

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
GENERAL PERMITS FOR  
DISCHARGES FROM POTABLE WATER TREATMENT FACILITIES**

**MASSACHUSETTS GENERAL PERMIT (No. MAG640000)**

**NEW HAMPSHIRE GENERAL PERMIT (No. NHG640000)**

Note: The General Permits for discharges from Potable Water Treatment Facilities (PWTfs) for the Commonwealth of Massachusetts and the State of New Hampshire are combined and are referred to herein as the General Permit.

In compliance with the provisions of the Federal Clean Water Act as amended, 33 U.S.C. §§ 1251 et seq. (the “CWA”), the following General Permit authorizes discharges of wastewater from potable water treatment facilities (PWTfs) in the Commonwealth of Massachusetts and the State of New Hampshire to all waters, unless otherwise restricted, in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

The General Permit shall become effective on the first day of the calendar month immediately following 60 days after signature.<sup>1</sup>

The General Permit expires at midnight, five years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on March 6, 2017.

Signed this       day of

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Ken Moraff, Director  
Water Division  
Environmental Protection Agency  
Region 1  
Boston, MA

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<sup>1</sup> Pursuant to 40 Code of Federal Regulations (CFR) § 124.15(b)(3), if no comments requesting a change to the Draft Permit are received, the permit will become effective upon the date of signature. Procedures for appealing EPA’s Final Permit decision may be found at 40 CFR § 124.19.

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The following documents are separate attachments to the General Permit:

### Part VII – Standard Conditions

Appendix A – Freshwater Acute Toxicity Test Procedure and Protocol, February 2011

Appendix B – Freshwater Chronic Toxicity Test Procedure and Protocol, April 2013

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

Appendix D – Marine Chronic Toxicity Test Procedure and Protocol, November 2013

Appendix E – Endangered Species Act Guidance and Eligibility Criteria

Appendix F – National Historic Preservation Act Review Requirements

Appendix G – Notice of Intent (NOI) Instructions

Appendix H – Site Specific Effluent Limitations

Appendix I – Reasonable Potential Analysis and Limit Derivation

Appendix J – PFAS Analyte List

Appendix K – List of Eligible Facilities

## **PART I. Applicability and Coverage**

### **A. Eligible Discharges**

Wastewater discharges from potable water treatment facilities in Massachusetts and New Hampshire, that are less than or equal to 1.0 million gallons per day (MGD) and that use one or more of the following treatment processes:

- Clarification,
- Coagulation,
- Media Filtration,
- Membrane filtration (not including reverse osmosis), and
- Disinfection.

Effluent flow for each facility covered by the General Permit is limited to facilities discharging up to a daily maximum flow limit of 1.0 million gallons per day (MGD), as reported on their Notice of Intent to discharge (NOI). On a case-by-case basis, EPA will consider approval for facilities that discharge a volume greater than 1.0 million gallons per day (MGD).

Discharges from other potable drinking water treatment processes may be included if they are reported in the NOI and attain the effluent limits and other conditions of this permit. Such discharges may include but are not limited to: those necessary to complete regular reoccurring maintenance or non-reoccurring maintenance, repair, testing or construction which assures efficient operation and/or prevents loss of life, personal injury, or severe property damage.

Those discharges authorized by this General Permit may be commingled with other discharges as long as the authorized discharge is monitored separately (prior to commingling) for compliance with the requirements of this General Permit and any non-authorized discharge is either covered by another NPDES permit or excluded from requiring an NPDES permit by EPA regulation or statute.

### **B. Geographic Coverage Area**

#### **1. Massachusetts**

Facilities authorized by the Massachusetts General Permit (permit number MAG640000) for discharges in the Commonwealth of Massachusetts may discharge into all waters of the Commonwealth, except as provided in Section I.C., immediately below, unless otherwise restricted by the Massachusetts Surface Water Quality Standards, 314 CMR 4.00 (or as revised).

#### **2. New Hampshire**

Facilities authorized by the New Hampshire General Permit (permit number NHG640000) may discharge into Class B waters of the State, except as provided in Section I.C., immediately below, unless otherwise restricted by the State Water Quality Standards, New Hampshire RSA

485-A:8 (or as revised) and the New Hampshire Code of Administrative Rules, Chapter Env-Wq 1700 (or as revised).

### C. Limitations on Coverage

The following dischargers are ineligible for coverage under this general permit:

1. Discharges to Outstanding Resource Waters, Special Resource Waters, and/or High Quality Waters
  - a. In Massachusetts, as defined by 314 CMR 4.06(3), 314 CMR 4.06(1)(d)4, and 314 CMR 4.06(1)(d)2, including Public Water Supplies (314 CMR 4.06(1)(d)1), which have been designated by the state as Class A waters, unless the facility receives an authorization or has previously been granted an authorization by the Massachusetts Department of Environmental Protection (MassDEP) under 314 CMR 4.04(3)(b). Additional state requirements may be required in order to be covered under this General Permit.
  - b. In New Hampshire, as defined in New Hampshire under Env-Wq 1708.04(a), unless allowed by the New Hampshire Department of Environmental Services (NHDES) under Env-Wq 1708.04(c).
2. Discharges to Class A waters in New Hampshire, in accordance with RSA 485-A:8 I. and Env-Wq 1708.05.
3. Discharges which may adversely affect threatened or endangered species, or critical habitats of such species, under the Endangered Species Act (ESA); or may adversely affect Essential Fish Habitat (EFH) under the Magnuson Stevens Fishery Conservation and Management Act. Procedures for determining whether this exclusion applies to a PWTF and additional information on the ESA are found in Appendix E.
4. Discharges of pollutants to receiving waters identified as a cause of impairment on the Commonwealth of Massachusetts' or the State of New Hampshire's approved 303(d) lists, unless the pollutant is discharged at or below a concentration that meets water quality standards for the listed pollutants. Permittees must include information in their NOI about impairments to receiving waterbodies. Upon review of the NOI, EPA may require the permittee to conduct additional effluent sampling and/or ambient receiving water sampling to determine if the PWTF discharge is contributing to the receiving waterbody impairment. The 2018/2020 EPA-approved Massachusetts Integrated List of Waters is available at: <https://www.mass.gov/lists/integrated-lists-of-waters-related-reports>. The 2020-2022 EPA-approved New Hampshire list of impaired waters is available at: <https://www.epa.gov/tmdl/new-hampshires-2020-2022-303d-list-report-and-related-documents>.
5. Discharges to a Publicly-Owned Treatment Works (POTW) which is permitted under Section 402 of the CWA (NPDES).

6. Discharges to Ocean Sanctuaries in Massachusetts, as defined at 302 CMR 5.00.
7. Discharges to territorial seas, as defined by Section 502 of the CWA.
8. Discharges which 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 USC Sections 470 et seq., as amended. Procedures for determining whether this exclusion applies to a PWTF and additional information on Historic Preservation are found in Appendix F.
9. Discharges which are inconsistent with the State Coastal Zone Management Program.
10. Any new or increased discharge.
11. Any "New Source" as defined in 40 CFR § 122.2.
12. Facilities which are designed to remove Radium or other radioactive substances from raw water sources to comply with drinking water standards.
13. Discharges for which the Director makes a determination that an individual permit is required under 40 CFR § 122.28(b)(3). See Part II.C of this General Permit for more information.
14. The construction of any water resources project that would have a direct, adverse effect on the values for which a national Wild and Scenic River was established, in accordance with 40 CFR § 122.49(a). The Nashua, Nissitissit, Squannacook, Wildcat, and Lamprey Rivers in New Hampshire and the Assabet, Concord, Nashua, Nissitissit, Squannacook, Sudbury, Taunton and Westfield Rivers in Massachusetts, have been designated as Wild and Scenic Rivers. See <http://www.rivers.gov/> for current National and/or State designations and additional information.
15. Discharges to designated areas under the Essential Fish Habitat Act (EFH) unless the requirements specified in this permit are fulfilled.

#### **D. Special Eligibility Determinations**

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. Endangered and Threatened Species and/or Critical Habitat: PWTF discharges that are located in areas in which listed species may be present are not automatically covered under this General Permit. Prior to submitting a Notice of Intent (NOI), operators must demonstrate permit eligibility following the eligibility requirements described in Appendix E. This demonstration shall be included in the NOI as described in Appendix G.

2. National Historic Preservation Act: Facilities which adversely affect properties listed or eligible for listing in the National Registry of Historic Places under the National Historic Preservation Act of 1966, 16 USC § 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 consultations with the NOI. Electronic listings of National and State Registers of Historic Places are maintained by the National Park Service (<https://www.nps.gov/subjects/nationalregister/index.htm>), the Massachusetts Historical Commission (<https://www.sec.state.ma.us/MHC/>) and the New Hampshire Division of Historical Resources ([www.nh.gov/nhdhr/](http://www.nh.gov/nhdhr/)).

Applicants must also comply with applicable State and local laws concerning the protection of historic properties and places. Applicants must coordinate with the State Historic Preservation Officer regarding effects of their discharges on historic properties. Prior to submitting the NOI, the applicant must meet the requirements of Appendix F.

## Part II. Obtaining Authorization to Discharge

### A. Obtaining Coverage

To be covered by this General Permit, applicants must submit a Notice of Intent (NOI) to both EPA and the applicable State agency (i.e., NHDES for all facilities in New Hampshire; MassDEP for all facilities in Massachusetts). A preferred template for NOI submissions is provided in Appendix G. At a minimum, the NOI must contain all of the information in the NOI template. The Applicant must state that their discharge meets the eligibility requirements of this General Permit, and that the applicant is requesting coverage under this General Permit. The facility's discharge will not be covered under the General Permit until the facility receives written authorization to discharge from EPA.

All NOIs must be submitted to EPA and the applicable State agency electronically at the email addresses provided on the Potable Water Treatment Facility General Permit website, <https://www.epa.gov/npdes-permits/potable-water-treatment-facility-general-permit-pwtf-gp-massachusetts-new-hampshire>.

Alternately, the Director may notify a discharger that it is covered under this General Permit, even if the discharger has not submitted an NOI to be covered in accordance with 40 CFR § 122.28(b)(2)(vi).

### B. NOI Timeframes

1. Proposed New Discharges: Facilities with proposed new discharges are not eligible for coverage under this General Permit. Contact the permitting authority for instructions on submitting an individual permit application.
2. Existing Permitted Discharges Authorized Under Previous Versions of this General Permit: For facilities covered under previous versions of this General Permit at the time of its issuance, permittees/applicants must submit a Notice of Intent (NOI) to EPA **within 60 days of the effective date of the General Permit** in accordance with 40 CFR 122.28(b)(2)(i) & (ii), unless a waiver for a later date has been approved by EPA ahead of the 60-day deadline. Failure to submit an NOI within 60 days of the effective date of this General Permit for an existing permitted facility will be considered discharging without a permit. An NOI is not required if the permittee submits a Notice of Termination (NOT) of discharge before the 60-day timeframe expires.
3. Existing Permitted Discharges Authorized Under Individual Permits: Any facility operating under an effective (unexpired) individual NPDES permit may request that the individual permit be revoked and that coverage under the General Permit be granted, as outlined in 40 CFR § 122.28(b)(3)(v). If EPA determines that the facility is eligible under this General Permit, then EPA will revoke the individual permit and the General Permit would apply to the discharge. Facilities with expired individual permits that have been administratively continued in accordance with 40 CFR § 122.6 may also apply for

coverage under this General Permit. If coverage is granted, the expired individual permit will cease to be in effect.

**C. When the Director May Require Application for an Individual NPDES Permit**

The Director may require any operator authorized by or requesting coverage under 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 the following:

1. A determination under 40 CFR § 122.28(b)(3), including:
  - a. A change has occurred in the availability of the demonstrated technology of practices for the control or abatement of pollutants applicable to the point source(s);
  - b. Effluent limitation guidelines are promulgated for the point source(s) covered by this permit;
  - c. A Water Quality Management Plan or Total Maximum Daily Load containing requirements applicable to such point source(s) is approved and inconsistent with this permit;
  - d. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary; and
  - e. The discharge(s) is a significant contributor of pollutants.
2. The discharger is not in compliance with the conditions of this General Permit.
3. The discharge(s) is in violation of State water quality standards for the receiving water.
4. Actual or imminent harm to aquatic organisms, including ESA or human health, is identified.
5. In the opinion of the Director, the discharge is more appropriately controlled under an individual or alternate General Permit.

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.

When an individual NPDES permit is issued to an operator otherwise subject to this General Permit, the applicability of this General Permit to that owner or operator is automatically terminated on the effective date of the individual permit.

#### **D. When an Individual Permit May Be Requested**

In accordance with 40 CFR § 122.28(b)(3)(iii), any owner or operator authorized by this General Permit may request to be excluded from the coverage of this General Permit. The owner or operator shall submit an application under § 122.21, with reasons supporting the request, to the Director no later than 90 days after the publication by EPA of the General Permit. The request shall be processed under Part 124. The request shall be granted by issuing of an individual permit if the reasons cited by the owner or operator are adequate to support the request.

When an individual NPDES permit is issued to an operator otherwise subject to this General Permit, the applicability of this General Permit to that owner or operator is automatically terminated on the effective date of the individual permit.

#### **E. EPA Determination of Coverage**

Any operator may request to be covered under this General Permit but the final authority rests with EPA. Coverage under this General Permit will not be effective until receipt of notification of inclusion from EPA. The effective date of coverage will be the date indicated in the authorization to discharge provided by EPA in writing. Any additional State conditions will be provided in writing.

Any operator authorized to discharge under this General Permit will receive written notification from EPA. Failure to receive from EPA written notification of permit coverage means that the operator is not authorized to discharge under this General Permit.

#### **F. Public Posting of NOIs**

All NOIs received by EPA that EPA proposes to authorize will be posted on the EPA NPDES PWTF GP website: <https://www.epa.gov/npdes-permits/potable-water-treatment-facility-general-permit-pwtf-gp-massachusetts-new-hampshire>, for a minimum of 30 days. Following the 30-day period, EPA will either grant authorization, request additional information, or deny authorization under this permit and require submission of an application for an individual NPDES permit. A facility will be authorized to discharge under the terms and conditions of this permit upon receipt of the written notice of authorization from EPA.

**PART III. General Permit Requirements****A. Effluent Limitations and Monitoring Requirements****1. Continuous and Intermittent Dischargers**

Continuous and Intermittent Dischargers are defined as those facilities that discharge more frequently than once per month or twelve times per year.

During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge wastewaters from potable water treatment facilities to the receiving water in the Permittee's authorization letter, unless the waters are restricted as noted in Section I.C. The discharge and receiving water shall be limited and monitored as detailed below and further specified in the facility's authorization letter.

The General Permit contains site-specific effluent limitations for total residual chlorine, total aluminum, and Whole Effluent Toxicity. See Appendix H. These conditions were derived in part from facility monitoring data and previously submitted NOIs. EPA will update these effluent limitations as necessary based on any new information received in the permittee's updated NOI. While the limitations may change, the process for deriving these limitations will not.

<b>Effluent Characteristic</b>	<b>Effluent Limitation</b>		<b>Monitoring Requirements<sup>1,2,3</sup></b>	
	<b>Average Monthly</b>	<b>Maximum Daily</b>	<b>Measurement Frequency</b>	<b>Sample Type<sup>4</sup></b>
Effluent Flow <sup>5</sup>	Report MGD	1.0 MGD	Continuous	Recorder
TSS	30 mg/L	50 mg/L	1/Week	Composite
pH Range <sup>6</sup>	See Footnote 6		1/Week	Grab
Total Residual Chlorine <sup>7,8</sup>	See Appendix H		1/Week	Grab
Total Aluminum <sup>9,10</sup>	See Appendix H or Report µg/L		1/Month	Composite
Total Phosphorus, as P (April 1 – Oct. 31) <sup>11,12</sup>	---	Report µg/L	1/Month	Composite
Total Iron <sup>13,14</sup>	---	Report µg/L	1/Month	Composite
Total Arsenic <sup>15,16</sup>	---	Report µg/L	1/Month	Composite
PFAS Analytes <sup>17,18</sup>	---	Report ng/L	2/Year or less	Composite
Adsorbable Organic Fluorine <sup>17,19</sup>	---	Report ng/L	2/Year or less	Composite
<b>Whole Effluent Toxicity (WET) Testing<sup>20,21</sup></b>				
LC <sub>50</sub> (Acute WET Testing)	---	See Appendix H or Report %	1/Year	Composite
C-NOEC (Chronic WET Testing)	---	See Appendix H or Report %	1/Year or None	Composite

Effluent Characteristic	Effluent Limitation		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type <sup>4</sup>
Hardness	---	Report mg/L	1/Year	Composite
Ammonia Nitrogen	---	Report mg/L	1/Year	Composite
Total Aluminum	---	Report mg/L	1/Year	Composite
Total Cadmium	---	Report mg/L	1/Year	Composite
Total Copper	---	Report mg/L	1/Year	Composite
Total Nickel	---	Report mg/L	1/Year	Composite
Total Lead	---	Report mg/L	1/Year	Composite
Total Zinc	---	Report mg/L	1/Year	Composite
Total Organic Carbon	---	Report mg/L	1/Year	Composite

Ambient Characteristic <sup>22</sup>	Reporting Requirements		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type <sup>4</sup>
Total Aluminum <sup>10</sup>	---	Report mg/L	1/Quarter	Grab
Total Phosphorus (April 1 - October 31) <sup>11,12</sup>	---	Report mg/L	1/Month, Rotating	Grab
Dissolved Organic Carbon <sup>23</sup>	---	Report mg/L	1/Quarter	Grab
Total Hardness (as CaCO <sub>3</sub> ) <sup>23</sup>	---	Report mg/L	1/Quarter	Grab
pH <sup>23</sup>	---	Report mg/L	1/Quarter	Grab
<b>Ambient Testing for WET<sup>24</sup></b>				
Hardness	---	Report mg/L	1/Year	Grab
Ammonia Nitrogen	---	Report mg/L	1/Year	Grab
Total Aluminum	---	Report mg/L	1/Year	Grab
Total Cadmium	---	Report mg/L	1/Year	Grab
Total Copper	---	Report mg/L	1/Year	Grab
Total Nickel	---	Report mg/L	1/Year	Grab
Total Lead	---	Report mg/L	1/Year	Grab
Total Zinc	---	Report mg/L	1/Year	Grab
Total Organic Carbon	---	Report mg/L	1/Year	Grab
pH <sup>25</sup>	---	Report S.U.	1/Year	Grab
Temperature <sup>25</sup>	---	Report °C	1/Year	Grab

## Footnotes:

1. All samples shall be collected in a manner to yield representative data. A routine sampling program shall be developed in which samples are taken at the same location, same time, and same days of the week each month unless noted elsewhere. Occasional deviations from the routine sampling program are allowed, but the reason for the deviation shall be documented as an electronic attachment to the applicable discharge

monitoring report. The Permittee shall report the results to the Environmental Protection Agency Region 1 (EPA) and the State of any additional testing above that required herein, if testing is in accordance with 40 CFR Part 136. Any change in sampling location from the one specified in the NOI shall be reviewed in writing by EPA and the State.

2. In accordance with 40 CFR § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is “sufficiently sensitive” when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
3. When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L). For reporting an average based on a mix of values detected and not detected, assign a value of “0” to all non-detects for that reporting period and report the average of all the results.
4. A “grab” sample is an individual sample collected in a period of less than 15 minutes.

A “composite” sample is a composite of at least four (4) grab samples collected at approximately equal intervals on a flow weighted basis during the time at which the discharge is entering the receiving water over an interval representative of the process (e.g., a backwash cycle).

The timing of grab samples (e.g., for pH and total residual chlorine) shall correspond with the timing of composite sampling for the other parameters.

5. The daily maximum flow limit allowed by this General Permit shall be no greater than 1.0 million gallons per day (MGD) unless EPA has provided approval for a higher flow rate in the facility’s authorization letter. This may be done on a case-by-case basis.
6. The pH shall be within the following range based on State and waterbody classification:  
  
Massachusetts (Class A and B): 6.5 – 8.3 S.U. and the discharge shall not cause a change in pH of the receiving water more than 0.5 S.U. outside of the natural background conditions.

Massachusetts (Class SA and SB): 6.5 – 8.5 S.U. and the discharge shall not cause a change in pH of the receiving water more than 0.2 S.U. outside of the natural background conditions.

New Hampshire (Class B): 6.5 – 8.0 S.U.

The minimum and maximum pH sample measurement values for the month shall be reported in standard units (S.U.). See Part VI.C.2.d below for a provision to modify the pH range for New Hampshire Permittee's

7. Limits and monitoring for total residual chlorine (TRC) are only required for discharges that have been previously chlorinated or contain residual chlorine. The maximum daily and average monthly concentrations of TRC allowed in the effluent are based on the appropriate water-quality criterion, listed below:

- Freshwater acute (for maximum daily limitations) = 19 µg/L
- Freshwater chronic (for average monthly limitations) = 11 µg/L
- Marine acute (for maximum daily limitations) = 13 µg/L
- Marine chronic (for average monthly limitations) = 7.5 µg/L

Site-specific limits are listed in Appendix H. TRC limits shall be calculated as described in Appendix I.

8. TRC analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level no greater than 20 µg/L.
9. Monitoring for Total Aluminum is only required for facilities that use and discharge an aluminum-based chemical (e.g., aluminum-based coagulant or product for algal control). Some facilities are subject to site-specific aluminum effluent limitations based on watershed criteria for aluminum and facility dilution. See Appendix H (for the limits) and Appendix I (for the limit calculation procedure).
10. Permittees required to monitor for Total Aluminum must monitor both the effluent and the ambient receiving water unaffected by the discharge. The ambient sampling point shall be immediately upstream, outside of the permitted discharge's zone of influence at a safe and reasonably accessible location. For two or more outfalls in close proximity discharging to the same receiving water, monitoring is only required for one ambient sampling location upstream/outside of both outfalls' zone of influence.
11. Monitoring for Total Phosphorus is only required for facilities that:
- Use and discharge phosphorus-containing chemicals;
  - Discharge to fresh waterbodies; and
  - Have a dilution factor less than 50:1.

Monitoring shall be conducted during the plant growing season of April 1 through October 31.

12. Permittees required to monitor for Total Phosphorus must monitor both the effluent and the ambient receiving water unaffected by the discharge.

Ambient sampling is required during the growing season (April 1<sup>st</sup> through October 31<sup>st</sup>) every other calendar year starting on the calendar year specified in the Permittee's authorization letter. One sample in the 2<sup>nd</sup> calendar quarter and one sample in the 3<sup>rd</sup> calendar quarter. The Permittee may enter "NODI" code 9 (i.e., conditional monitoring) in the relevant discharge monitoring report during years when monitoring is not required.

The ambient sampling point shall be immediately upstream/outside of the permitted discharge's zone of influence at a safe and reasonably accessible location. For two or more outfalls in close proximity discharging to the same receiving water, monitoring is only required for one ambient sampling location upstream/outside of both outfalls' zone of influence.

13. Monitoring for Total Iron is only required for facilities that use an iron-based coagulant. This includes any facility that replaces an aluminum-based coagulant with an iron-based one.
14. Total Iron analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level no greater than 55 µg/L.
15. Monitoring for Total Arsenic is only required when the facility is providing treatment to remove arsenic from the raw water source.
16. Total Arsenic analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level no greater than 1.4 µg/L.
17. All permittees are required to sample for PFAS analytes (Appendix J) and Adsorbable Organic Fluorine during the first three semi-annual periods of the permit term (as defined in the Facility's final authorization letter) using an analytical method approved in 40 CFR Part 136 or, if no method is approved, EPA Method 1633 and EPA Method 1621.

After completing three rounds of PFAS monitoring, the Permittee may request that PFAS monitoring be terminated if (1) none of the samples had detectable concentrations (as defined in the laboratory procedure) of any of the PFAS analytes, (2) the discharge is not from treated groundwater, and (3) the discharge is not directly to or upstream of a drinking water treatment source. EPA and the State will make a facility-specific determination based on the Permittee's monitoring termination request whether to discontinue the monitoring.

18. Report in nanograms per liter (ng/L). Until there is an analytical method approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Draft Method 1633. Report in NetDMR the results of all PFAS analytes required to be tested in Method 1633, as shown in Appendix J.

For those permittees required to sample twice per year, monitoring shall be conducted twice per year as specified in the Permittee's authorization letter.

19. Report in nanograms per liter (ng/L). Until there is an analytical method approved in 40 CFR Part 136 for Adsorbable Organic Fluorine, monitoring shall be conducted using Draft Method 1621. Monitoring shall be conducted twice per year as specified in the Permittee's authorization letter
20. Whole Effluent Toxicity (WET) acute testing (LC50) is required once per year for all facilities. WET chronic testing (C-NOEC) is required once per year only for facilities with dilution factors less than 20:1. WET testing shall be conducted in accordance with test procedures and protocols specified in Appendix A and B for discharges to fresh waterbodies or Appendix C and D for discharges to marine waterbodies. The Permittee shall test the daphnid, *Ceriodaphnia dubia*, if their discharge is to a fresh waterbody or the Inland Silverside, *Menidia beryllina*, for discharges to marine waters. Testing shall be conducted in the third calendar quarter (July – September) of every year. Facilities subject to LC50 and/or C-NOEC limits are specified in Appendix H.
21. For Part I.A.1., Whole Effluent Toxicity Testing, the Permittee shall conduct the analyses specified in **Appendix A/B or C/D**, Part VI. CHEMICAL ANALYSIS for the effluent sample. If toxicity test(s) using the receiving water as diluent show the receiving water to be toxic or unreliable, the Permittee shall follow procedures outlined in **Appendix A/B or C/D**, Section IV., DILUTION WATER. Minimum levels and test methods are specified in **Appendix A/B or C/D**, Part VI. CHEMICAL ANALYSIS.
22. Ambient monitoring shall be conducted in the receiving water at a point immediately upstream/outside of the permitted discharge's zone of influence at a reasonably accessible location. If the discharge is to the headwater of a receiving waterbody and no upstream sampling point exists or no dilution has been granted the discharge, ambient sampling is not required. Ambient sampling is required even during monitoring periods when effluent is not discharged.
23. Quarterly monitoring and reporting for dissolved organic carbon (DOC), total hardness as CaCO<sub>3</sub>, and pH will be used to derive site-specific aluminum criteria. These analytes shall be collected concurrently with ambient total aluminum sampling. Total hardness and pH analysis used for annual WET sampling can be used to satisfy the third quarter reporting requirement.

24. For Part I.A.1., Ambient Testing for WET, the Permittee shall conduct the analyses specified in **Appendix A/B or C/D**, Part VI. CHEMICAL ANALYSIS for the receiving water sample collected as part of the WET testing requirements. Such samples shall be taken from the receiving water at a point immediately upstream/outside of the permitted discharge's zone of influence at a reasonably accessible location, as specified in **Appendix A/B or C/D**. Minimum levels and test methods are specified in **Appendix A/B or C/D**, Part VI. CHEMICAL ANALYSIS.
25. A pH and temperature measurement shall be taken of each receiving water sample at the time of collection and the results reported on the appropriate DMR. These pH and temperature measurements are independent from any pH and temperature measurements required by the WET testing protocols.

## 2. Emergency and Infrequent Dischargers

Emergency dischargers are defined as those facilities that only discharge in case of an emergency (e.g., rare hydrologic event, treatment system failure, etc.). Infrequent dischargers are those facilities that discharge less than once per month or less than twelve times per year.

During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge wastewaters from potable water treatment facilities to the receiving water in the Permittee's authorization letter, unless the waters are restricted as noted in Section I.C. The discharge and receiving water shall be limited and monitored as detailed below and further specified in the facility's authorization letter.

Effluent Characteristic	Effluent Limitation		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type <sup>4</sup>
Effluent Flow <sup>5</sup>	Report MGD	1.0 MGD	Continuous	Recorder or Estimate
TSS	30 mg/L	50 mg/L	1/Discharge Event	Composite
pH Range	Variable <sup>6</sup>		1/Discharge Event	Grab
Total Residual Chlorine <sup>7,8</sup>	See Appendix H		1/Discharge Event	Grab
Total Aluminum <sup>9</sup>	---	Report µg/L	1/Discharge Event	Composite
Total Arsenic <sup>10,11</sup>	---	Report µg/L	1/Discharge Event	Composite
Total Iron <sup>12,13</sup>	---	Report µg/L	1/Discharge Event	Composite

### Footnotes:

1. All samples shall be collected in a manner to yield representative data. A routine sampling program shall be developed in which samples are taken at the same location prior to the discharge mixing with other waste streams and entering the receiving waterbody. The Permittee shall report the results to the Environmental Protection Agency Region 1 (EPA) and the State of any additional testing above that required herein, if testing is in accordance with 40 CFR Part 136. Any change in sampling location from the one specified in the NOI shall be reviewed in writing by EPA and the State.
2. In accordance with 40 CFR § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is "sufficiently sensitive" when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established

in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.

3. When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L). For reporting an average based on a mix of values detected and not detected, assign a value of “0” to all non-detects for that reporting period and report the average of all the results.
4. A “grab” sample is an individual sample collected in a period of less than 15 minutes.

When possible, composite samples shall be taken for those parameters identified in the table. A “composite” sample is a composite of at least four (4) grab samples collected at approximately equal intervals on a flow weighted basis during the time at which the discharge is entering the receiving water over an interval representative of the process (e.g., a backwash cycle).

5. The daily maximum flow limit allowed by this General Permit shall be no greater than 1.0 MGD, unless EPA has provided approval for a higher flow rate in the facility’s authorization letter. This may be done on a case-by-case basis. Also report monthly average and maximum daily flow in MGD.
6. The pH shall be within the following range based on State and waterbody classification:

Massachusetts (Class A and B): 6.5 – 8.3 S.U. and the discharge shall not cause a change in pH of the receiving water more than 0.5 S.U. outside of the natural background conditions.

Massachusetts (Class SA and SB): 6.5 – 8.5 S.U. and the discharge shall not cause a change in pH of the receiving water more than 0.2 S.U. outside of the natural background conditions.

New Hampshire (Class B): 6.5 – 8.0 S.U.

The minimum and maximum pH sample measurement values for the month shall be reported in standard units (S.U.). See Part VI.C.2.d below for a provision to modify the pH range for New Hampshire Permittees.

7. Limits and monitoring for total residual chlorine (TRC) are only required for discharges that have been previously chlorinated or contain residual chlorine. The maximum daily and average monthly concentrations of TRC allowed in the effluent are based on the appropriate water-quality criterion, listed below:

- Freshwater acute (for maximum daily limitations) = 19 µg/L
- Freshwater chronic (for average monthly limitations) = 11 µg/L
- Marine acute (for maximum daily limitations) = 13 µg/L
- Marine chronic (for average monthly limitations) = 7.5 µg/L

Site-specific limits are listed in Appendix H. TRC limits shall be calculated as described in Appendix I.

8. TRC analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level no greater than 20 µg/L.
9. Monitoring for Total Aluminum is only required for facilities that use and discharge an aluminum-based chemical (e.g., aluminum-based coagulant or product for algal control).
10. Monitoring for Total Iron is only required for facilities that use an iron-based coagulant. This includes any facility that replaces an aluminum-based coagulant with an iron-based one.
11. Total Iron analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level no greater than 55 µg/L.
12. Monitoring for Total Arsenic is only required when the facility is providing treatment to remove arsenic from the raw water source.
13. Total Arsenic analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level no greater than 1.4 µg/L.

**B. Other Requirements for All Facilities**

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

**C. Other Requirements for Massachusetts Facilities**

1. The discharge shall be free from pollutants in concentrations or combinations that, in the receiving water, settle to form objectionable deposits; float as debris, scum or other matter to form nuisances; produce objectionable odor, color, taste or turbidity; or produce undesirable or nuisance species of aquatic life.
2. The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical, chemical, or biological nature of the bottom.
3. The discharge shall not result in pollutants in concentrations or combinations in the receiving water that are toxic to humans, aquatic life, or wildlife.
4. The discharge shall be free from floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to the receiving water.
5. For discharges to Class A waterbodies: the discharge shall be free from oil and grease, petrochemicals and other volatile or synthetic organic pollutants.

For discharges to Class SA waterbodies: the discharge shall be free from oil and grease and petrochemicals.

For discharges to Class B or SB waterbodies: the discharge shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.

6. Discharges shall have no adverse impact on the intake of an existing or proposed Public Water Supply. This is in accordance with Massachusetts SWQs at 314 CMR 4.03(1)(a) that states, “[d]ischarges shall be limited or prohibited to protect existing uses and not interfere with the attainment of designated uses in downstream and adjacent segments”.

**D. Other Requirements for New Hampshire Facilities**

1. The discharge shall be free from substances in kind or quantity that settle to form harmful benthic deposits; float as foam, debris, scum or other visible substances; produce odor, color, taste or turbidity that is not naturally occurring and would render the surface water unsuitable for its designated uses; result in the dominance of nuisance species; or interfere with recreational activities.

2. Tainting substances shall not be present in the discharge in concentrations that individually or in combination are detectable by taste and odor tests performed on the edible portions of aquatic organisms.
3. The discharge shall not result in toxic substances or chemical constituents in concentrations or combinations in the receiving water that injure or are inimical to plants, animals, humans or aquatic life; or persist in the environment or accumulate in aquatic organisms to levels that result in harmful concentrations in edible portions of fish, shellfish, other aquatic life, or wildlife that might consume aquatic life.
4. For discharges to Class B waterbodies: the discharge shall not result in benthic deposits that have a detrimental impact on the benthic community. The discharge shall not result in oil and grease, color, slicks, odors, or surface floating solids that would impair any existing or designated uses in the receiving water.
5. For discharges to Class B waterbodies: the discharge shall not result in an exceedance of the naturally occurring turbidity in the receiving water by more than 10 NTUs.

**E. Unauthorized Discharges**

1. This permit authorizes discharges only from processes and outfalls identified in the notice of intent to discharge application submitted to the agencies in accordance with the terms and conditions of this permit and the permittee's authorization letter. Discharges of wastewater from any other point sources are not authorized by this permit. The Permittee must provide verbal notification to EPA and the State within 24 hours of becoming aware of any unauthorized discharge and a report within 5 days, in accordance with Part VII.D.1.e (24-hour reporting).

**Part IV. Special Conditions****A. Best Management Practices (BMP) Plan**

1. The permittee shall develop, implement, and maintain a Best Management Practices (BMP) Plan designed to reduce or prevent the discharge of pollutants in wastewater to waters of the United States. The BMP Plan shall be a written document that is consistent with the terms of the permit and identifies and describes the BMPs employed by the facility in operating wastewater controls. The Plan must be developed at least once a permit term (i.e., five years) and re-evaluated if any significant changes to the facility's operations occur.
2. The BMP Plan shall be completed (or updated) and certified by the permittee concurrent with the submission of the permittee's NOI (60 days from the effective date of this permit). The permittee shall certify the BMP Plan has been prepared, that it meets the requirements of this permit, and that it reduces the pollutants discharged in wastewater to the extent practicable. The BMP Plan and certification shall be signed in accordance with the requirements identified in 40 CFR §122.22. A copy of the BMP Plan and certification shall be maintained at the facility and made available to EPA and the State Agency upon request.
3. The permittee shall amend and update the BMP Plan within 14 days after any changes at the facility affecting the BMP Plan. Such changes may include, but are not limited to changes in the design, construction, operation, or maintenance of the facility, which have a significant effect on the potential for the discharge of pollutants to the waters of the United States. The amended BMP Plan shall be certified as described in Part IV.A.2. above.
4. The permittee shall certify annually that the facility is in compliance with the requirements of the BMP Plan. If the facility is not in compliance with any aspect of the BMP Plan, the annual certification shall state the non-compliance (e.g., a selected BMP is not achieving the control necessary to meet a numeric or non-numeric effluent limitation) and the remedies which are being undertaken (e.g., the selection, design and implementation of an alternate BMP). Such annual certifications also shall be signed in accordance with the requirements identified in 40 CFR §122.22. The permittee shall keep a copy of the current BMP Plan and all BMP Plan certifications (e.g., the initial certification, re-certifications, and annual certifications) signed during the effective period of this permit at the facility and shall make it available for inspection by EPA and the State Agency.
5. The BMP Plan shall include, at a minimum, the following items:
  - a. Selection, design, installation, implementation, and maintenance of control measures necessary to meet the effluent limitations in this permit, including non-numeric technology-based effluent limitations. Any control measures shall be used in accordance with good engineering practices and manufacturer's specifications.

- b. A description of the pollution control equipment and procedures used to minimize the discharge of suspended solids, floating solids, foam, visible oil sheen, and settleable solids to surface waters.
- c. Preventative maintenance procedures for the pollution control equipment to ensure that equipment failures are avoided.
- d. A description of the water treatment and intake water residuals generated at the Plant and how these residuals are generated, controlled, and disposed.
- e. Procedures for handling facility wastes, including schedules for removal, handling and disposal of materials, a description of where solids removed from the pollution control equipment or appurtenances, including sludge, are stored and/or disposed of, and the control measures used to prevent the removed solids from reentering the receiving water. If facility wastes are to be removed from the site, describe the destination and the method of disposal and/or reuse.
- f. A record of the following information for all water additives used at the facility, including, but not limited to, chemicals used for coagulation, pH neutralization, dechlorination, control of biological growth, control of corrosion and scale in water pipes, etc.):
  - Product name, chemical formula, and manufacturer of the additive;
  - Purpose or use of the additive;
  - Safety Data Sheet (SDS) and Chemical Abstracts Service (CAS) Registry number for each additive;
  - The frequency (e.g., hourly, daily, etc.), magnitude (e.g., maximum application concentration) duration (e.g., hours, days), and method of application for the additive;
  - If available, the vendor's reported aquatic toxicity (i.e., NOAEL and/or LC50 in percent for aquatic organism(s)).
- g. If a phosphorus-containing chemical is used during the water treatment process (e.g. to control corrosion and scale in water pipes) and the facility discharges into a water body impaired for (total) phosphorus, invasive aquatic algae, excess algal growth, cyanobacteria hepatotoxic microcystins, dissolved oxygen (saturation), or chlorophyll-a, the permittee shall also evaluate possible means and measures that will reduce and/or eliminate the discharge of this chemical into the receiving water.
- h. A description of the training to be provided for employees to assure they understand the goals, objectives, and procedures of the BMP Plan, the requirements of the NPDES Permit, and their individual responsibilities for complying with the goals and objectives of the BMP Plan and the NPDES permit. Training should be conducted on an annual basis. Certification of such training should be recorded and kept on site,

along with the BMP Plan certifications.

- i. Minimum documentation requirements are as follows:
  - i. Records of operational and preventive maintenance activities, evaluations, equipment inspections, procedure audits, and personnel training.
  - ii. Records of the collection and analysis of samples, including, but not limited to, sample location, any calculations done at the time of sampling, any sampling or analytical methods used for samples analyzed on site, and sample results so that an inspector may verify that the sampling was properly conducted.
  - iii. All documentation of BMP Plan activities shall be kept at the facility for at least three years from the date the document was generated and provided to EPA or the State upon request.
- j. If aluminum is used during the water treatment process (e.g., as a coagulant), evaluation (or re-evaluation for previously covered facilities) of control measures that minimize the discharge of aluminum to the receiving water, which must include, at a minimum:
  - (1) Examination of control measures used to minimize the discharge of aluminum to surface waters (e.g., use of baffles, filter press, etc. to remove contaminants during treatment of raw water for drinking);
  - (2) Evaluation of other materials (e.g., coagulants) which could reduce or eliminate the use of coagulants which contain aluminum. If a new material is used to replace the aluminum-based coagulant, the permittee will inform EPA and the State Agency of the change. If a facility switches to an iron-based coagulant, see the monitoring requirement in Part III.A.
  - (3) The procedures for handling facility wastes and the proper design for devices used to treat residuals.

For Massachusetts: Evaluation of the procedures for handling Facility Wastes (Part 5.10 and specifically for alum, Part 5.10.5) outlined in the most current issuance of Chapter 5 of the MassDEP Guidelines for Public Water Systems.<sup>2</sup>

For New Hampshire: The New Hampshire Administrative Rules contain the proper design standards for Large Public Water Systems at Env-Dw 404.<sup>3</sup> This regulation adopts by reference the most current edition of "Recommended

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<sup>2</sup> The Commonwealth of Massachusetts, Department of Environmental Protection, Bureau of Resource Protection, Drinking Water Program's Guidelines for Public Water System, Chapter 5: Treatment.

<sup>3</sup> New Hampshire Code of Administrative Rules, Env-Dw 404, Design Standards for Large Public Water Systems.

Standards for Water Works," committee report of the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers.

- (4) Unless already included in the BMP Plan (Part IV.A.5.e.), the procedures and schedules for removal of accumulated sludge from the filter backwash sedimentation basin or sludge treatment facility in order to maintain effective removal of solids prior to the wastewater discharge to surface waters.
- (5) Identification of any other design standards and operational changes that can be incorporated into the design and/or operation of the Plant to further reduce or eliminate the discharge of aluminum.

## **B. Discharge of Chemicals and Additives**

This permit does not allow the discharge of any water additives or chemicals unless they are listed in the NOI. An exception to this requirement is allowed for additives not anticipated when the NOI was submitted, provided that the permittee notifies EPA and the State within five (5) days of its use of the new additive. If a new additive is used, EPA and/or the State reserves the right to require additional monitoring, effluent limits, or other requirements using procedures/conditions outlined in this permit. All water additives used by the facility, including those listed in the NOI, shall be listed in the BMP Plan as required by IV.A.f. of this General Permit. Examples of water additives include chemicals (e.g., surfactants, disinfectant agents, detergents, emulsifier, etc.) used for coagulation, pH neutralization, dechlorination, control of biological growth, and control of corrosion and scale in water pipes.

To request authorization to discharge a new chemical or additive, the Permittee must submit a written notification to EPA and the State in accordance with Part V.2 and V.4 of this permit. The written notification must include the following information, at a minimum:

- a. The following information for each chemical and/or additive that will be discharged:
  - 1) Product name, chemical formula, general description, and manufacturer of the chemical/additive;
  - 2) Purpose or use of the chemical/additive;
  - 3) Safety Data Sheet (SDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
  - 4) The frequency (e.g., hourly, daily), magnitude (i.e., maximum application concentration), duration (e.g., hours, days), and method of application for the chemical/additive;
  - 5) If available, the vendor's reported aquatic toxicity (i.e., NOAEL and/or LC<sub>50</sub> in percent for aquatic organism(s)).
- b. Written rationale that demonstrates that the discharge of such chemicals and/or additives as proposed will not: 1) will not add any pollutants in concentrations that exceed any permit effluent limitation; and 2) will not add any pollutants that would

justify the application of permit conditions different from, or in addition to those currently in this permit.

### **C. Dilution Factor Study (Massachusetts Only)**

Permittees in Massachusetts may conduct a model or dye study to determine a defensible dilution factor for their discharge. If a permittee intends to conduct such a study a study proposal shall be submitted to the Agencies for approval, as an attachment to their NOI submission.

**Study Goal.** To determine the zone of initial dilution (ZID) and corresponding dilution factor at the edge of that zone for the regulated toxics (e.g., Total Residual Chlorine, Total Aluminum, etc.) from the facility outfall at the critical receiving water flow. Further information on such a study can be found in the Draft Permit's Fact Sheet.

### **D. Schedules of Compliance**

Permittee's may request in their NOI a compliance schedule of up to 24 months to meet any newly established or more stringent water quality-based effluent limits. Schedules of compliance will only be authorized for discharges not expected to be in compliance with the limit(s) upon the effective date of the authorization to discharge under the General Permit. The request for a compliance schedule shall include at a minimum:

- Reason that the facility cannot currently meet the permit condition and requires a compliance schedule.
- Method for achieving compliance (e.g., re-routing the discharge, constructing new treatment units, changing water treatment process, etc.).
- Anticipated time for compliance. If the proposed schedule exceeds 1 year, include interim project dates.

Within twelve (12) months of the notice of authorization to discharge under the PWTF GP, the Permittee shall submit to EPA and the State a status report relative to the process improvements necessary to achieve the permit limit. Reports and updates must be submitted to EPA and the applicable State agency electronically at the email addresses provided on the Potable Water Treatment Facility General Permit website, <https://www.epa.gov/npdes-permits/potable-water-treatment-facility-general-permit-pwtf-gp-massachusetts-new-hampshire>.

**Part V. Monitoring, Record-Keeping, and Reporting Requirements**

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

**1. Submittal of DMRs Using NetDMR**

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

**2. Submittal of Reports as NetDMR Attachments**

Unless otherwise specified in this permit, the Permittee shall electronically submit all reports to EPA as NetDMR attachments rather than as hard copies. See Part V.4. for more information on State reporting. Because the due dates for reports described in this permit may not always coincide with the due date for submitting DMRs (which is no later than the 15th day of the month), a report submitted electronically as a NetDMR attachment shall be considered timely if it is electronically submitted to EPA using NetDMR with the next DMR due following the report due date specified in this permit.

**3. Notice of Change (NOC)**

Facilities covered under this General Permit may request a change to certain conditions through submission of an NOC to EPA and the appropriate State, when required. The NOC can take the form of a letter explaining the change and signed in accordance with the signatory requirements of 40 CFR § 122.22. The following are examples of NOC requests:

- a) A change in the frequency, magnitude, or the nature of the discharge.
- b) The use of a new chemical/additive or the discontinuation of one.
- c) A change in the effluent sampling location.
- d) A change to certain administrative information, such as a change in facility ownership.

Completed and signed NOCs shall be submitted to EPA and the appropriate State agency electronically at the email addresses provided on the Potable Water Treatment Facility General Permit website, <https://www.epa.gov/npdes-permits/potable-water-treatment-facility-general-permit-pwtf-gp-massachusetts-new-hampshire>. Written approval by EPA is required for all changes to be effective, with the exception of those changes involving administrative information. Prior to receiving written approval for all changes with the

exception of those involving administrative information, the Permittee must continue to comply with the associated permit condition.

4. State Reporting

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

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

**For New Hampshire.** Unless otherwise specified in this permit or by the State, duplicate signed copies of all reports, information, requests or notifications described in this permit, including the reports, information, requests or notifications described in Part V.3 shall also be submitted to the New Hampshire Department of Environmental Services, Water Division (NHDES–WD) electronically to the Permittee’s assigned NPDES inspector at NHDES-WD or as a hardcopy to the following addresses:

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

5. Verbal Reports and Verbal Notifications

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

**EPA ECAD at 617-918-1510  
and  
MassDEP Emergency Response at 888-304-1133  
NHDES Assigned NPDES Inspector:  
Central/South NH: 603-271-2985  
North/West NH: 603-271-1494  
NH Seacoast: 603-271-1493**

**Part VI. 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 under this General Permit. The NOT shall include the name, mailing address, phone number, and the location of the facility for which the notification is being submitted, the NPDES permit number of the discharge identified by the notice, and an indication of whether the discharge has been eliminated. 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 electronically at the email addresses provided on the Potable Water Treatment Facility General Permit website, <https://www.epa.gov/npdes-permits/potable-water-treatment-facility-general-permit-pwtf-gp-massachusetts-new-hampshire>.

**B. Continuation of this General Permit After Expiration**

If this General Permit is not reissued prior to its expiration date, it will be administratively continued in accordance with the Administrative Procedures Act (5 U.S.C. 558(c)) and 40 CFR § 122.6 and remain in full force and in effect for discharges authorized prior to its expiration.

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

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

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

**C. State 401 Certification Conditions**

1. Massachusetts
  - a. This Permit is in the process of receiving state water quality certification issued by the State under § 401(a) of the CWA and 40 CFR § 124.53. EPA will incorporate appropriate State water quality certification requirements (if any) into the Final Permit.
2. New Hampshire

- a. 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 of, or interfere with the uses assigned to, said water by the New Hampshire Legislature (RSA 485-A:12).
- b. This NPDES discharge permit is issued by EPA under federal 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.
- c. 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.
- d. The pH range of 6.5 to 8.5 Standard Units (S.U.) must be achieved in the final effluent unless the Permittee can demonstrate to NHDES-WD: 1) that the range should be widened due to naturally occurring conditions in the receiving water; or 2) that the naturally occurring receiving water pH is not significantly altered by the Permittee's discharge. The scope of any demonstration project must receive prior approval from NHDES-WD. In no case, shall the above procedure result in pH limits outside the range of 6.0 to 9.0 S.U., which are federal technology-based effluent limitation guidelines for pH commonly found in 40 CFR subchapter N Parts 405 through 471.

NPDES PART II STANDARD CONDITIONS  
(January, 2007)

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## NPDES PART II STANDARD CONDITIONS

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### PART II. A. GENERAL REQUIREMENTS

#### 1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

- a. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.
- b. The CWA provides that any person who violates Section 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any of such sections in a permit issued under Section 402, or any requirement imposed in a pretreatment program approved under Section 402 (a)(3) or 402 (b)(8) of the CWA is subject to a civil penalty not to exceed \$25,000 per day for each violation. Any person who negligently violates such requirements is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. Any person who knowingly violates such requirements is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.
- c. Any person may be assessed an administrative penalty by the Administrator for violating Section 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

Note: See 40 CFR §122.41(a)(2) for complete “Duty to Comply” regulations.

#### 2. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or notifications of planned changes or anticipated noncompliance does not stay any permit condition.

#### 3. Duty to Provide Information

The permittee shall furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

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### 4. Reopener Clause

The Regional Administrator reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA in order to bring all discharges into compliance with the CWA.

For any permit issued to a treatment works treating domestic sewage (including “sludge-only facilities”), the Regional Administrator or Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under Section 405 (d) of the CWA. The Regional Administrator or Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or contains a pollutant or practice not limited in the permit.

Federal regulations pertaining to permit modification, revocation and reissuance, and termination are found at 40 CFR §122.62, 122.63, 122.64, and 124.5.

### 5. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the CWA, or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

### 6. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges.

### 7. Confidentiality of Information

- a. In accordance with 40 CFR Part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words “confidential business information” on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2 (Public Information).
- b. Claims of confidentiality for the following information will be denied:
  - (1) The name and address of any permit applicant or permittee;
  - (2) Permit applications, permits, and effluent data as defined in 40 CFR §2.302(a)(2).
- c. Information required by NPDES application forms provided by the Regional Administrator under 40 CFR §122.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

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8. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Regional Administrator. (The Regional Administrator shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

9. State Authorities

Nothing in Part 122, 123, or 124 precludes more stringent State regulation of any activity covered by these regulations, whether or not under an approved State program.

10. Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State, or local laws and regulations.

PART II. B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. Bypass

a. Definitions

- (1) *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.

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- (2) *Severe property damage* means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can be reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

### b. Bypass not exceeding limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of Paragraphs B.4.c. and 4.d. of this section.

### c. Notice

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D.1.e. of this part (Twenty-four hour reporting).

### d. Prohibition of bypass

Bypass is prohibited, and the Regional Administrator may take enforcement action against a permittee for bypass, unless:

- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
- (3) i) The permittee submitted notices as required under Paragraph 4.c. of this section.  
ii) The Regional Administrator may approve an anticipated bypass, after considering its adverse effects, if the Regional Administrator determines that it will meet the three conditions listed above in paragraph 4.d. of this section.

## 5. Upset

- a. Definition. *Upset* means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph B.5.c. of this section are met. No determination made during

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administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee submitted notice of the upset as required in paragraphs D.1.a. and 1.e. (Twenty-four hour notice); and
  - (4) The permittee complied with any remedial measures required under B.3. above.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

### PART II. C. MONITORING REQUIREMENTS

#### 1. Monitoring and Records

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. Except for records for monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application except for the information concerning storm water discharges which must be retained for a total of 6 years. This retention period may be extended by request of the Regional Administrator at any time.
- c. Records of monitoring information shall include:
  - (1) The date, exact place, and time of sampling or measurements;
  - (2) The individual(s) who performed the sampling or measurements;
  - (3) The date(s) analyses were performed;
  - (4) The individual(s) who performed the analyses;
  - (5) The analytical techniques or methods used; and
  - (6) The results of such analyses.
- d. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in the permit.
- e. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by

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imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

### 2. Inspection and Entry

The permittee shall allow the Regional Administrator or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

## PART II. D. REPORTING REQUIREMENTS

### 1. Reporting Requirements

- a. **Planned Changes.** The permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:
  - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR§122.29(b); or
  - (2) The alteration or addition could significantly change the nature or increase the quantities of the pollutants discharged. This notification applies to pollutants which are subject neither to the effluent limitations in the permit, nor to the notification requirements at 40 CFR§122.42(a)(1).
  - (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition or change may justify the application of permit conditions different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. **Anticipated noncompliance.** The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- c. **Transfers.** This permit is not transferable to any person except after notice to the Regional Administrator. The Regional Administrator may require modification or revocation and reissuance of the permit to change the name of the permittee and

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incorporate such other requirements as may be necessary under the CWA. (See 40 CFR Part 122.61; in some cases, modification or revocation and reissuance is mandatory.)

- d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
  - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.
  - (2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of the monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
  - (3) Calculations for all limitations which require averaging or measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Twenty-four hour reporting.
  - (1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances.

A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
  - (2) The following shall be included as information which must be reported within 24 hours under this paragraph.
    - (a) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR §122.41(g).)
    - (b) Any upset which exceeds any effluent limitation in the permit.
    - (c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Regional Administrator in the permit to be reported within 24 hours. (See 40 CFR §122.44(g).)
  - (3) The Regional Administrator may waive the written report on a case-by-case basis for reports under Paragraph D.1.e. if the oral report has been received within 24 hours.

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- f. Compliance Schedules. Reports of compliance or noncompliance with, any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- g. Other noncompliance. The permittee shall report all instances of noncompliance not reported under Paragraphs D.1.d., D.1.e., and D.1.f. of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph D.1.e. of this section.
- h. Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, it shall promptly submit such facts or information.

### 2. Signatory Requirement

- a. All applications, reports, or information submitted to the Regional Administrator shall be signed and certified. (See 40 CFR §122.22)
- b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 2 years per violation, or by both.

### 3. Availability of Reports.

Except for data determined to be confidential under Paragraph A.8. above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Regional Administrator. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA.

## PART II. E. DEFINITIONS AND ABBREVIATIONS

### 1. Definitions for Individual NPDES Permits including Storm Water Requirements

*Administrator* means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

*Applicable standards and limitations* means all, State, interstate, and Federal standards and limitations to which a “discharge”, a “sewage sludge use or disposal practice”, or a related activity is subject to, including “effluent limitations”, water quality standards, standards of performance, toxic effluent standards or prohibitions, “best management practices”, pretreatment standards, and “standards for sewage sludge use and disposal” under Sections 301, 302, 303, 304, 306, 307, 308, 403, and 405 of the CWA.

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*Application* means the EPA standard national forms for applying for a permit, including any additions, revisions, or modifications to the forms; or forms approved by EPA for use in “approved States”, including any approved modifications or revisions.

*Average* means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For total and/or fecal coliforms and Escherichia coli, the average shall be the geometric mean.

*Average monthly discharge limitation* means the highest allowable average of “daily discharges” over a calendar month calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.

*Average weekly discharge limitation* means the highest allowable average of “daily discharges” measured during the calendar week divided by the number of “daily discharges” measured during the week.

*Best Management Practices (BMPs)* means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of “waters of the United States.” BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

*Best Professional Judgment (BPJ)* means a case-by-case determination of Best Practicable Treatment (BPT), Best Available Treatment (BAT), or other appropriate technology-based standard based on an evaluation of the available technology to achieve a particular pollutant reduction and other factors set forth in 40 CFR §125.3 (d).

*Coal Pile Runoff* means the rainfall runoff from or through any coal storage pile.

*Composite Sample* means a sample consisting of a minimum of eight grab samples of equal volume collected at equal intervals during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportional to flow, or a sample consisting of the same number of grab samples, or greater, collected proportionally to flow over that same time period.

*Construction Activities* - The following definitions apply to construction activities:

- (a) Commencement of Construction is the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.
- (b) Dedicated portable asphalt plant is a portable asphalt plant located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject to the asphalt emulsion effluent limitation guideline at 40 CFR Part 443.
- (c) Dedicated portable concrete plant is a portable concrete plant located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

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- (d) Final Stabilization means that all soil disturbing activities at the site have been complete, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
- (e) Runoff coefficient means the fraction of total rainfall that will appear at the conveyance as runoff.

*Contiguous zone* means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone.

*Continuous discharge* means a “discharge” which occurs without interruption throughout the operating hours of the facility except for infrequent shutdowns for maintenance, process changes, or similar activities.

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, and Pub. L. 97-117; 33 USC §§1251 et seq.

*Daily Discharge* means the discharge of a pollutant measured during the calendar day or any other 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the “daily discharge” is calculated as the average measurement of the pollutant over the day.

*Director* normally means the person authorized to sign NPDES permits by EPA or the State or an authorized representative. Conversely, it also could mean the Regional Administrator or the State Director as the context requires.

*Discharge Monitoring Report Form (DMR)* means the EPA standard national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by “approved States” as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA’s.

*Discharge of a pollutant* means:

- (a) Any addition of any “pollutant” or combination of pollutants to “waters of the United States” from any “point source”, or
- (b) Any addition of any pollutant or combination of pollutants to the waters of the “contiguous zone” or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation (See “Point Source” definition).

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead

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to a treatment works; and discharges through pipes, sewers, or other conveyances leading into privately owned treatment works.

This term does not include an addition of pollutants by any “indirect discharger.”

*Effluent limitation* means any restriction imposed by the Regional Administrator on quantities, discharge rates, and concentrations of “pollutants” which are “discharged” from “point sources” into “waters of the United States”, the waters of the “contiguous zone”, or the ocean.

*Effluent limitation guidelines* means a regulation published by the Administrator under Section 304(b) of CWA to adopt or revise “effluent limitations”.

*EPA* means the United States “Environmental Protection Agency”.

*Flow-weighted composite sample* means a composite sample consisting of a mixture of aliquots where the volume of each aliquot is proportional to the flow rate of the discharge.

*Grab Sample* – An individual sample collected in a period of less than 15 minutes.

*Hazardous Substance* means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the CWA.

*Indirect Discharger* means a non-domestic discharger introducing pollutants to a publicly owned treatment works.

*Interference* means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- (a) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- (b) Therefore is a cause of a violation of any requirement of the POTW’s NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act (CWA), the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resources Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SDWA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection Research and Sanctuaries Act.

*Landfill* means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

*Land application unit* means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

*Large and Medium municipal separate storm sewer system* means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and 40 CFR Part 122); or (ii) located in the counties with unincorporated urbanized

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populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships, or towns within such counties (these counties are listed in Appendices H and I of 40 CFR 122); or (iii) owned or operated by a municipality other than those described in Paragraph (i) or (ii) and that are designated by the Regional Administrator as part of the large or medium municipal separate storm sewer system.

*Maximum daily discharge limitation* means the highest allowable “daily discharge” concentration that occurs only during a normal day (24-hour duration).

*Maximum daily discharge limitation (as defined for the Steam Electric Power Plants only) when applied to Total Residual Chlorine (TRC) or Total Residual Oxidant (TRO)* is defined as “maximum concentration” or “Instantaneous Maximum Concentration” during the two hours of a chlorination cycle (or fraction thereof) prescribed in the Steam Electric Guidelines, 40 CFR Part 423. These three synonymous terms all mean “a value that shall not be exceeded” during the two-hour chlorination cycle. This interpretation differs from the specified NPDES Permit requirement, 40 CFR § 122.2, where the two terms of “Maximum Daily Discharge” and “Average Daily Discharge” concentrations are specifically limited to the daily (24-hour duration) values.

*Municipality* means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribe organization, or a designated and approved management agency under Section 208 of the CWA.

*National Pollutant Discharge Elimination System* means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the CWA. The term includes an “approved program”.

*New Discharger* means any building, structure, facility, or installation:

- (a) From which there is or may be a “discharge of pollutants”;
- (b) That did not commence the “discharge of pollutants” at a particular “site” prior to August 13, 1979;
- (c) Which is not a “new source”; and
- (d) Which has never received a finally effective NPDES permit for discharges at that “site”.

This definition includes an “indirect discharger” which commences discharging into “waters of the United States” after August 13, 1979. It also includes any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a “site” for which it does not have a permit; and any offshore rig or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979, at a “site” under EPA’s permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Regional Administrator in the issuance of a final permit to be in an area of biological concern. In determining whether an area is an area of biological concern, the Regional Administrator shall consider the factors specified in 40 CFR §§125.122 (a) (1) through (10).

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An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a “new discharger” only for the duration of its discharge in an area of biological concern.

*New source* means any building, structure, facility, or installation from which there is or may be a “discharge of pollutants”, the construction of which commenced:

- (a) After promulgation of standards of performance under Section 306 of CWA which are applicable to such source, or
- (b) After proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

*NPDES* means “National Pollutant Discharge Elimination System”.

*Owner or operator* means the owner or operator of any “facility or activity” subject to regulation under the NPDES programs.

*Pass through* means a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW’s NPDES permit (including an increase in the magnitude or duration of a violation).

*Permit* means an authorization, license, or equivalent control document issued by EPA or an “approved” State.

*Person* means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

*Point Source* means any discernible, confined, and discrete conveyance, including but not limited to any pipe ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff (see 40 CFR §122.2).

*Pollutant* means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. §§2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

- (a) Sewage from vessels; or
- (b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well is used either to facilitate production or for disposal purposes is approved by the authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

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*Primary industry category* means any industry category listed in the NRDC settlement agreement (Natural Resources Defense Council et al. v. Train, 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D. D.C. 1979)); also listed in Appendix A of 40 CFR Part 122.

*Privately owned treatment works* means any device or system which is (a) used to treat wastes from any facility whose operation is not the operator of the treatment works or (b) not a “POTW”.

*Process wastewater* means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

*Publicly Owned Treatment Works (POTW)* means any facility or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a “State” or “municipality”.

This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

*Regional Administrator* means the Regional Administrator, EPA, Region I, Boston, Massachusetts.

*Secondary Industry Category* means any industry which is not a “primary industry category”.

*Section 313 water priority chemical* means a chemical or chemical category which:

- (1) is listed at 40 CFR §372.65 pursuant to Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986);
- (2) is present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and
- (3) satisfies at least one of the following criteria:
  - (i) are listed in Appendix D of 40 CFR Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols), or Table V (certain toxic pollutants and hazardous substances);
  - (ii) are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA at 40 CFR §116.4; or
  - (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

*Septage* means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

*Sewage Sludge* means any solid, semisolid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, septage, portable toilet pumpings, Type III Marine Sanitation Device pumpings (33 CFR Part 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

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*Sewage sludge use or disposal practice* means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge.

*Significant materials* includes, but is not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets, raw materials used in food processing or production, hazardous substance designated under section 101(14) of CERCLA, any chemical the facility is required to report pursuant to EPCRA Section 313, fertilizers, pesticides, and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.

*Significant spills* includes, but is not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the CWA (see 40 CFR §110.10 and §117.21) or Section 102 of CERCLA (see 40 CFR § 302.4).

*Sludge-only facility* means any “treatment works treating domestic sewage” whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to Section 405(d) of the CWA, and is required to obtain a permit under 40 CFR §122.1(b)(3).

*State* means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands.

*Storm Water* means storm water runoff, snow melt runoff, and surface runoff and drainage.

*Storm water discharge associated with industrial activity* means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. (See 40 CFR §122.26 (b)(14) for specifics of this definition.

*Time-weighted composite* means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

*Toxic pollutants* means any pollutant listed as toxic under Section 307 (a)(1) or, in the case of “sludge use or disposal practices” any pollutant identified in regulations implementing Section 405(d) of the CWA.

*Treatment works treating domestic sewage* means a POTW or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices.

For purposes of this definition, “domestic sewage” includes waste and wastewater from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under Section 405(f) of the CWA, the Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal in 40 CFR Part 503 as a “treatment works treating domestic sewage”, where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 CFR Part 503.

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*Waste Pile* means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

*Waters of the United States* means:

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of tide;
- (b) All interstate waters, including interstate “wetlands”;
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands”, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - (1) Which are or could be used by interstate or foreign travelers for recreational or other purpose;
  - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in Paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in Paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 CFR §423.11(m) which also meet the criteria of this definition) are not waters of the United States.

*Wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

*Whole Effluent Toxicity (WET)* means the aggregate toxic effect of an effluent measured directly by a toxicity test. (See Abbreviations Section, following, for additional information.)

### 2. Definitions for NPDES Permit Sludge Use and Disposal Requirements.

*Active sewage sludge unit* is a sewage sludge unit that has not closed.

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*Aerobic Digestion* is the biochemical decomposition of organic matter in sewage sludge into carbon dioxide and water by microorganisms in the presence of air.

*Agricultural Land* is land on which a food crop, a feed crop, or a fiber crop is grown. This includes range land and land used as pasture.

*Agronomic rate* is the whole sludge application rate (dry weight basis) designed:

- (1) To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land; and
- (2) To minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water.

*Air pollution control device* is one or more processes used to treat the exit gas from a sewage sludge incinerator stack.

*Anaerobic digestion* is the biochemical decomposition of organic matter in sewage sludge into methane gas and carbon dioxide by microorganisms in the absence of air.

*Annual pollutant loading rate* is the maximum amount of a pollutant that can be applied to a unit area of land during a 365 day period.

*Annual whole sludge application rate* is the maximum amount of sewage sludge (dry weight basis) that can be applied to a unit area of land during a 365 day period.

*Apply sewage sludge or sewage sludge applied to the land* means land application of sewage sludge.

*Aquifer* is a geologic formation, group of geologic formations, or a portion of a geologic formation capable of yielding ground water to wells or springs.

*Auxiliary fuel* is fuel used to augment the fuel value of sewage sludge. This includes, but is not limited to, natural gas, fuel oil, coal, gas generated during anaerobic digestion of sewage sludge, and municipal solid waste (not to exceed 30 percent of the dry weight of the sewage sludge and auxiliary fuel together). Hazardous wastes are not auxiliary fuel.

*Base flood* is a flood that has a one percent chance of occurring in any given year (i.e. a flood with a magnitude equaled once in 100 years).

*Bulk sewage sludge* is sewage sludge that is not sold or given away in a bag or other container for application to the land.

*Contaminate an aquifer* means to introduce a substance that causes the maximum contaminant level for nitrate in 40 CFR §141.11 to be exceeded in ground water or that causes the existing concentration of nitrate in the ground water to increase when the existing concentration of nitrate in the ground water exceeds the maximum contaminant level for nitrate in 40 CFR §141.11.

*Class I sludge management facility* is any publicly owned treatment works (POTW), as defined in 40 CFR §501.2, required to have an approved pretreatment program under 40 CFR §403.8 (a) (including any POTW located in a state that has elected to assume local program responsibilities pursuant to 40 CFR §403.10 (e) and any treatment works treating domestic sewage, as defined in 40 CFR § 122.2,

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classified as a Class I sludge management facility by the EPA Regional Administrator, or, in the case of approved state programs, the Regional Administrator in conjunction with the State Director, because of the potential for sewage sludge use or disposal practice to affect public health and the environment adversely.

*Control efficiency* is the mass of a pollutant in the sewage sludge fed to an incinerator minus the mass of that pollutant in the exit gas from the incinerator stack divided by the mass of the pollutant in the sewage sludge fed to the incinerator.

*Cover* is soil or other material used to cover sewage sludge placed on an active sewage sludge unit.

*Cover crop* is a small grain crop, such as oats, wheat, or barley, not grown for harvest.

*Cumulative pollutant loading rate* is the maximum amount of inorganic pollutant that can be applied to an area of land.

*Density of microorganisms* is the number of microorganisms per unit mass of total solids (dry weight) in the sewage sludge.

*Dispersion factor* is the ratio of the increase in the ground level ambient air concentration for a pollutant at or beyond the property line of the site where the sewage sludge incinerator is located to the mass emission rate for the pollutant from the incinerator stack.

*Displacement* is the relative movement of any two sides of a fault measured in any direction.

*Domestic septage* is either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

*Domestic sewage* is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

*Dry weight basis* means calculated on the basis of having been dried at 105 degrees Celsius (°C) until reaching a constant mass (i.e. essentially 100 percent solids content).

*Fault* is a fracture or zone of fractures in any materials along which strata on one side are displaced with respect to the strata on the other side.

*Feed crops* are crops produced primarily for consumption by animals.

*Fiber crops* are crops such as flax and cotton.

*Final cover* is the last layer of soil or other material placed on a sewage sludge unit at closure.

*Fluidized bed incinerator* is an enclosed device in which organic matter and inorganic matter in sewage sludge are combusted in a bed of particles suspended in the combustion chamber gas.

*Food crops* are crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

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*Forest* is a tract of land thick with trees and underbrush.

*Ground water* is water below the land surface in the saturated zone.

*Holocene time* is the most recent epoch of the Quaternary period, extending from the end of the Pleistocene epoch to the present.

*Hourly average* is the arithmetic mean of all the measurements taken during an hour. At least two measurements must be taken during the hour.

*Incineration* is the combustion of organic matter and inorganic matter in sewage sludge by high temperatures in an enclosed device.

*Industrial wastewater* is wastewater generated in a commercial or industrial process.

*Land application* is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

*Land with a high potential for public exposure* is land that the public uses frequently. This includes, but is not limited to, a public contact site and reclamation site located in a populated area (e.g., a construction site located in a city).

*Land with low potential for public exposure* is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

*Leachate collection system* is a system or device installed immediately above a liner that is designed, constructed, maintained, and operated to collect and remove leachate from a sewage sludge unit.

*Liner* is soil or synthetic material that has a hydraulic conductivity of  $1 \times 10^{-7}$  centimeters per second or less.

*Lower explosive limit for methane gas* is the lowest percentage of methane gas in air, by volume, that propagates a flame at 25 degrees Celsius and atmospheric pressure.

*Monthly average (Incineration)* is the arithmetic mean of the hourly averages for the hours a sewage sludge incinerator operates during the month.

*Monthly average (Land Application)* is the arithmetic mean of all measurements taken during the month.

*Municipality* means a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal agency of two or more of the foregoing entities) created by or under State law; an Indian tribe or an authorized Indian tribal organization having jurisdiction over sewage sludge management; or a designated and approved management agency under section 208 of the CWA, as amended. The definition includes a special district created under state law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201 (e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use or disposal of sewage sludge.

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*Other container* is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

*Pasture* is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

*Pathogenic organisms* are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

*Permitting authority* is either EPA or a State with an EPA-approved sludge management program.

*Person* is an individual, association, partnership, corporation, municipality, State or Federal Agency, or an agent or employee thereof.

*Person who prepares sewage sludge* is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

*pH* means the logarithm of the reciprocal of the hydrogen ion concentration; a measure of the acidity or alkalinity of a liquid or solid material.

*Place sewage sludge or sewage sludge placed* means disposal of sewage sludge on a surface disposal site.

*Pollutant (as defined in sludge disposal requirements)* is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction) or physical deformations in either organisms or offspring of the organisms.

*Pollutant limit (for sludge disposal requirements)* is a numerical value that describes the amount of a pollutant allowed per unit amount of sewage sludge (e.g., milligrams per kilogram of total solids); the amount of pollutant that can be applied to a unit of land (e.g., kilograms per hectare); or the volume of the material that can be applied to the land (e.g., gallons per acre).

*Public contact site* is a land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

*Qualified ground water scientist* is an individual with a baccalaureate or post-graduate degree in the natural sciences or engineering who has sufficient training and experience in ground water hydrology and related fields, as may be demonstrated by State registration, professional certification, or completion of accredited university programs, to make sound professional judgments regarding ground water monitoring, pollutant fate and transport, and corrective action.

*Range land* is open land with indigenous vegetation.

*Reclamation site* is drastically disturbed land that is reclaimed using sewage sludge. This includes, but is not limited to, strip mines and construction sites.

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*Risk specific concentration* is the allowable increase in the average daily ground level ambient air concentration for a pollutant from the incineration of sewage sludge at or beyond the property line of a site where the sewage sludge incinerator is located.

*Runoff* is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off the land surface.

*Seismic impact zone* is an area that has 10 percent or greater probability that the horizontal ground level acceleration to the rock in the area exceeds 0.10 gravity once in 250 years.

*Sewage sludge* is a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to: domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in treatment works.

*Sewage sludge feed rate* is either the average daily amount of sewage sludge fired in all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located for the number of days in a 365 day period that each sewage sludge incinerator operates, or the average daily design capacity for all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located.

*Sewage sludge incinerator* is an enclosed device in which only sewage sludge and auxiliary fuel are fired.

*Sewage sludge unit* is land on which only sewage sludge is placed for final disposal. This does not include land on which sewage sludge is either stored or treated. Land does not include waters of the United States, as defined in 40 CFR §122.2.

*Sewage sludge unit boundary* is the outermost perimeter of an active sewage sludge unit.

*Specific oxygen uptake rate (SOUR)* is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in sewage sludge.

*Stack height* is the difference between the elevation of the top of a sewage sludge incinerator stack and the elevation of the ground at the base of the stack when the difference is equal to or less than 65 meters. When the difference is greater than 65 meters, stack height is the creditable stack height determined in accordance with 40 CFR §51.100 (ii).

*State* is one of the United States of America, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and an Indian tribe eligible for treatment as a State pursuant to regulations promulgated under the authority of section 518(e) of the CWA.

*Store or storage of sewage sludge* is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

*Surface disposal site* is an area of land that contains one or more active sewage sludge units.

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*Total hydrocarbons* means the organic compounds in the exit gas from a sewage sludge incinerator stack measured using a flame ionization detection instrument referenced to propane.

*Total solids* are the materials in sewage sludge that remain as residue when the sewage sludge is dried at 103 to 105 degrees Celsius.

*Treat or treatment of sewage sludge* is the preparation of sewage sludge for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of sewage sludge. This does not include storage of sewage sludge.

*Treatment works* is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

*Unstable area* is land subject to natural or human-induced forces that may damage the structural components of an active sewage sludge unit. This includes, but is not limited to, land on which the soils are subject to mass movement.

*Unstabilized solids* are organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

*Vector attraction* is the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

*Volatile solids* is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air.

*Wet electrostatic precipitator* is an air pollution control device that uses both electrical forces and water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

*Wet scrubber* is an air pollution control device that uses water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

### 3. Commonly Used Abbreviations

BOD	Five-day biochemical oxygen demand unless otherwise specified
CBOD	Carbonaceous BOD
CFS	Cubic feet per second
COD	Chemical oxygen demand
Chlorine	
Cl <sub>2</sub>	Total residual chlorine
TRC	Total residual chlorine which is a combination of free available chlorine (FAC, see below) and combined chlorine (chloramines, etc.)

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TRO	Total residual chlorine in marine waters where halogen compounds are present
FAC	Free available chlorine (aqueous molecular chlorine, hypochlorous acid, and hypochlorite ion)
Coliform	
Coliform, Fecal	Total fecal coliform bacteria
Coliform, Total	Total coliform bacteria
Cont. (Continuous)	Continuous recording of the parameter being monitored, i.e. flow, temperature, pH, etc.
Cu. M/day or M <sup>3</sup> /day	Cubic meters per day
DO	Dissolved oxygen
kg/day	Kilograms per day
lbs/day	Pounds per day
mg/l	Milligram(s) per liter
ml/l	Milliliters per liter
MGD	Million gallons per day
Nitrogen	
Total N	Total nitrogen
NH <sub>3</sub> -N	Ammonia nitrogen as nitrogen
NO <sub>3</sub> -N	Nitrate as nitrogen
NO <sub>2</sub> -N	Nitrite as nitrogen
NO <sub>3</sub> -NO <sub>2</sub>	Combined nitrate and nitrite nitrogen as nitrogen
TKN	Total Kjeldahl nitrogen as nitrogen
Oil & Grease	Freon extractable material
PCB	Polychlorinated biphenyl
pH	A measure of the hydrogen ion concentration. A measure of the acidity or alkalinity of a liquid or material
Surfactant	Surface-active agent

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Temp. °C	Temperature in degrees Centigrade
Temp. °F	Temperature in degrees Fahrenheit
TOC	Total organic carbon
Total P	Total phosphorus
TSS or NFR	Total suspended solids or total nonfilterable residue
Turb. or Turbidity	Turbidity measured by the Nephelometric Method (NTU)
ug/l	Microgram(s) per liter
WET	“Whole effluent toxicity” is the total effect of an effluent measured directly with a toxicity test.
C-NOEC	“Chronic (Long-term Exposure Test) – No Observed Effect Concentration”. The highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specified time of observation.
A-NOEC	“Acute (Short-term Exposure Test) – No Observed Effect Concentration” (see C-NOEC definition).
LC <sub>50</sub>	LC <sub>50</sub> is the concentration of a sample that causes mortality of 50% of the test population at a specific time of observation. The LC <sub>50</sub> = 100% is defined as a sample of undiluted effluent.
ZID	Zone of Initial Dilution means the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports.