

**DRAFT NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM (NPDES) GENERAL PERMITS
FOR NONCONTACT COOLING WATER DISCHARGES**

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MAG250000 and NHG250000
NONCONTACT COOLING WATER GENERAL PERMIT

Part 1 MASSACHUSETTS GENERAL PERMIT, Permit No. MAG250000

In compliance with the provisions of the Federal Clean Water Act, as amended (33 U.S.C. 1251 et seq.) and the Massachusetts Clean Waters Act, as amended (M.G.L. Chap. 21, sections 26-53), operators of facilities located in Massachusetts, which discharge noncontact cooling water (NCCW) to the classes of waters as designated in the Massachusetts Water Quality Standards, 314 CMR 4.00 et seq., are authorized to discharge to all waters, unless otherwise restricted, in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

The General Permit allows NCCW to be commingled with other discharges as long as the NCCW is monitored separately (prior to commingling) for compliance with the requirements of this General Permit.

The General Permit shall become effective on the first day of the calendar month following signature of the notice of availability of the final General Permit, published in the Federal Register.

This General Permit and the authorization to discharge supersedes the General Permit issued on April 25, 2000, and will expire at midnight, 5 years from the last day of the month preceding the effective date.

Signed this [day]th day of [Month], 2007

Stephen S. Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency
Boston, MA 02114

Glenn Haas, Director
Division of Watershed Management
Department of Environmental
Protection, Commonwealth of
Massachusetts,
Boston, MA 02108

1.1 Discharge Limits and Monitoring Requirements

1. During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge NCCW. Each outfall discharging NCCW shall be limited and monitored as specified below. Monitoring for each outfall shall be reported.

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max Daily	Monitoring Frequency	Sample Type
Flow, MGD	---	1.0 MGD ¹	1/Week	Estimate or Totalizer
Discharge Temperature Warm Water fishery ² in °F (Class A and B)	Report	83°F	1/Week	Grab
Discharge Temperature Cold Water Fishery ² in °F (Class A and B)	Report	68°F	1/Week	Grab
Discharge Temperature in °F Class SA and SB	Report	80°F	1/Week	Grab
Temperature, Influent, °F	Report	Report	1/Week	Grab
Water Body Temperature ³ Class A Waters, °F	-----	Change of less than 1.5°F from background in cold water fisheries; and, 5°F in warm water fisheries	1/Quarter	Grab See 1.2.4
Water Body Temperature ^{3,4} in °F, Class B Waters	-----	Change of less than 3.0°F from background	1/Quarter	Grab See 1.2.4
Water Body Temperature ³ in °F, Class SA Waters	-----	Change of less than 1.5°F from background	1/Quarter	Grab See 1.2.4
Water Body Temperature ³ in °F, Class SB Waters – July to September	-----	Change of less than 1.5°F from background	1/Quarter	Grab See 1.2.4

	Avg.	Max Daily	Monitoring	Sample Type
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	Monthly		Frequency	
Water Body Temperature ³ in °F Class SB Waters – October – June	-----	Change of less than 4.0°F from background	1/Quarter	Grab See 1.2.4
pH Class A and B	-----	6.5-8.3 s.u. ^{5,6,8} <0.5 outside background	1/Week	Grab report maximum and minimum
pH Class SA and SB	-----	6.5-8.5 s.u. ^{5,7,8} <0.2 outside background	1/Week	Grab report maximum and minimum
Total Residual Chlorine ⁹ Class A and B, ug/l	See 1.2.5	See 1.2.5	1/Month	Grab
Total Residual Chlorine ⁹ Class SA and SB, ug/l	See 1.2.5	See 1.2.5	1/Month	Grab
LC ₅₀ & C-NOEC, %				24-hour composite See 1.2.3

¹ Flow limits of 1.0 MGD or a lower flow if reported in the NOI and authorized by MassDEP, with EPA concurrence. Effluent flow is limited to the flow reported by permittee on its Notice of Intent (NOI).

²The definition of cold and warm water fishery can be found in the Massachusetts Surface Water Quality Standards, 314 CMR 4.02.

³Natural seasonal and daily variations shall be maintained (314 CMR 4.05(3)). Calendar year quarterly water body monitoring shall be done on a day when the facility is operating and on one of the days the discharge temperature is monitored and reported. Quarterly waterbody monitoring shall be done at a one foot depth.

See also Section 1.2.4 of the General Permit.

⁴In lakes and ponds the rise shall not exceed 3°F in the epilimnion (based on the monthly average of maximum daily temperature); and natural seasonal and daily variations shall be maintained (314 CMR 4.05(3)(b)2).

⁵ There shall be no change from background conditions that would impair any uses assigned to the receiving water class.

⁶ The discharge shall not be more than 0.5 pH units from background conditions.

⁷ The discharge shall not be more than 0.2 pH units from background conditions.

⁸ MassDEP, with EPA concurrence, may expand the pH range to the federal standard 6.0-9.0 s.u., on a case-by-case basis when conditions warrant it.

⁹ Monitoring for total residual chlorine is only required for dischargers using potable water for NCCW.

1.2 Other Requirements

1. Samples taken in compliance with the monitoring requirements specified above shall be taken at a location that provides a representative sample of the effluent just prior to discharge to the receiving water or, if the effluent is commingled with another discharge, prior to such commingling. Samples for temperature shall be

taken during normal operations (i.e., when the facility is operating under normal heat load and temperature variations are minimal).

2. Any change in sampling locations must be reviewed and approved in writing by EPA and MassDEP. All samples shall be tested using the analytical methods found in 40 CFR Section 136 or alternative methods approved by EPA in accordance with the procedures in 40 CFR Section 136. All samples shall be a composite unless specified as a grab sample in either 40 CFR Section 136 or in Part 1.1.1 (“sample type”) of the General Permit.
3. Chronic (and modified acute) toxicity test(s) shall be performed on the NCCW discharge by the permittee upon request by EPA and/or MassDEP. Any testing shall be performed in accordance with EPA’s toxicity protocol, a copy of which will be provided at the time of the request. Toxicity test protocols may be viewed at http://www.epa.gov/region1/npdes/epa_attach.html#epa. The test shall be performed on a 24-hour composite sample taken during normal facility operation. The results of the test (C-NOEC and LC₅₀) shall be forwarded to MassDEP and EPA no later than 30 days after completion of the test.
4. The permittee is required to monitor in-water body temperature in accordance with the requirements of Part 1.1, except as noted below. Waterbody monitoring shall be done at a one foot depth. During each monitoring event the permittee shall collect one background grab sample from upstream and one downstream grab sample a sufficient distance downstream of the discharge outfall to allow for initial dilution (mixing zone). The location of the downstream sample shall be consistent with the Massachusetts mixing zone requirements (see 314 CMR 4.03(2)).

If the discharge is into a lake, pond, ocean, estuary or a non-flowing water body, one background grab sample shall be taken from an area not expected to be impacted by the discharge. Another “downstream” grab sample shall be taken in an area where the temperature is likely to be impacted by the discharge after allowable mixing consistent with the Massachusetts Mixing Zone policy. The background and downstream in-water body temperature samples shall be taken within a fifteen minute time period, all during a continuous discharge of NCCW. The background and downstream in-water body temperature sample locations shall be identified on a map and submitted with the NOI, at an appropriate scale to distinguish the sampling locations and location of the facility NCCW outfall.

Alternatively, the permittee may demonstrate through engineering calculations that the discharge will not cause or contribute to a violation of the allowable water body temperature change. This calculation shall be based on the maximum amount of heat discharged from the facility and the dilution available in the receiving water, if any. See Attachment A of the Permit for the formulas to be used in such a calculation and example calculations.

5. The maximum daily and average monthly concentration of Total Residual

Chlorine (TRC) allowed in the effluent are based on the appropriate water-quality criterion and the available dilution in the receiving water. This is expressed in the following equation:

$$\text{Effluent Limit} = (\text{Dilution Factor}) \times (\text{Water Quality Criteria})$$

The appropriate water quality criteria are shown below:

- Freshwater acute (Class A or B) = 19 ug/l (0.019 mg/l); use for daily maximum
- Freshwater chronic (Class A or B) = 11 ug/l (0.011 mg/l); use for average monthly
- Marine acute (Class SA or SB) = 13 ug/l (0.013 mg/l); use for daily maximum
- Marine chronic (Class SA or SB) = 7.5 ug/l (0.0075 mg/l); use for average monthly

The available dilution shall be determined by using the equations found in Attachment B of the Permit.

Both the dilution factor and applicable chlorine limits will be approved by EPA and MassDEP during review of the facility's NOI. The permittee will be provided with the appropriately determined limits when notified of permit coverage.

The TRC limit only applies to facilities that use potable water for noncontact cooling water. The permittee may not add chlorine or any other biocide to noncontact cooling water used at the facility. A facility that uses potable water as an alternate source of NCCW and did not include that alternate source water information in its NOI, must contact EPA and the State Agency prior to using this alternate source to obtain a TRC effluent limit and related reporting requirements.

6. Any discharge that causes a violation of the water quality standards of the receiving waters is prohibited.
7. Any discharge of floating solids, visible oil sheen or foam other than in trace amounts is prohibited.
8. Flow equalization may be required on a case-by-case basis.
9. This permit does not allow the discharge of any chemicals except for non-toxic chemicals used for pH neutralization and/or dechlorination. The use of additives to control biological growth, corrosion, and/or scale in cooling water is prohibited. Prior to discharging pH neutralization and/or dechlorination chemicals, the discharger must receive written approval from MassDEP. The written request for approval must contain the information below for each non-toxic pH neutralization and/or dechlorination chemical used:

- (1) Name and manufacturer,
- (2) Maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the NCCW discharge, and
- (3) The vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for aquatic organism(s)).

The initial request for approval may be submitted with the applicant's NOI letter. All substitutions of nontoxic neutralization chemicals must be approved by the State in writing prior to their usage. All written substitution requests must contain the information required in (1), (2) and (3) immediately above.

1.3 State Permit Conditions

1. This discharge permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the MassDEP under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, Section 43.
2. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as an NPDES permit issued by the U.S. EPA. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.
3. An authorization to discharge under this General Permit, where the activity discharges to a municipal or private storm drain owned by another party, does not convey any rights or authorization to connect to that drain.
4. As provided in 314 CMR 3.06(8), in lieu of requiring a discharger covered under a general permit to obtain an individual permit, MassDEP may direct such discharger to undertake additional control measures, BMPs, or other actions to ensure compliance with the general permit, water quality standards, and/or to protect public health and the environment. MassDEP may exercise its authority to require the discharger to take these actions by imposing a condition in the general permit to that effect, or by taking an enforcement action against the discharger, or by any other means.

Part 2 NEW HAMPSHIRE GENERAL PERMIT, Permit No. NHG250000

In compliance with the provisions of the Federal Clean Water Act, as amended (33 U.S.C. 1251 et seq.), operators of facilities located in New Hampshire that discharge noncontact cooling water (NCCW) are authorized to discharge to all waters, unless otherwise restricted by State Water Quality Standards, New Hampshire RSA 485-A:8, in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

The General Permit allows NCCW to be commingled with other discharges as long as the NCCW can be monitored separately for compliance.

The General Permit shall become effective on the first day of the calendar month following signature of the notice of availability of the final General Permit, published in the Federal Register.

This General Permit and the authorization to discharge supersedes the General Permit issued on April 25, 2000, and will expire at midnight, 5 years from the last day of the month preceding the effective date.

Signed this [day]th day of [Month], 2007

Stephen S. Perkins, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA 02114

2.1 Discharge Limits and Monitoring Requirements

1. During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge NCCW. Each outfall discharging NCCW shall be limited and monitored as specified below. Monitoring for each outfall shall be reported.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Avg. Monthly	Max Daily	Monitoring Frequency	Sample Type
Flow, MGD	---	1.0 MGD ¹	1/Week	Estimate or Totalizer
Discharge Temperature, in °F, Warm Water Fishery ²	Report	83°F	1/Week	Grab
Discharge Temperature, in °F, Cold Water Fishery ²	Report	68°F	3/Week	Grab
pH ³	---	6.5-8.0 ³	1/week	Grab
pH of Upstream Receiving Water ³	Report	Report	See footnote ⁴ below	Grab
Total Residual Chlorine ⁵ , ug/l, Marine Water	7.5 ug/l	13 ug/l	Quarterly	Grab
LC ₅₀ & C-NOEC, %	See 2.2.5			24-hour composite

¹The State, with EPA concurrence, may allow coverage under the General Permit for discharges of greater than 1 MGD on a case-by-case basis. Discharges must be consistent with all terms and conditions of the permit and must not violate applicable surface water quality standards. Effluent flow is limited to the flow reported by the permittee on its Notice of Intent.

²The New Hampshire Department of Fish and Game determines which waters are cold and warm water fisheries.

³The pH shall be in the specified range or within 0.5 s.u. of the upstream receiving water pH in accordance with Part 2.3.1 of this permit.

⁴ Upstream receiving water monitoring and reporting required if permittee is demonstrating compliance of its effluent's pH in accordance with Part 2.3.1 of this permit

⁵ Calendar year quarterly monitoring for total residual chlorine is only required for dischargers using chlorinated potable water for NCCW. If after submitting its NOI, a facility uses potable water as an alternate source of NCCW, the facility must contact EPA and the State Agency prior to using this alternate source to obtain a TRC effluent limit and related reporting requirements.

2.2 Other requirements

1. Samples taken in compliance with the monitoring requirements specified above shall be taken at a location that provides a representative analysis of the effluent just prior to discharge to the receiving water or, if the effluent is commingled with another permitted discharge, prior to such commingling.
2. Any change in sampling locations must be reviewed and approved in writing by EPA and NHDES. All samples shall be tested using the analytical methods found in 40 CFR Section 136 or alternative methods approved by EPA in accordance with the procedures in 40 CFR Section 136. All samples shall be a composite sample unless specified as a grab sample in either 40 CFR Section 136 or Part 2.1.1 (“sample type”) of the General Permit.
3. Any discharge that causes a violation of the water quality standards of the receiving waters is prohibited.
4. Any discharge of oil, floating solids, foam, debris or other visible pollutants is prohibited.
5. Chronic (and modified acute) toxicity test shall be performed on the NCCW discharge by the permittee upon request by EPA and/or the New Hampshire Department of Environmental Services (NHDES). Any testing shall be performed in accordance with EPA’s toxicity protocol, a copy of which will be provided at the time of the request. Toxicity test protocols may be viewed at http://www.epa.gov/region1/npdes/epa_attach.html#epa. The test shall be performed on a 24-hour composite sample taken during normal facility operation. The results of the test (C-NOEC and LC₅₀) shall be forwarded to the State and EPA within 30 days after completion.
6. This permit does not allow the discharge of any chemicals except for non-toxic chemicals used for pH neutralization and/or dechlorination. The use of additives to control biological growth, corrosion, and/or scale in cooling water is prohibited. Prior to discharging pH neutralization and/or dechlorination chemicals, the discharger must receive written approval from NHDES. The written request for approval must contain the information below for each non-toxic chemical used:
 - (1) Name and manufacturer,
 - (2) Maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the NCCW discharge, and
 - (3) The vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for aquatic organism(s)).

The initial request for approval may be submitted with the applicant’s NOI letter.

All substitutions of nontoxic neutralization and/or dechlorination chemicals must be approved by the State in writing prior to their usage. All written substitution requests must contain the information required in (1), (2) and (3) immediately above.

2.3 State Permit Conditions

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

1. The pH of the discharge shall be in the range of 6.5 to 8.0 Standard Units (s.u.) unless the upstream ambient pH in the receiving water is outside of this range and it is not altered by the facility's discharge or activities. If the permittee's discharge pH is lower than 6.5 s.u., the permittee may demonstrate compliance by showing that the discharge pH was either higher than, or no more than 0.5 s.u. lower than, the ambient upstream receiving water pH. If the permittee's discharge pH is higher than 8.0 s.u., the permittee may demonstrate compliance by showing that the discharge pH is either lower than, or no more than 0.5 s.u. higher than, the upstream receiving water pH. For this demonstration the upstream receiving water sample must be collected on the same day as the discharge pH is measured. The location where the upstream ambient pH sample is collected shall be representative of upstream conditions unaffected by the facility's discharge(s) or activities. For this determination for discharges to tidal waters, upstream samples must be collected during the last two hours of the ebb (outgoing) tide, when discharge pH values are below 6.5 s.u.; and during the last two hours of the flood (incoming) tide, when discharge pH values are above 8.0 s.u.
2. This NPDES Permit is issued by the EPA under Federal law. Upon final issuance by the EPA, the NHDES may adopt this permit, including all terms and conditions, as a State permit pursuant to RSA 485-A:13. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of the permit as issued by the other agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation.

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

3. An authorization to discharge under this General Permit, where the activity discharges to municipal or private storm drain owned by another party, does not convey any rights or authorization to connect to that drain.
4. At any time that NHDES determines that additional water quality certification requirements are necessary to protect water quality, an individual discharge may be required to meet additional conditions to obtain coverage or to continue coverage under the NCCW General Permit. Any such conditions shall be supplied to the permittee in writing.

NOTE: The following Parts 3 through Part 9 are common elements for both the Massachusetts and New Hampshire General Permits.

Part 3 Applicability and Coverage of Noncontact Cooling Water General Permit

3.1 Subject Discharges: The permittee is authorized to discharge noncontact cooling water (NCCW). NCCW is water used for cooling that does not come into direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.

This General Permit will cover discharges of NCCW of up to 1.0 million gallons a day (MGD) per outfall in Massachusetts and New Hampshire. On a case-by-case basis, for facilities located in New Hampshire, larger volume discharges may be covered by this General Permit if the State of New Hampshire allows coverage and both EPA and the State approve the discharge. Effluent flow for each facility covered by the General Permit is limited to the flow reported on the NOI.

3.2 Geographic Coverage Area:

1. Massachusetts: Facilities authorized by the Massachusetts General Permit (permit number MAG250000) for discharges in the Commonwealth of Massachusetts may discharge into all waters of the Commonwealth and Indian Country lands, except as provided in Item 3.3, immediately below, unless otherwise restricted by the Massachusetts Surface Water Quality Standards, 314 CMR 4.00 (or as revised), including 314 CMR 4.04(3) Protection of Outstanding Resource Waters.
2. New Hampshire: Facilities authorized by the New Hampshire General Permit (permit number NHG250000) may discharge into all waters of the State of New Hampshire, except as provided in Item 3.3, 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-Ws 1700 or as revised.

3.3 Specific Discharges Excluded from Coverage: The following discharges are excluded from coverage under this General Permit:

1. Discharges from new facilities (including new offshore oil and gas extraction facilities), as defined in 40 CFR §125.83, that have a design intake flow greater than two (2) million gallons per day and at least one cooling water intake structure that uses at least 25 percent of the water it withdraws for cooling purposes.
2. Discharges to Outstanding Resource Waters in Massachusetts and New Hampshire:
 - i) as defined in Massachusetts by 314 CMR 4.06(3), including Public Water Supplies (314 CMR 4.06(1)(d)1), which have been designated by the State as Class A waters, unless a variance is granted by the MassDEP, under 314 CMR 4.04(3)(b); or,
 - ii) as defined in New Hampshire under Env-Ws 1708.05(a), unless allowed by the NHDES under Env-Ws 1708.05(b).
3. Discharges to Class A waters in New Hampshire, in accordance with RSA 485-A:8, I. To determine if the proposed receiving water is a Class A waterbody, contact the NHDES at the address listed in Appendix 4.3 of this General Permit.
4. Discharges to a river designated as a Wild and Scenic River. (As of 1/1/2007, the Wildcat Brook and Lamprey River in New Hampshire and the Westfield, Sudbury, Assabet and Concord Rivers in Massachusetts have been designated as Wild and Scenic Rivers. See <http://www.rivers.gov/wildriverslist.html#ma> for current designations and additional information.)
5. Discharges of any commercial or industrial wastes to Ocean Sanctuaries in Massachusetts, as defined by at 302 CMR 5.00.
6. Discharges to territorial seas, as defined by Section 502 of the Clean Water Act.
7. Discharges of pollutants which are specifically included in the States' published 303(d) lists of "non-attainment" segments of receiving waters in the Commonwealth or State unless the discharge is at or below a concentration that meets water quality standards for the listed pollutants.
8. Any facility whose new or increased discharge is not in compliance with the States' antidegradation policy or the New Hampshire Water Conservation Rules (Env-Ws 390, or as amended).
9. Discharges that are likely to jeopardize the continued existence of any federally-listed endangered or threatened species or to adversely impact or destroy critical habitat of such

species. Discharges to designated areas under the Endangered Species Act (ESA) are excluded for coverage under this General Permit unless the requirements specified in this permit are fulfilled. See Paragraph 3.4 below and Appendix 2 for additional requirements.

10. Discharges to designated areas under the Essential Fish Habitat Act (EFH) unless the requirements specified in this General Permit are fulfilled as discussed in the Fact Sheet Question 26, which is posted for reference at www.epa.gov/region1/npdes/permits/noncontactcoolwatermassnh.pdf

11. Discharges 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 Sections 470 et seq. See Paragraph 3.4 below and Appendix 3 for more information.

12. Discharges to a Publicly-Owned Treatment Works (POTW) which are permitted under Section 402 of the CWA (NPDES).

13. “New Source” dischargers, as defined in 40 CFR § 122.2.

14. Discharges for which the Director makes a determination that an individual permit is required under 40 CFR 122.28(b)(3). See Part 5.10 of this General Permit for more information.

15. Facilities that require an individual permit based on the Director’s consideration of factors including, but not limited to, the following:

- Variability of the pollutants or pollutant parameters in the effluent (based on chemical-specific information and the type of treatment facility);
- Receiving stream or withdrawal stream characteristics, including possible or known water quality impairment;
- Recommendation from the State;
- The location, capacity, design or construction of the cooling water intake structure that may represent an adverse environmental impact;
- Other considerations (including but not limited to consultation with the State, a history of toxic impact or compliance problems at the facility) which the Director determines could cause or contribute to adverse water quality impacts;
- Stream flows that are not maintained at levels to protect existing and designated uses as established in the State’s water quality standards;
- The discharge from the facility, when combined with other dischargers in the watershed, that may represent a cumulative adverse environmental impact to the receiving water; or
- Metal concentrations in the effluent (from a facility that uses groundwater as the source of NCCW) that may cause or contribute to adverse water quality impact after consideration of the dilution available and other factors.

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

In addition, for facilities located in Massachusetts, permit coverage for discharges to Areas of Critical Environmental Concern (ACEC), as defined by the Massachusetts Wetlands Protection Act c.131, Section 40, are contingent upon review and approval by EPA-New England and MassDEP. See Appendix 1 for a listing of ACEC's by city and town in Massachusetts.

1. Endangered and Threatened Species and/or Critical Habitat:¹ Discharges that are located in areas in which listed endangered or threatened species may be present may be covered under this permit only if operators demonstrate permit eligibility following the eligibility requirements of Appendix 2 and the most recent Endangered and Threatened Species County-Species List in Appendix 2.1. This determination shall be included in the NOI as described in Appendices 2 and 4.

There are four listed species of concern to applicants applying for permit coverage, namely the shortnose sturgeon, the dwarf wedge mussel, the bog turtle, and the northern redbelly cooter. The shortnose sturgeon is listed under the jurisdiction of the NOAA National Fisheries Service and the dwarf wedge mussel, the bog turtle, and the northern redbelly cooter are listed under the jurisdiction of the U.S. Fish and Wildlife Service.

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 Sections 470 et seq. are not authorized to discharge under this 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. Applicants are required to submit the results of any consultations with its NOI. Electronic listings of National and State Registers of Historic Places are maintained by the National Park Service (www.nr.nps.gov), the Massachusetts Historical Commission (www.sec.state.ma.us/mhc/mhcidx.htm) and the New Hampshire Historical Commission (www.state.nh.us/nhdhr).

Applicants must also comply with applicable State, Tribal and local laws concerning the protection of historic properties and places. Applicants must coordinate with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer and others regarding effects of their discharges on historic properties. Prior to submitting the NOI, the applicant must meet the requirements of Appendix 3.

¹ There is currently only one area federally-designated as a critical habitat in MA, i.e., for the northern redbelly cooter in Plymouth County, MA, and none in NH.

Part 4 CWA Section 316(b) Requirements for the Design and Operation of Cooling Water Intake Structures

This section implements the requirements of Section 316(b) of the Clean Water Act. Section 316(b) requires that the location, design, construction and capacity of cooling water intake structures (CWIS) reflect the best technology available (BTA) for minimizing adverse environmental impacts.

CWIS cause adverse environmental impacts by pulling eggs and larvae into the cooling system. This is known as entrainment. Entrained organisms may be killed or injured by heat or physical stress as they pass through the cooling water system. CWIS also kill or injure larger organisms when they are trapped against screens at the front of an intake structure. This process is known as impingement.

The requirements of this section of the NCCW General Permit are intended to minimize the entrainment and impingement of aquatic organisms by facilities covered under this permit. These requirements reflect the BTA for minimizing the impact of CWIS for facilities covered by this permit.

4.1 Definitions that apply to this section - The definitions of the following terms used in this permit are as found in 40 CFR Section 125.83. For convenience, the definitions, as recorded in 66 Federal Register 65338, Dec. 18, 2001, as amended at 68 Federal Register 36754, June 19, 2003 and as effective on February 12, 2007, are included below.

Annual mean flow means the average of daily flows over a calendar year. Historical data (up to 10 years) must be used where available.

Closed-cycle recirculating system means a system designed, using minimized makeup and blowdown flows, to withdraw water from a natural or other water source to support contact and/or noncontact cooling uses within a facility. The water is usually sent to a cooling canal or channel, lake, pond, or tower to allow waste heat to be dissipated to the atmosphere and then is returned to the system. (Some facilities divert the waste heat to other process operations.) New source water (make-up water) is added to the system to replenish losses that have occurred due to blowdown, drift, and evaporation.

Cooling water means water used for contact or noncontact cooling, including water used for equipment cooling, evaporative cooling tower makeup, and dilution of effluent heat content. The intended use of the cooling water is to absorb waste heat rejected from the process or processes used, or from auxiliary operations on the facility's premises. Cooling water that is used in a manufacturing process either before or after it is used for cooling is considered process water for the purposes of calculating the percentage of a new facility's intake flow that is used for cooling purposes in §125.81(c).

Cooling water intake structure (CWIS) means the total physical structure and any associated constructed waterways used to withdraw cooling water from waters of the U.S.

The cooling water intake structure extends from the point at which water is withdrawn from the surface water source up to, and including, the intake pumps.

Design intake flow means the value assigned (during the facility's design) to the total volume of water withdrawn from a source water body over a specific time period.

Design intake velocity means the value assigned (during the design of a cooling water intake structure) to the average speed at which intake water passes through the open area of the intake screen (or other device) against which organisms might be impinged or through which they might be entrained.

Entrainment means the incorporation of all life stages of fish and shellfish with intake water flow entering and passing through a cooling water intake structure and into a cooling water system.

Estuary means a semi-enclosed body of water that has a free connection with open seas and within which the seawater is measurably diluted with fresh water derived from land drainage. The salinity of an estuary exceeds 0.5 parts per thousand (by mass) but is typically less than 30 parts per thousand (by mass).

Freshwater river or stream means a lotic (free-flowing) system that does not receive significant inflows of water from oceans or bays due to tidal action. For the purposes of this rule, a flow-through reservoir with a retention time of 7 days or less will be considered a freshwater river or stream.

Impingement means the entrapment of all life stages of fish and shellfish on the outer part of an intake structure or against a screening device during periods of intake water withdrawal.

Lake or reservoir means any inland body of open water with some minimum surface area free of rooted vegetation and with an average hydraulic retention time of more than 7 days. Lakes or reservoirs might be natural water bodies or impounded streams, usually fresh, surrounded by land or by land and a man-made retainer (e.g., a dam). Lakes or reservoirs might be fed by rivers, streams, springs, and/or local precipitation. Flow-through reservoirs with an average hydraulic retention time of 7 days or less should be considered a freshwater river or stream.

Ocean means marine open coastal waters with a salinity greater than or equal to 30 parts per thousand (by mass).

Source water means the water body (waters of the U.S.) from which the cooling water is withdrawn.

Tidal river means the most seaward reach of a river or stream where the salinity is typically less than or equal to 0.5 parts per thousand (by mass) at a time of annual low flow and whose surface elevation responds to the effects of coastal lunar tides.

4.2 Facilities That Must Comply With This Section. If both of the following conditions apply to the facility seeking coverage under this permit, then the permittee must comply with the requirements of Sections 4.1 to 4.3.

- The facility has discharges covered by this General Permit; and,
- The facility withdraws water from surface source waters for use, in full or part, as noncontact cooling water.

4.3 Best Technology Available (BTA) Requirements to Minimize the Adverse Environmental Effects of a CWIS

a. General BTA Requirements. If a facility meets the applicability requirements of Section 4.2, the permittee must implement the following general BTA and BTA-related requirements.

- Cease or reduce the intake of cooling water whenever withdrawal of source water is not necessary;
- Return all observed live fish impinged on or in the CWIS to the source water to the extent practicable in a manner that maximizes their chance of survival;
- Ensure that no chlorinated water is sprayed on impinged fish or invertebrates if sprayed water is used to remove impinged fish or invertebrates from the CWIS; and,
- Conduct and document a program tailored to the facility's CWIS to regularly monitor for impinged fish and impinged invertebrates and retain the results of this monitoring on-site for inspection by or submission to EPA for at least five calendar years from the date of the monitoring event. Upon request from EPA, provide an explanation in writing why the program to regularly monitor for impinged fish and impinged invertebrates is appropriate for each particular CWIS and situation.

b. Facility-Specific BTA Requirements. Facilities that meet the applicability requirement of Section 4.2 must implement, in addition to the four general BTA requirements listed in section 4.3(a), measures that satisfy a facility-specific use of the best technology available. The Notice of Intent (NOI) must include a facility-specific BTA description. The permittee shall propose and implement a facility-specific BTA description which shall consist of one or a combination of: (1) attributes of the current CWIS, (2) design measures, and/or (3) operational measures. The NOI shall describe these attributes and

measures, collectively referred to as the “facility-specific BTA description.” See Attachment C of the General Permit for a list of potential components of a facility specific BTA description.

The NOI shall include a characterization of the source water body’s fish habitat in the vicinity of each CWIS during the seasons when the CWIS may be in use. Include a characterization of the following: the abundance of fish eggs, larvae, juveniles and adults; the density of these life stages; and the potential for entrainment and impingement of fish eggs, larvae, juveniles and adults in the CWIS intake water. Include information such as the fish species expected in the water body, stocking programs affecting their presence, and the quality of the local spawning and nursery habitat. Base this characterization on sampling, water body characteristics, CWIS features, available documentation of the presence of fish species (or the absence of fish species) in the surface water body, and/or other information. Fully cite any reports, documents, or personal observations used as references for this characterization, and, if available, provide a copy of such references with the NOI.

In addition, the NOI shall include the following information related to each CWIS to support the facility-specific BTA description:

- The design capacity of the CWIS, in million gallons per day (mgd);
- The maximum monthly average intake of the CWIS in mgd during the previous five years in mgd, and the month in which this flow occurred;
- Whether the facility withdraws cooling water at a rate commensurate with a closed-cycle cooling system. If so, a demonstration of this shall be included in the NOI.;
- The water body type of the source water, as defined in Section 4.1 (estuary; freshwater river or stream; lake or reservoir; ocean; or tidal river);
- The maximum through-screen design intake velocity in feet per second (fps);
- The source water’s annual mean flow if the CWIS is located on a freshwater river or stream, in cubic feet per second (cfs);
- The design intake flow as a percent of the source water’s annual mean flow if the CWIS is located on a freshwater river or stream;
- The source water’s 7Q10 if the CWIS is located on a freshwater river or stream, in cubic feet per second (cfs). See Attachment B of the General Permit for information on how to determine the 7Q10 of the source water;
- The design intake flow as a percent of the source water’s 7Q10 if the CWIS is located on a freshwater river or stream; and
- A description of the historical occurrence of impinged fish on or in the CWIS during the five years prior to the date of the applicant’s Notice of Intent. If impingement has been observed, the following information shall be included for each impingement episode, if available: duration of the event, number, species and length of impinged fish, condition of fish (dead or alive), actions taken (e.g. fish returned to river, fish collected, cooling water intake flow reduced, etc.).

c. Implementation of Facility-Specific BTA Requirements: Upon EPA's authorization to discharge under this General Permit, the permittee shall implement and maintain the components of the facility-specific BTA description submitted in the NOI. This authorization serves as EPA's determination that the permittee meets the BTA requirements of Section 316(b). Any subsequent changes to the location, design, construction or capacity of the facility's CWIS during the period of General Permit coverage must be approved by EPA prior to implementing such a change.

Part 5 Application and Notice of Intent (NOI)

5.1 Eligibility for Coverage under the NCCW General Permit: To be covered by this permit the applicant must submit a Notice of Intent (NOI) to both EPA and the appropriate State. The NOI must contain all the information required above in Part 4, CWA Section 316(b) Requirements for the Design and Operation of Cooling Water Intake Structures; all the information required below; and all the information required in Appendix 4. The NOI must state that the discharge meets the applicable requirements of the General Permit and that the applicant is requesting coverage under this General Permit. However, the facility's discharge will not be covered until the facility receives written authorization to discharge from EPA.

Facility owners/operators must submit a NOI if they are seeking coverage under this General Permit for the first time or if the facility received coverage under the NCCW General Permit that expired on April 25, 2005.

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. If EPA revokes the individual permit, the General Permit would apply to the discharge. Facilities with expired individual permits that have been administratively continued may also apply for coverage under this General Permit. When coverage is granted, the expired individual permit is no longer in effect.

5.2 NOI Options: The owner and/or operator of the facility is responsible for applying for the General Permit as required by 40 CFR Section 122.21(b). To be covered by this General Permit, operators of facilities whose discharge or discharges are identified in Part 3.1 of this permit, must submit to EPA-NE and the appropriate State, a complete, signed NOI. For purposes of this General Permit, the NOI consists of either:

- a. The suggested NOI form at Appendix 4.1 of this permit, or
- b. Another form of official correspondence containing all of the information required in the NOI instructions in Appendix 4 of this permit.

5.3 NOI Submittal Time Frames

- a. Proposed New Discharges: Facilities with proposed new discharges that are seeking coverage under this General Permit must submit an NOI to EPA-NE and the respective State, post-marked at least 60 days prior to the commencement of discharge.
- b. Existing Permitted Discharges: Facilities with existing coverage under the NCCW General Permit that expired on April 25, 2005 and that wish to seek coverage under this General Permit, must file an NOI to EPA-NE and the respective State for coverage under this General Permit within 60 days of the effective date of this permit. For enforcement purposes, failure to submit a NOI within 60 days of the effective date of the General Permit for an existing permitted NCCW discharge will be considered to be discharging without a permit.

5.4 Special NOI Requirements for Groundwater Sources of NCCW

1. If groundwater is used as all or part of the source water of the facility’s noncontact cooling water, the NOI must include the results of laboratory analyses for the parameters listed below, of a representative sample of the NCCW effluent. Note that the hardness analysis should be of a representative sample of the receiving surface water upstream of the facility’s discharge. All metals shall be reported as total recoverable.

Antimony	Chromium (Total)	Iron	Silver
Arsenic	Chromium (VI)	Mercury	Zinc
Cadmium	Copper	Nickel	
pH	Chloride		

Hardness – sample of receiving surface water

- 2. The effluent sample shall be taken at a location that provides a representative analysis of the NCCW effluent. For the effluent sample, to the extent practicable, the sample shall be taken just prior to discharge to the receiving water or, if the effluent is commingled with another permitted discharge, prior to such commingling. The instream sample for hardness should be taken upstream of the facility discharge and other facility activities that could affect water quality.
- 3. All samples shall be tested using the analytical methods found in 40 CFR Part 136, alternative methods approved by EPA in accordance with the procedures at 40 CFR Part 136, or methods listed in Appendix 5.
- 4. Analysis of the effluent samples, as well as the in-stream sample for hardness, shall use the 40 CFR Part 136 approved test methods that will achieve the lowest available minimum levels (MLs).

5.5 Endangered Species Act Consultation with Federal Services: All NOI applicants must comply with the requirements of Appendix 2 regarding consultation

pertaining to endangered species.

5.6. National Historic Preservation Act Review: All NOI applicants must comply with the requirements of Appendix 3 regarding potential adverse effect on properties that are listed or eligible for listing on the National Register of Historic Places.

5.7 Signature: The NOI must be signed by the owner and/or operator of the facility in accordance with the signatory requirements of 40 CFR Section 122.22.

5.8 Submission of NOIs: Each applicant must submit a copy of the NOI to EPA and the appropriate State authority listed in Appendix 4.3

5.9 Submission of State Applications

1.a. **Massachusetts facilities** with new or increased discharges, or facilities with a NCCW discharge that are currently covered by an individual permit and have been requested to seek coverage under the General Permit, must submit the following documents to the appropriate MassDEP offices, at the addresses listed in Appendix 4.3:

- (1) a copy of the completed EPA's Suggested NOI Form found at Appendix 4.1; and,
- (2) the completed State transmittal form.

The transmittal form, instructions, and fee amount may be obtained through the MassDEP website at <http://www.mass.gov/dep/water/approvals/surffms.htm>. Click on "Getting Started" to link to the both the transmittal form and form instructions.

1.b. **Massachusetts facilities** with NCCW discharges that were covered under the expired General Permit had their coverage administratively continued if the facility submitted a renewal application before the General Permit expired on April 25, 2005. To obtain coverage under this General Permit, these facilities must submit the following documents to MassDEP at the addresses listed in Appendix 4.3 of the General Permit:

- (1) a completed copy of EPA's Suggested NOI Form, Appendix 4.1; and,
- (2) a copy of the MassDEP transmittal from their previous application.

2. **The State of New Hampshire** does not have a state application form. Facilities located in New Hampshire are encouraged to complete EPA's suggested NOI form found in Appendix 4.1.

5.10 When the Director May Require an Application for an Individual NPDES

Permit: The Director may require any person authorized by this permit to apply for and obtain an individual NPDES permit. Any interested person may petition the Director to take such action.

a. Instances where an individual permit may be required include, but are not limited to, the following:

- i) The discharge(s) is a significant contributor of pollution or is in violation of State Water Quality Standards for the receiving water;
- ii) The discharger is not in compliance with the conditions of this General Permit;
- iii) A change has occurred in the availability of the demonstrated technology of practices or the control or abatement of pollutants applicable to the point source;
- iv) Effluent limitation guidelines are promulgated for point sources covered by this permit;
- v) A Water Quality Management Plan or Total Maximum Daily Load containing requirements applicable to such point source is approved;
- vi) The location, capacity, design or construction of the cooling water intake structure may represent an adverse environmental impact;
- vii) The discharge is to the territorial sea;
- viii) The discharge adversely impacts any federally-managed species for which Essential Fish Habitat has been designated;
- ix) The metal concentrations in the effluent (from a facility that uses groundwater as the source water for NCCW) cause or contribute to adverse water quality impacts; and,
- x) The point source(s) covered by this permit no longer:
 - (a) Involves the same or substantially similar types of operations;
 - (b) Discharges the same types of wastes;
 - (c) Requires the same effluent limitations or operating conditions;
 - (d) Requires the same or similar monitoring; and
 - (e) In the opinion of the Director, is more appropriately controlled under an individual or different general permit.

b. 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.

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

5.11 When a Permittee May Request that an Individual NPDES Permit Be Issued:

Any operator may request to be excluded from the coverage of this General Permit by applying for an individual permit. The request may be made by submitting an NPDES permit application and documentation to support the request to EPA for consideration.

5.12 EPA Determination of Coverage: Any applicant may request to be included

under this General Permit but the final authority rests with the EPA. Coverage under the General Permit will not be effective until EPA has reviewed the NOI, made a determination that coverage under the NCCW General Permit is authorized, and has notified the operator in writing of its determination. The effective date of coverage will be the date of signature of the authorization letter by the EPA.

Part 6 Monitoring, Recordkeeping and Reporting Requirements

Signed and dated original DMRs, and all other reports (including copies of all toxicity tests and other notifications required by this permit herein or in Part 9.4, Standard Conditions, Reporting Requirements) shall be submitted to EPA-New England and the appropriate State Agency at the addresses listed below.

6.1 Facilities in New Hampshire: Monitoring results obtained during the previous month must be summarized for each month and reported on separate Discharge Monitoring

Report Forms (DMRs), postmarked no later than the 15th day of the month following the completed reporting period. Facilities that do not discharge NCCW during a particular month are required to submit monthly DMRs that indicate no discharge for that month.

New Hampshire facilities shall submit duplicate signed copies of all reports required herein to the State at:

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

6.2 Facilities in Massachusetts:

a. On a quarterly basis, monitoring results obtained during the previous 3 months must be summarized for each month and reported on separate Discharge Monitoring Report Forms (DMRs). The DMRs must be postmarked by the 15th day of January, April, July and October. The first report may include less than 3 months information.

b. Operators of facilities that discharge intermittently (discharges that occur sometimes but not regularly, i.e., monthly or seasonally or another regular frequency) are not required to submit DMRs to maintain coverage under this General Permit. Rather, these facilities are required to submit an annual report that verifies that no discharge occurred during the previous calendar year. The annual report must be postmarked by the 15th of January.

In addition, when facilities that discharge NCCW on an intermittent basis commence to discharge NCCW, then the operator must submit written notification of the discharge to EPA, within five (5) days of the start of the discharge, at the address listed below and

begin submitting DMRs as required in 6.2.a. above.

Massachusetts facilities shall submit duplicate signed copies of all reports required herein to the State at:

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd floor
Worcester, MA 01608

Massachusetts facilities must also submit copies of all DMRs to the MassDEP Regional Office where the discharge occurs. A list of regional office addresses can be found at <http://www.mass.gov/dep/about/region/findyour.htm> and Appendix 4.3 of the General Permit.

6.3 ALL FACILITIES: Signed and dated original DMRs and all other reports required herein shall be submitted to EPA at:

U.S. Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, MA 02114-8127

Part 7 Administrative Requirements

7.1 Notice of Termination (NOT) of Discharge: Permittees shall notify EPA-NE and the appropriate State agency in writing of the termination of the discharge(s) authorized under the General Permit. The Notice of Termination (NOT) may be either the suggested NOT form in Appendix 4.2, or any other form of official correspondence that incorporates all of the information required in Appendix 4, Section II. Instructions for completing the NOT are contained in Appendix 4, Section II, Notice of Termination. The NOT must be completed and submitted within 30 days of the permanent cessation of the discharge(s) authorized by the NCCW General Permit. Signed and completed NOT forms and attachments must be submitted to EPA-NE and the appropriate State agency at the addresses listed in Appendix 4.3.

7.2 Continuation of this General Permit after its 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 and remain in force and in effect for any permittee that submits a new NOI at least 60 days prior to the expiration date of this General Permit. However, once this General Permit expires, EPA cannot provide written authorization of coverage under this General Permit to any permittee who submits an NOI to EPA after the General Permit's expiration date. Any permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit

until the earlier of:

- a. Reissuance of this General Permit, at which time the permittee must comply with the NOI conditions of the new permit to maintain authorization to discharge;
- b. The permittee's submittal of a Notice of Termination;
- c. Issuance of an individual permit for the permittee's discharges; or
- d. A formal permit decision by the EPA-NE Director not to reissue this General Permit, at which time the permittee must seek coverage under an alternative general permit or an individual permit.

Part 8 Additional Permit Conditions Applicable to Specific States or Indian Country Lands: If required, this section is reserved and will be completed following the State certification process and the public notice period.

Part 9 Standard Conditions

9.1 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 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage 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 requirement.

The CWA provides that any person who violates Sections 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 Sections 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 or 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 or more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both. Note: See 40 CFR §122.41(a)(2) for additional enforcement criteria. Any person may be assessed an administrative penalty by the Administrator for violating Sections 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.

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 a notification 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.

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.

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 any 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: 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).

Claims of confidentiality for the following information will be denied:

- i) The name and address of any permit applicant or permittee;
- ii) Permit applications, permits, and effluent data as defined in 40 CFR § 2.302(a)(2).

Information required by NPDES application forms provided by the Regional Administrator under § 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.

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 NOI at least 60 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, and local laws and regulations.

9.2 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.

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 reasonably be 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 provisions of Paragraphs c and 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 Section 9.4.2 (Reporting Requirements, 24-hour notice and 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 preventive maintenance; and

3) The permittee submitted notices as required in Paragraph c, above, of this section.

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 here.

5. Upset

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary non-compliance 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 5.c (below) of this section are met. No determination made during 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 Section 9.4.1. a and e; and
- 4) The permittee complied with any remedial measures required under 9.2.3 (duty to mitigate) above.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

9.3 **Monitoring and Records**

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 of 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, unless other test procedures have been specified in the permit.

e. The Clean Water Act 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 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 Clean Water Act, any substances or parameters at any location.

9.4 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 required only 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 quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR §122.42(a)(1).

b. Anticipated noncompliance. The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or an 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 incorporate such other requirements as may be necessary under the Clean Water Act. (See 40 CFR §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) forms provided by or specified by the Regional Administrator.

2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR form specified by the Regional Administrator.

3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Regional Administrator in the permit.

4) Operators of facilities located in Massachusetts that discharge NCCW intermittently are not required to submit DMRs for periods of no discharge to maintain coverage under this General Permit. Rather, these facilities are required to submit an annual report that verifies that no discharge occurred during the previous calendar year. The annual report must be postmarked by the 15th of January. When a facility commences to discharge, it must comply with the monitoring and reporting requirements at Part 6.2.b. of General 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 9.4.1.e, above, if the oral report has been received within 24 hours.

f. Compliance Schedules: Reports of compliance or noncompliance with, or 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 9.4.1.d., e and f. of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph 9.4.1.e above.

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.

i. Signatory Requirement:

1.) All applications, reports, or information submitted to the Regional Administrator shall be signed and certified. (See 40 CFR §122.22)

2.) 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 non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

j. **Availability of Reports:** Except for data determined to be confidential under Paragraph 9.1.7 of this Section, 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 statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA.

9.5 Other Conditions

1. Definitions for purposes of this permit are as follows.

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" or a related activity is subject to, including water quality standards, standards of performance, toxic effluent standards or prohibitions, "best management practices", and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308, 403, and 405 of CWA.

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 bacteria, 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" over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) mean 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 standard based on an evaluation of the available technology to achieve a particular pollutant reduction.

Composite Sample - A sample consisting of a minimum of eight grab samples 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 continuously collected proportionally to flow over that same time period.

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 or "The Act" 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 U.S.C. §§1251 et seq.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 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 means the person authorized to sign NPDES permits by EPA and/or the State.

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.

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 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 Director 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 limitations guideline 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."

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 CWA.

Maximum daily discharge limitation means the highest allowable "daily discharge."

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 or 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 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 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 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 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 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 Sections §§125.122. (a)(1) through (10).

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.
- b) After proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such a 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".

Noncontact Cooling Water means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product or finished product.

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

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, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

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 used either to facilitate production or for disposal purposes is approved by 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.

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 used (a) to treat waste from any facility whose operator is not the operator of the treatment works and (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 device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial waste of a liquid nature which is owned by a "State" or "municipality." This definition includes sewers, pipes or other conveyance only if they convey wastewater to a POTW providing treatment.

Regional Administrator means the Regional Administrator of EPA, New England, Boston, Massachusetts.

Secondary Industry Category means any industry category which is not a "primary industry category."

Section 313 water priority chemical means a chemical or chemical categories which are:

- 1) 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 Re-authorization Act (SARA) of 1986);
- 2) 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.

Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances 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 Clean Water Act (see 40 CFR §§110.10 and 117.21) or Section 102 of CERCLA (see 40 CFR §§302.4).

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 Section 122.26(b)(14) for specifics of this definition.)

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

Toxic pollutant means any pollutant listed as toxic in Appendix D of 40 CFR Part 122, under Section 307(a)(1) of the Clean Water Act.

Uncontaminated storm water is precipitation to which no pollutants have been added and has not come into direct contact with any raw material, intermediate product, waste product or finished product.

Waste pile means any noncontainerized accumulation of solid, nonflowing 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 the 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:
 - i) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - iii) 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) (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)-(f) of this definition.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient 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) is the total effect of an effluent measured directly with a toxicity test.

C-NOEC “Chronic (Long-term Exposure Test) – No Observed Effect Concentration” means 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 above.

LC₅₀ LC₅₀ is the concentration of a sample that causes mortality of 50% of the test population at a specific time of observation. The LC₅₀ = 100% is defined as a sample of undiluted effluent.

2. Abbreviations used in this permit are defined below:

cfs	cubic feet per second
DMR	discharge monitoring report
MassDEP	Massachusetts Department of Environmental Protection
MGD	million gallons per day
mg/l	milligrams per liter
NCCW	noncontact cooling water
NHDES	New Hampshire Department of Environmental Services
NOI	Notice of Intent
NOT	Notice of Termination
pH	a measure of the hydrogen ion concentration
Temp. °C	temperature in degrees Centigrade
Temp. °F	temperature in degrees Fahrenheit
TRC	total residual chlorine
ug/l	micrograms/liter