the Endangered Species Act eligibility criteria in **Attachment D**, and include all of the documentation necessary to support the eligibility demonstration.

j. Applicants proposing a new or increased discharge shall contact MassDEP or NHDES prior to filing the NOI to determine what, if any, additional information (including instream water quality information) will be required to be provided in the NOI submittal.

k. The NOI must be signed by either the principal executive officer or ranking elected official (for a municipality or other public agency), or by a responsible corporate officer (for a corporation), in accordance with the signatory requirements of 40 CFR §122.22.

l. NOIs are to be submitted to EPA and the appropriate State agency offices, at the addresses provided in **Attachment F**.

2. <u>Specific Notification Requirements for Facilities Located in Massachusetts</u>

a. Applicants seeking General Permit coverage for discharges into Class B waters, Class SA waters not designated for shellfishing, or Class SB waters not designated for shellfishing may request written authorization from EPA and MassDEP to conduct seasonal disinfection by chlorination or an alternative disinfection method. Such requests shall be included in the NOI submission.

b. Applicants must submit the following documents to the appropriate MassDEP offices provided in **Attachment F**:

(1) Completed applicable parts of NPDES Form 2A (note: applicants having a completed NPDES Form 2A on file with EPA and MassDEP are to submit the information required in Part V.B.1.(c) of this permit).

(2) Completed application transmittal form (all applicants) and fee (if applicable). Permittees whose authorization to discharge under the expired POTW GP was administratively continued are not required to submit a new transmittal form or pay the fee. Instead, include the transmittal number of the previously-submitted transmittal form in the NOI.

(3) <u>Owners/Operators of POTWs:</u> Application forms BRP-07 (Permit Renewal/Plan Modification (Non-Industrial)) and BRP WM 02A (Application for permit to

Discharge Municipal Wastewater.

(4) Owners/operators of other treatment works treating domestic sewage: Application form BRP-07 (Permit Renewal/Plan Modification (Non-Industrial)) and the required fee.

(5) Owners/operators proposing a new/increased discharge: Application form BRP-07 (Permit Renewal/Plan Modification (Non-Industrial)).

Note: These forms, instructions, and fee amounts (if applicable) may be obtained through the MassDEP website at:

Transmittal form: http://www.mass.gov/dep/service/online/trasmfrm.shtml
Application Forms: http://www.mass.gov/dep/water/approvals/surffms.htm#npdes1

Transmittal forms and applications shall be sent to MassDEP at addresses provided in **Attachment F**.

3. Specific Notification Requirements for Facilities Located in New Hampshire

a. Applicants without a complete NPDES permit application on file with EPA and NHDES must complete the Notice of Intent (NOI) form required by NHDES and submit this form to EPA and NHDES at the addresses provided in **Attachment F**. This form can be found on the NHDES's website at: http://des.nh.gov/organization/ divisions/water/ wweb/documents/notice_of_intent_form.pdf.

Note: EPA will accept NHDES's NOI form in lieu of NPDES Application Form 2A.

The minimum sampling requirements for completing the NHDES NOI form are the same as those listed in Part V.B.1, above (for the completion of the effluent testing sections of NPDES Form 2A).

Applicants having a completed NPDES Form 2A on file with EPA and NHDES are to submit the information required in Part V.B.1.(c) of this permit.

b. Applicants whose discharge is to a tidal water designated for the taking or growing of shellfish shall indicate in the NOI whether total coliform bacteria or fecal coliform bacteria limitations apply.

c. The NOI must state whether the discharge is to freshwater near a designated beach or to a tidal water utilized for swimming purposes, as determined by NHDES.

C. Notification Timeframes

1. *Discharges Authorized by the Expired POTW GP*: Permittees whose authorization to discharge under the POTW GP which expired on September 22, 2010 has been administratively continued in accordance with the Administrative Procedures Act (5 U.S.C. 558(c)) and 40 CFR § 122.6, who wish to obtain coverage under the reissued POTW GP, must submit a new NOI requesting permit coverage in accordance with the requirements of Part V of the reissued POTW GP to EPA and the applicable State agency **within 90 days** after the effective date of the POTW GP. For enforcement purposes, permittees whose authorization to discharge under the expired POTW GP was administratively continued, who fail to submit an NOI or an application for an individual NPDES permit within 90 days after the effective date of the POTW GP, will be considered to be discharging without a permit (see 40 CFR § 122.28(b)(3)(iii)). An NOI is not required if the permittee submits a notice of termination (NOT), as set forth in Part VII.A. of this permit, within 90 days after the effective date of the POTW GP.

2. *Proposed New or Increased Discharges:* Owners/operators of facilities with a proposed new or increased discharge(s) that are seeking coverage under this General Permit must submit an NOI to EPA and the respective State agency, postmarked at least **180 days** prior to the commencement of the new/increased discharge. The applicable State agency must be contacted prior to submitting the NOI to determine what, if any, additional information is required.

D. Notification Requirements

1. The request for coverage (NOI) under this General Permit must contain all of the information indicated in Part V.B. that applies to each discharge for which permit coverage is being sought.

2. EPA and/or either MassDEP or NHDES may request additional information or analytical data from the permittee when it is determined to be necessary to adequately review the NOI and to evaluate the discharge.

E. When the Director May Require an Application for an Individual NPDES Permit:

1. The Director may require any owner/operator of a facility whose discharge is authorized by this General Permit to apply for and obtain an individual NPDES permit. Any interested person may petition the Director to take such action. Instances where an individual permit may be required include, but are not limited to, the following:

   a. A determination under 40 CFR § 122.28(b)(3);

   b. The discharger is not in compliance with the terms and conditions of the General Permit;

   c. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

d. Effluent limitation guidelines are promulgated for the point sources covered by the General Permit;

e. A Water Quality Management Plan or Total Maximum Daily Load containing requirements applicable to such point sources is approved;

f. Circumstances have changed since the time of the request to be covered such that the discharge is no longer appropriately controlled under the General Permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;

g. The discharge(s) is a significant contributor of pollution or is in violation of state water quality standards for the receiving water; or,

h. The discharge(s) adversely impacts any federally-managed species for which Essential Fish Habitat has been designated.

i. The point source(s) authorized to discharge under this General Permit no longer:

(1) Involves the same or substantially similar types of operations;

(2) Discharges the same types of wastes;

(3) Requires the same effluent limitations or operating conditions;

(4) Requires the same or similar monitoring; or

(5) Is, in the opinion of the Director, more appropriately controlled under an individual NPDES permit rather than under the General Permit.

2. If the Director requires that an individual permit be issued, the permittee will be notified in writing that an individual permit is required, and will be given a brief explanation of the reasons for this decision.

3. Pursuant to 40 CFR § 122.28(b)(3)(iv), when an individual NPDES permit is issued to a discharge otherwise subject to this General Permit, the applicability of this General Permit to that discharge is automatically terminated on the effective date of the individual permit.

F. When an Individual NPDES Permit May be Requested

The owner or operator of a facility whose discharge is authorized by this General Permit may request to be excluded from coverage by applying for an individual permit. This request may be made by submitting a NPDES permit application (NPDES Form 2A and 2S) together with reasons supporting the request. In accordance with 40 CFR § 122.28(b)(3)(iv), when an individual NPDES permit is issued to a permittee whose discharge is otherwise subject to this General Permit, the applicability of this General Permit to that discharge is automatically terminated on the effective date of the individual permit.

G. Determination of Coverage Under the General Permit

Authorization to discharge under the POTW GP will not be effective until EPA and the appropriate State agency have reviewed the NOI, made a determination that coverage under the POTW GP is authorized, and have provided the applicant with written notification of authorization to discharge under the POTW GP. The effective date of coverage will be the date of signature of the authorization letter sent by certified mail from EPA. Any applicant who is denied coverage or who fails to submit to EPA and the appropriate state agency a complete NOI and/or fails to receive written notification of permit coverage from EPA is not authorized to discharge under the POTW GP.

VI. MONITORING AND REPORTING REQUIREMENTS

A. Additional Monitoring

In addition to the toxicity testing requirements in Parts I and II of this permit, upon request by EPA and/or MassDEP or NHDES, the permittee shall perform additional acute WET tests on the discharge. Such testing shall be performed in accordance with EPA toxicity protocol to be provided by EPA at the time of the request. The test shall be performed on a 24-hour composite sample of the effluent, unless otherwise approved by EPA, and shall be collected during normal facility operations. The test results and associated documentation shall be forwarded to EPA and the appropriate State agency at the addresses provided in **Attachment F** within 30 days following the completion of the test

B. Reporting

1. Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) (DMRs). Facilities that do not discharge during a given month are required to indicate "no discharge" for that month on the DMR.

   Signed and dated original discharge monitoring report forms (DMRs), postmarked no later than the 15th day of the month following the completed reporting period, and all other reports (including MassDEP Monthly Operations and Maintenance Reports and NHDES Monthly Operations Reports (MORs)), test results, other submittals, notifications, and communications (both written and verbal) required herein or in Part VIII (Standard Conditions) shall be submitted to EPA and the appropriate state agency office(s) at the addresses provided in **Attachment F.**

2. **Within one year of the effective date of receiving authorization to discharge under the General Permit,** all discharge monitoring reports (DMRs) (both federal DMRs, MassDEP's Monthly Operations and Maintenance Reports, and NHDES's Monthly Operations Reports), and other reports required by this permit shall be submitted to EPA using NetDMR, unless the permittee demonstrates a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR (an "opt-out"). NetDMR is a web-based tool that allows permittees to submit discharge monitoring reports (DMRs) and reports to EPA electronically via a secure internet connection. NetDMR is accessed from: http://www.epa.gov/netdmr.

Once a permittee begins submitting reports using NetDMR, they will no longer be required to submit hard copies of DMRs or other reports required by this permit to EPA or NHDES. However, permittees shall continue to send hard copies of reports other than DMRs (including MassDEP's Monthly Operations and Maintenance Reports) to MassDEP at the addresses provided in **Attachment F** until further notice from MassDEP.

Opt-out requests must be submitted in writing to EPA at the addresses provided in **Attachment F** at least sixty (60) days prior to the date the facility would otherwise be required to begin using NetDMR. Opt-outs shall become effective upon the date of written approval by EPA and shall be valid for twelve (12) months from the date of EPA approval and shall thereupon expire. Upon expiration, DMRs and reports shall be submitted to EPA using NetDMR unless the permittee has submitted a renewed opt-out request 60 days prior to expiration of their opt-out and such request is approved by EPA.

VII. ADMINISTRATIVE REQUIREMENTS

A. Notice of Termination (NOT) of Discharge

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

B. Continuation of this General Permit After Expiration

If this General Permit is not reissued prior to its expiration date (as specified in Part I and Part II), 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 provided that a Notice of Intent to maintain permit coverage is submitted at least **180 days prior to the General Permit's expiration**. For the purpose of requesting to have coverage under the General Permit administratively continued, the Notice of Intent shall consist of a letter indicating the permittee's request to maintain coverage under the General Permit upon its expiration. In addition, the letter shall also include the following: the NPDES permit number for the discharge(s) for which continued permit coverage is being sought; the name, mailing address, and telephone number of the facility, an indication of whether the permittee will seek coverage under the POTW GP upon its reissuance or an individual NPDES permit; a description of any modification(s) to the treatment process that have occurred since receiving authorization to discharge under the General Permit that may affect the discharge's eligibility to be covered under the General Permit. This letter shall be submitted to EPA and either MassDEP and/or NHDES at the addresses provided in **Attachment F**.

Coverage under this permit will not be available to any facility that submits a Notice of Intent to EPA after the expiration date.

Any permittee whose authorization to discharge under this General Permit was administratively continued prior to the expiration date discharge 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 following a timely and appropriate submittal of a complete NOI requesting authorization to discharge under the reissued/replacement permit in accordance with the NOI conditions of the reissued permit;
2. The permittee's submittal of a Notice of Termination in accordance with Part VII. A; 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.

(Note: The following documents are separate attachments to this permit)

VIII. STANDARD CONDITIONS

Attachment A Freshwater Acute Toxicity Test Procedure and Protocol
Attachment B Marine Acute Toxicity Test Procedure and Protocol
Attachment C National Historic Preservation Act Review
Attachment D Endangered Species Act Review
Attachment E Endangered Species Act-County Species List
Attachment F Agency Addresses