

**Final Remediation General Permit Under the National Pollutant Discharge  
Elimination System (NPDES) for Discharges in Massachusetts**

**Massachusetts General Permit, Permit No. MAG910000**

In compliance with the provisions of the Federal Clean Water Act, as amended,<sup>1</sup> and the Massachusetts Clean Waters Act, as amended,<sup>2</sup> the following permit authorizes discharge of water from four general categories, including: 1) site remediation<sup>3</sup> primarily related to petroleum contamination; 2) site remediation<sup>3</sup> activities where petroleum is not the primary contaminant; 3) contaminated construction site dewatering; and 4) miscellaneous contaminated discharges. Such discharges are authorized at sites located in Massachusetts (including both Commonwealth and Indian Country lands) to all classes of waters designated in the Massachusetts Water Quality Standards, 314 CMR 4.00 et seq., unless otherwise restricted, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit shall become effective when issued. If this permit is not reissued prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedures Act and remain in force and in effect. However, once this permit expires EPA-NE cannot provide written notification of coverage under this general permit to any permittee who submits Notice of Intent to EPA Region I after the permit's expiration date. Any permittee who was granted coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of: reissuance of this permit, at which time the permittee must comply with the Notice of Intent conditions of the new permit to maintain authorization to discharge; the permittee's submittal of a Notice of Termination; issuance of an individual permit; or a formal permit decision by the Director not to reissue this general permit, at which time the permittee must seek coverage under an alternative general or individual permit.

Signed this     day of                     2005

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Linda M. Murphy, Director  
Office of Ecosystem Protection  
U.S. Environmental Protection Agency  
Boston, MA

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

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<sup>1</sup>33 U.S.C. §§ 1251 et seq.; the "CWA"

<sup>2</sup> M.G.L. Chap. 21, §§ 26-53

<sup>3</sup>For discharges that are subject to the Massachusetts Contingency Plan and 310 CMR 40.000, the permit applies as a matter of federal, but not state, law. For all other discharges, the permit applies under both.

**Final Remediation General Permit Under the National Pollutant Discharge  
Elimination System (NPDES) for Discharges in New Hampshire**

**New Hampshire General Permit, Permit No. NHG910000**

In compliance with the provisions of the Federal Clean Water Act, as amended,<sup>4</sup> the following permit authorizes discharge of water from four general categories, including: 1) site remediation activities primarily related to petroleum contamination; 2) site remediation activities where petroleum is not the primary contaminant ("non-petroleum" sites); 3) contaminated construction site dewatering; and 4) miscellaneous contaminated discharges. Such discharges are authorized to all waters located in New Hampshire, unless otherwise restricted by the New Hampshire water quality standards,<sup>5</sup> in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit shall become effective when issued. If this permit is not reissued prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedures Act and remain in force and in effect as to any particular permittee. However, once this permit expires EPA-NE cannot provide written notification of coverage under this general permit to any permittee who submits Notice of Intent to EPA Region I after the 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: reissuance of this permit, at which time the permittee must comply with the Notice of Intent conditions of the new permit to maintain authorization to discharge; the permittee's submittal of a Notice of Termination; issuance of an individual permit; or a formal permit decision by the Director not to reissue this general permit, at which time the permittee must seek coverage under an alternative general permit or an individual permit.

Signed this     day of                     2005.

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Linda M. Murphy  
Director, Office of Ecosystem Protection  
U.S. Environmental Protection Agency  
Boston, MA

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<sup>4</sup> 33 U.S.C. §§ 1251 et seq.; the "CWA"

<sup>5</sup> 50 RSA § 485-A:8 and the N.H. Code of Administrative Rules, CHAPTER Env-Ws 1700 SURFACE WATER QUALITY REGULATIONS (December 1999)

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**PART I - Permit Applicability and Conditions**

**A. Applicability and Coverage of the Remediation General Permit (RGP)**

1. Subject discharges - During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge wastewater to surface waters from a variety of discharges listed below, including discharges from:
  - a. site remediation activities related primarily to petroleum, including site remediation of groundwater contaminated from petroleum spills or leaks, such as gasoline, fuel oil, or other oil contaminated sites;
  - b. site remediation where the spill or leak is not petroleum-specific, such as sites contaminated with volatile organic compounds and/or metals;
  - c. construction de-watering of contaminated sites, such as at EPA or state-listed contamination sites, including locations where sub-surface site investigations and/or soil characterization for disposal have revealed various common pollutants typically associated with past industrialization, power generation, incineration, or other activity and where no specific source of contamination is apparent; and
  - d. de-watering of miscellaneous contaminated discharge sites, such long-term remediation of contaminated sumps, and short-term contaminated dredge drain back waters (if not covered by Section 401/404 permit), aquifer pump testing to evaluate remediation of formerly contaminated sites, well development or rehabilitation at contaminated or formerly contaminated sites, and hydrostatic testing of pipelines and tanks.

**Table I: Activities Covered by the Remediation General Permit**

<b>Category</b>	<b>Sub-Category</b>
<b>I - Petroleum Related Site Remediation</b>	<b>A. Gasoline Only Sites B. Fuel Oils and Other Oil Sites C. Petroleum Sites Containing Other Contaminants</b>
<b>II - Non Petroleum Site Remediation</b>	<b>A. VOC Only Sites B. VOC Sites Containing Other Contaminants C. Sites Containing Primarily Metals</b>
<b>III - Contaminated Construction Dewatering</b>	<b>A. General “Urban Fill” Sites B. Known Contamination Sites</b>

<b>IV - Miscellaneous Related Discharges</b>	<b>A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites</b> <b>B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites</b> <b>C. Hydrostatic Testing of Pipelines and Tanks</b> <b>D. Long-Term Remediation of Contaminated Non-residential Sumps and Dikes</b> <b>E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit)</b>
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2. Geographic Coverage Area

- a. *Massachusetts:* All of the discharges to be authorized by this general NPDES permit for dischargers in the Commonwealth of Massachusetts are into all waters of the Commonwealth and Indian Country lands 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.
- b. *New Hampshire:* All of the discharges to be authorized by this general NPDES permit for dischargers in the State of New Hampshire are into all waters of the State of New Hampshire unless otherwise restricted by the State Water Quality Standards: see 50 RSA § 485-A:8 and the N.H. Code of Administrative Rules, Chapter Env-Ws 1700 or as revised.

3. Specific Discharges Excluded From Coverage - the following discharges are excluded from coverage under this General Permit:

- a. *Discharges to Outstanding Resource Waters in Massachusetts and New Hampshire:*
  - 1) 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 Massachusetts Department of Environmental Protection (MADEP) under 314 CMR 4.04(3)(b), or
  - 2) as defined in New Hampshire under Env-Ws 1708.05(a), unless allowed by the New Hampshire Department of Environmental Services (NH DES) under Env-Ws 1708.05(b).
- b. *Discharges to Areas of Critical Environmental Concern (ACEC) in Massachusetts* as defined by the Massachusetts Wetlands Protection Act c.131, Section 40, unless a variance as allowed in the water quality standards is granted by the State. See Appendix I for a listing of ACEC's by city and town in Massachusetts (MA).

- c. *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 NH DES at the address listed in Part I.D.4 of this permit.
- d. *Discharges to designated areas under the Endangered Species Act (ESA)* unless the requirements specified in this permit are fulfilled. See Parts I.B.4 & 5 and Appendices II and VII for additional requirements.
- e. *Discharges to designated areas under the Essential Fish Habitat Act (EFH)* unless the requirements specified in this permit are fulfilled.
- f. *Discharges of pollutants which are specifically excluded by the States' published 303(d) lists* of “non-attainment” segments of receiving waters in the Commonwealth of Massachusetts and the State of New Hampshire, as defined by the CWA and approved by EPA unless the discharge is at or below a concentration that meets water quality standards.
- g. *Discharges to a Publicly-Owned Treatment Works (POTW)* which are permitted under Section 402 of the CWA (NPDES).
- h. *Discharge to municipal separate storm sewer systems (MS4s)*, unless local permitting or approval under the municipality’s Storm Water Management Program (SWMP), required under EPA’s MS4 general permits, is completed. See Part I.F.1.
- i. *Discharges directly or indirectly to the ground.*
- j. *Discharge of dredge drain back waters covered by CWA Section 401 and 404 and 40 CFR 330.5(a)(16)* administered by the US Army Corps of Engineers (USACOE) where USACOE intends to permit the discharge.
- k. *Discharges of water supply or other well development or rehabilitation waste waters*, except discharges of treated water from the development or rehabilitation of monitoring wells at contaminated or formerly contaminated sites. This permit does not cover wastewater from wells that contain naturally occurring substances or materials from only routine maintenance activities.
- l. *Discharge of water from one water body to another water body*, otherwise referred to as “water transfers,” except for the specific purpose of hydrostatic testing of pipelines, tanks and other structures.
- m. *Uncontaminated construction dewatering discharges* eligible for coverage under EPA Region I’s General Permit for Construction Dewatering dated September 23, 2002, or non-stormwater discharges covered by the EPA’s national Construction General Permit dated July 1, 2003.

- n. *Short-term discharges from sumps or other similar water collection structures, e.g., discharges lasting less than one week (7 days) at residential properties. These discharges may, however, be subject to local requirements under EPA’s Phase I and II Municipal Separate Storm Sewer System (MS4) general permits.*
  - o. *“New Source” dischargers, as defined in 40 CFR § 122.2.*
  - p. *Discharges listed in an individual NPDES permit unless:*
    - 1) the permit has expired;
    - 2) EPA has terminated the existing permit;
    - 3) the discharges are separate from the currently permitted discharges; or
    - 4) the discharge is new and eligible for this permit (e.g., an industry where the primary process waste discharge is covered by an individual permit but the facility is conducting groundwater remediation with separate treatment and discharge).
  - q. *Discharges for which the Director makes a determination that an individual permit is required under 40 CFR 122.28(b)(3). See Part I.B.8. below.*
  - r. *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.*
  - s. *Discharges of any commercial or industrial wastes to Ocean Sanctuaries in Massachusetts, as defined at 302 CMR 5.00.*
  - t. *Discharges to territorial seas, as defined by Section 502 of the Clean Water Act.*
  - u. *Discharges made from a CERCLA remediation site under a signed Record of Decision under 40 CFR 300.400(e)(1).*
4. Endangered and Threatened Species and/or Critical Habitat<sup>6</sup>: Proposed discharges that are located in areas in which listed endangered or threatened species may be present, are not automatically covered under this permit. Prior to submitting a Notice of Intent (NOI), operators must demonstrate permit eligibility following the eligibility requirements of Appendix VII and the most recent Endangered and Threatened Species County-Species List in Appendix II.

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 National Marine Fisheries Service and the **dwarf wedgemussel** the **bog turtle**, and the **northern redbelly cooter** are listed under the jurisdiction of the U.S. Fish and Wildlife Service.

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<sup>6</sup> There is currently only one area federally-designated as critical habitat in MA, i.e., for the Northern Redbelly Cooter in Plymouth County, MA, and none in NH.

5. 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. Prior to submitting a Notice of Intent (NOI), 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. Electronic listings of National and State Registers of Historic Places are maintained by the National Park Service ([www.nr.nps.gov/nrishome.htm](http://www.nr.nps.gov/nrishome.htm)), the Massachusetts Historical Commission ([www.state.ma.us/sec/mhc.](http://www.state.ma.us/sec/mhc.)) and the New Hampshire Historical Commission ([www.state.nh.us/nhdhr.](http://www.state.nh.us/nhdhr.))

Applicants must 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 VII, Section II, pertaining to historic places.

**B. Application and Notice of Intent (NOI)**

1. Definition of “owner” and “operator” -

- a. For purposes of this permit, the “owner” of a property is the person, as defined by 40 CFR 122.2, holding the title, deed, or legal document to the regulated property, facility, or activity, including a party working under an easement on the property.
- b. The “operator” is defined as the person who has operational control over plans and specifications, or the person who has day-to-day supervision and control of activities occurring at the site. Further, for purposes of this permit, the operator is:
  - i. The owner if that person is performing all work related to complying with this permit; **or**
  - ii. Both the owner and contractor(s), as co-permittees, if a contractor(s) has been hired to perform work related to complying with this permit.

2. Eligibility for Coverage Under the Remediation General Permit (RGP) - The following types of facilities or sites are eligible to apply for coverage under the RGP:

- a. New dischargers.
- b. Facilities with on-going discharges pursuant to EPA- or State-approved site remediation projects.
- c. Facilities with expired individual permits that have been administratively continued in accordance with 40 CFR§ 122.6 may apply for coverage under this general permit. If, and when, EPA New England (EPA-NE) grants coverage under this permit, EPA-NE will initiate the process to revoke the individual

permit.

- d. Any facility operating under an effective (unexpired) individual NPDES permit may request that the individual permit be revoked and that coverage under this general permit be granted, as outlined in 40 CFR § 122.28(b)(3)(v). If, and when, EPA-NE grants coverage under this permit, EPA-NE will initiate the process to terminate the individual permit.
3. Notice of Intent Options: The “operator” of the site or facility is responsible for applying for the permit as required by 40 CFR 122.21(b). To be covered by this general permit, operators of applicable sites or facilities, whose discharge or discharges are identified in Part I.A.1 above, must submit to EPA-NE and the appropriate State, a complete, signed **Notice of Intent (NOI)**. For purposes of this RGP, the NOI consists of either:
    - a. The suggested NOI form in Appendix V of this permit, or
    - b. Another form of official correspondence containing all of the information required in the NOI instructions in Appendix V of this permit.
  4. General Application Requirements
    - a. Facilities For Which an Individual NPDES Application Has Not Been Previously Submitted
      - 1) Operators of proposed new discharges seeking coverage under this general permit, must submit a NOI to EPA-NE post-marked at least **14 days** prior to the commencement of discharge.
      - 2) Operators of existing discharges pursuant to EPA- or State-approved site remediation projects, who have never submitted an application for an individual NPDES permit, must file an NOI for coverage under this permit or application Forms 1 & 2C for coverage under an individual permit. The applicant must submit the NOI or individual permit application within **30 days** of the effective date of the RGP to: EPA-NE, the respective State, and the municipality into which the discharge is proposed,. See Appendix V for NOI instructions and addresses.
    - b. Facilities For Which Individual NPDES Permit Applications Have Been Previously Submitted - For facility operators with discharges pursuant to approved site remediation projects, who have previously filed a NPDES application for coverage under an individual permit, the following conditions apply:
      - 1) If a facility owner or operator has made only minor changes to the discharge operations since submission of the application, the applicant may notify EPA in writing that the existing application continues to be accurate and is serving in lieu of a notice of intent (NOI). Minor changes include changes to administrative information, changes to the treatment system that improve performance or decrease flow, changes to the discharge location on the same receiving water, etc.
      - 2) If a facility owner or operator has made significant changes to the discharge

operations since submission of the application, the operator must file a NOI following the instructions in Appendix V. Significant changes include: discharges containing chemicals not reported in the original application, additional discharge locations, discharges to different receiving waters, changes of flow of greater than 25%, etc.

5. Consultation with Federal Services - **All** applicants must comply with the requirements of Appendix VII, Section I, regarding consultation pertaining to endangered species.
6. Signature - The Notice of Intent must be signed by the operator(s) of the facility, as defined in Part I.B.1. above, in accordance with the signatory requirements of 40 CFR Section 122.22.
7. Submission of NOIs - Each applicant must submit a copy of the Notice of Intent to EPA and the appropriate State authority<sup>7</sup> listed in Appendix V. Additionally, the applicant must submit a copy of the NOI to the municipality in which the proposed discharge would be located.
8. When the Director May Require 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.
  - a. Instances where an individual permit may be required include the following:
    - 1) The discharge(s) is a significant contributor of pollution;
    - 2) The discharger is not in compliance with the conditions of this permit;
    - 3) A change has occurred in the availability of the demonstrated technology of practices for the control or abatement of pollutants applicable to the point source;
    - 4) Effluent limitation guidelines are promulgated for point sources covered by this permit;
    - 5) A Water Quality Management Plan or Total Maximum Daily Load containing requirements applicable to such point source is approved;
    - 6) The discharge is to an outstanding natural resource water;
    - 7) The discharge causes or may cause violations to the water quality standards of the receiving water or if actual or imminent harm to aquatic organisms is identified;
    - 8) The discharge adversely impacts any federally-managed species for which Essential Fish Habitat has been designated;
    - 9) The discharge is into waters which are specifically excluded by the States' published 303(d) lists of "non-attainment" segments of receiving waters in the Commonwealth of Massachusetts and the State of New Hampshire, as defined by the CWA and approved by EPA, and the discharge is above a concentration that meets water quality standards.
    - 10) The point source(s) covered by this permit no longer:
      - i) Involves the same or substantially similar types of operations;

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<sup>7</sup>For discharges that are subject to the Massachusetts Contingency Plan and 310 CMR 40.000, the permit applies as a matter of federal, but not state, law. For all other discharges, the permit applies under both.

- ii) Discharges the same types of wastes;
- iii) Requires the same effluent limitations or operating conditions;
- iv) Requires the same or similar monitoring; or

11) In the opinion of the Director, the discharge is more appropriately controlled under an individual or different general permit.

- b. If the Director requires an individual permit, 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 operator is automatically terminated on the effective date of the individual permit.
9. EPA Determination of Coverage - Any applicant may request to be included under this general permit but the final authority rests with the EPA-NE. Coverage under the general permit will not be effective until EPA-NE has reviewed the certification and existing file information, made a determination that coverage under the RGP is appropriate, and notified the operator in writing of its determination. The effective date of coverage will be the date of signature of the notification letter by the EPA-NE Director.

### **C. Effluent Limitations and Monitoring Requirements**

1. General Effluent Limitations and Monitoring Requirements - Each discharge outfall subject to this permit shall be limited and monitored by the permittee as specified below in accordance with the receiving water classification when indicated. Permittees shall monitor for the influent and effluent for all applicable parameters unless otherwise specified.
- a. Permittees must monitor monthly for each outfall in accordance with Parts I.C, D, E, and F, and Parts II.C and D of this permit.
  - b. All of the parameter limits of the permit apply except where the permittee has certified that pollutants are “believed absent” in the discharge (see Part I.C.8 below) or where specifically excluded in the provisions below.
2. pH Limitations - For discharges in Massachusetts, Table II below applies to the effluent only. For discharges in New Hampshire, Table III below applies to the effluent only.

**Table II: pH Limits in Massachusetts**

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
pH Range for Class A & Class B Waters <sup>8</sup>	Standard Units	6.5 to 8.3 <sup>9</sup>	1/Month	Grab <sup>10</sup>
pH Range for Class SA & Class SB Waters <sup>8</sup>	Standard Units	6.5 to 8.5 <sup>9</sup>	1/Month	Grab <sup>10</sup>

**Table III: pH Limits in New Hampshire**

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
pH Range for Class B Waters <sup>8</sup>	Standard Units	6.5 to 8.0	1/Month	Grab <sup>10</sup>

3. Water Quality Requirements - The discharge shall not cause a violation of the water quality standards of the receiving water.
  - a. The discharge shall be adequately treated to insure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits, float as foam, debris, scum, form a visible sheen or other visible pollutants.
  - b. The discharge shall be adequately treated to insure that the receiving waters remain free from color, odor, taste, or turbidity in concentrations that would render them unsuitable for their designated use unless such concentrations are naturally occurring.

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<sup>8</sup>State certification requirement.

<sup>9</sup> The permittee may request that the pH range be widened to within 6 to 9 s.u. or another range due to naturally occurring conditions in the receiving water. Similarly, permittees may request such a change if the naturally occurring source water is unaltered by the permittee's operation. The scope of any demonstration must receive prior approval from the MA DEP. An NOC must be submitted to the EPA-NE Director upon approval from the state (see Appendix V).

<sup>10</sup> pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test method 150.1.

4. Prohibition of Toxic Discharge - The discharge shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.
5. Heat - Where the permittee's operation contains a process that alters the temperature of the water prior to discharge, effluent temperature shall be monitored prior to discharge and the following temperature limits apply:

**Table IV: Temperature Limits**

Effluent Characteristic	Units	Discharge Limitation	Monitoring Requirement	
			Measurement Frequency	Sample Type
a. Warm water fisheries daily maximum temperature	Fahrenheit (°F)	83	1/Month	Grab <sup>11</sup>
b. Cold water fisheries daily maximum temperature	°F	68	1/Month	Grab <sup>11</sup>
For sites in Massachusetts, the following additional temperature limits apply:				
c. Coastal and marine waters daily maximum and maximum of maximum daily mean	°F	85 (daily max.) 80 (maximum daily mean)	1/Month	Grab <sup>11</sup>

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<sup>11</sup>Temperature sampling per Method 170.1

For sites in Massachusetts, the following additional limits on temperature change apply:					
Class of Water Body	Type of Fishery or Subcategory	Units	Maximum Change in Temperature	Measurement Frequency	Sample Type
A		°F	1.5	1/Month	Grab <sup>11</sup>
B	Warm Water	°F	5	1/Month	Grab <sup>11</sup>
	Cold Water and Lakes/Ponds	°F	3	1/Month	Grab <sup>11</sup>
SA	Coastal	°F	1.5	1/Month	Grab <sup>11</sup>
SB	July to September	°F	1.5	1/Month	Grab <sup>11</sup>
	October to June	°F	4	1/Month	Grab <sup>11</sup>

6. Chemical Effluent Limits and Influent and Effluent Monitoring - In addition to the general monitoring requirements of Part II.C and Part II.D, after the initial startup sampling and testing requirements of Part I.D.2 have been met, permittees must monitor their untreated influents and outfall discharge effluents on a **monthly basis** unless otherwise provided for by this permit. See Appendix V, Section II, Notice of Change. Permittees must demonstrate compliance with all of the applicable effluent parameter limits specified in this permit, except as provided for in Part I.C.8 (see Table V below).
  
7. Consideration of Dilution Factors for Discharges of Metals - Where discharges of metals require effluent limits, dilution factors may be applied to the discharges of **metals to freshwater**.<sup>12</sup> In the NOI, the applicant must select the applicable parameters and, if necessary, an appropriate dilution factor. **See Appendix V, Section I.A.3. of the NOI Instructions for detailed instructions for determining the applicable effluent limitations for metals into freshwater**<sup>13</sup>.
  
8. Specific Pollutants to Be Monitored for Individual Sub-Categories
  - a. Upon becoming subject to this permit, permittees must monitor the untreated influents and outfall discharge effluents of all of the chemicals related to the applicable sub-categories listed in Table V below on a monthly basis, except for any chemical for which the permittee certified in the NOI that the chemical was “**believed absent.**” See Appendix V, Section I.A.3.
    - 1) If the discharge falls within only one sub-category (e.g., gasoline remediation sites), the permittee must monitor monthly for the pollutants specified for that sub-category, except for any chemical for which the permittee certified in the NOI that the chemical was “**believed absent.**”

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<sup>12</sup> Dilution factors may be available for discharges to saline waters but only with approval of the flow modeling information from the State prior to the submission of the NOI.

- 2) If the site falls within more than one sub-category, the permittee is required to monitor for all sub-category specified pollutants, except for any chemical for which the permittee certified in the NOI that the chemical was “**believed absent.**”
- b. If the permittee certified in the NOI that any chemicals were “**believed absent,**” the following additional requirements apply regarding those chemicals:
- 1) If the discharge continues for fewer than six (6) months from the start of the discharge under this permit, monthly monitoring of that chemical is not required.
  - 2) If the discharge continues for six (6) months or longer from the start of the discharge under this permit, the permittee must re-certify by letter to EPA that chemicals continue to be “**believed absent.**” Such re-certification shall be made at least once during each sequential six (6) month period that the discharge continues.
    - i. Re-certification of a chemical as “**believed absent**” shall be based on laboratory data from a minimum of one (1) new untreated influent sample taken within 30 days following the end of the six-month period, or
    - ii. In lieu of new sampling every six (6) months, the permittee may re-certify that a chemical is “**believed absent,**” by submitting historical sampling data demonstrating that the untreated influent concentration was below the otherwise applicable limit for that chemical in Appendices III or IV, or below the minimum level (see Part I.D.1.d). To use historical data, the permittee must submit (e.g., with the NOI or by letter) a minimum of six (6) consecutive months of laboratory data at a point prior to any treatment of the water, and obtained pursuant to:
      - 1) Massachusetts’ regulations 310 CMR 40.0000, the Massachusetts Contingency Plan (“Chapter 21E”);
      - 2) New Hampshire’s Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act Chapter 485-A, Section 485-A:13, “Water Discharge Permits” or
      - 3) EPA permit exclusion letter issued pursuant to 40 CFR 122.3.Such historical data may be submitted with the NOI or within 30 days following the end the first six-month period of operation under the permit. Historical data used for re-certification can not be more than two years old (i.e., must have been collected less than 2 years before the re-certification is due).
- c. Re-certifications that permitted chemicals are “**believed absent**” must be signed in accordance with 40 CFR Section 122.22.
- d. Regardless of certification of chemicals as “**believed absent,**” the Director may provide written notice to any operator, requiring monitoring of specific parameters. Any such notice will briefly state the reasons for the monitoring, parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.
- e. If the discharge is known to contain additional chemicals than are listed in

Appendix III of the permit, the permittee must also monitor for the known chemicals on a monthly basis (i.e., as “monitor only”). See Appendix V, Section A.3.b.

- f. As required in 40 CFR Section 122.42, in addition to reporting requirements specified in the permit, permittees must notify the Director as soon as they have reason to believe that any activity has occurred which would result in the discharge of any toxic pollutant which is not otherwise limited in the permit and is referenced in 40 CFR 401.15.
- g. Certain monitoring requirements may be reduced upon demonstration by ongoing sampling and analytical data.
  - i. To be eligible for a reduction in **influent** monitoring, the permittee must provide a minimum of **6 consecutive months** of data. This data must be submitted with a notice of change (NOC) per Appendix V, Section II.
  - ii. To be eligible for a reduction in **effluent** monitoring, the permittee must provide **12 consecutive months** of data demonstrating compliance with the applicable parameter limits, applicable ML (see Part I.D.1.d), or demonstrating no toxicity, in the case of whole effluent toxicity testing is required. This type of change requires written approval by the Director. Prior to receiving written approval, the permittee must continue to monitor at the frequency specified in the RGP. This data must be submitted with a NOC.

**Table V: Chemical Effluent Limits and Monitoring Requirements by Sub-Category**

**1. Petroleum Related Site Remediation**

<b>A. Gasoline Remediation Sites</b>					
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>		<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
<b>Benzene</b>	<b>5.0 micrograms per liter (ug/l)</b>		<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Total Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)</b>	<b>100 ug/l</b>		<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Naphthalene</b>	<b>20 ug/l<sup>13</sup></b>		<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Ethylene dibromide</b>	<b>0.05 ug/l</b>		<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Methyl-t-Butyl Ether (MtBE)</b>	<b>70.0 ug/l</b>		<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>tert-Butyl Alcohol</b>	<b>Monitor Only (ug/L)</b>		<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>tert-Amyl Methyl Ether</b>	<b>Monitor Only (ug/L)</b>		<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Total Suspended Solids (TSS)</b>	<b>30.0 milligrams per liter (mg/l)</b>		<b>monthly average</b>	<b>grab</b>	<b>1/month</b>
<b>Total Petroleum Hydrocarbon</b>	<b>5.0 mg/l</b>		<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Lead (total recoverable)</b>	<b>In MA: FW<sup>14</sup> = 1.3 ug/L SW<sup>15</sup> = 8.5 ug/L</b>	<b>In NH: FW = 0.5 ug/L SW = 8.5 ug/L</b>	<b>monthly average</b>	<b>grab</b>	<b>1/month</b>
<b>Iron (total recoverable)</b>	<b>In MA: 1,000 ug/L</b>	<b>In NH: 1,000 ug/L</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>

<sup>13</sup> Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.

<sup>14</sup>FW = freshwater

<sup>15</sup>SW = saltwater

<b>B. Fuel Oils (and Other Oils) Sites</b>					
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>		<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
Acetone	Monitor Only (ug/L)		daily maximum	grab	1/month
TPH	5.0 mg/l		daily maximum	grab	1/month
Naphthalene	20 ug/l <sup>13</sup>		daily maximum	grab	1/month
Polycyclic Aromatic Hydrocarbons (PAHs)	See Appendix III (#'s 35 & 36)		daily maximum	grab	1/month
Benzene	5.0 ug/l		daily maximum	grab	1/month
BTEX	100 ug/l		daily maximum	grab	1/month
Nickel (total recoverable)	In MA: FW = 29.0 ug/L SW = 8.2 ug/L	In NH: FW = 16.1 ug/L SW = 8.2 ug/L	monthly average	grab	1/month
Chromium III (trivalent) (total recoverable)	In MA: FW = 48.8 ug/L SW = 100 ug/L	IN NH: FW = 27.7 ug/L SW = 100 ug/L	monthly average	grab	1/month
Chromium VI (hexavalent) (total recoverable)	In MA: FW = 11.4 ug/L SW = 50.3 ug/L	In NH: FW = 11.4 ug/L SW = 50.3 ug/L	monthly average	grab	1/month
Zinc (total recoverable)	In MA: FW = 66.6 ug/L SW = 85.6 ug/L	In NH: FW = 37 ug/L SW = 85.6 ug/L	monthly average	grab	1/month
Iron (total recoverable)	In MA: 1,000 ug/L	In NH: 1,000 ug/L	daily maximum	grab	1/month

<b>C. Petroleum Sites Containing Other Pollutants</b>					
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>		<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
All pollutants listed in Appendix III	See Appendix III		See Appendix III	grab	1/month

**2. Non-Petroleum (i.e., Not Gasoline and Oil) Site Remediation**

<b>A. VOC-Only Sites</b>				
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
Carbon Tetrachloride	4.4 ug/l	daily maximum	grab	1/month
1,2 (or o)-Dichlorobenzene (DCB)	600 ug/l	daily maximum	grab	1/month
1,3 (or m)-Dichlorobenzene	320 ug/l	daily maximum	grab	1/month
1,4 (or p)-Dichlorobenzene	5.0 ug/l	daily maximum	grab	1/month
Total Dichlorobenzene	763 ug/l - NH only	daily maximum	grab	1/month
1,1-Dichloroethane (DCA)	70 ug/l	daily maximum	grab	1/month
1,2-Dichloroethane	5.0 ug/l	daily maximum	grab	1/month
1,1-Dichloroethylene (DCE)	3.2 ug/	daily maximum	grab	1/month
cis-1,2-Dichloroethylene	70 ug/l	daily maximum	grab	1/month
Methylene Chloride	4.6 ug/l	daily maximum	grab	1/month
Tetrachloroethylene (PCE)	5.0 ug/l	daily maximum	grab	1/month
1,1,1-Trichloroethane (TCA)	200 ug/l	daily maximum	grab	1/month
1,1,2 Trichloroethane	5.0 ug/l	daily maximum	grab	1/month
Trichloroethylene (TCE)	5.0 ug/l	daily maximum	grab	1/month
Vinyl Chloride	2.0 ug/l	daily maximum	grab	1/month
TPH	5.0 mg/l	daily maximum	grab	1/month
Phenols	300 ug/l	daily maximum	grab	1/month
Pentachlorophenol	1.0 ug/l	daily maximum	grab	1/month
Total Phthalates (sum of individual compounds)	3.0 ug/L	monthly average	grab	1/month
<b>A. VOC-Only Sites (continued)</b>				

<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
<b>Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]</b>	<b>6.0 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Total PCBs</b>	<b>0.000064 ug/L<sup>16</sup></b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Acetone</b>	<b>Monitor Only (ug/L)</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>1,4 Dioxane</b>	<b>Monitor Only (ug/L)</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>BTEX</b>	<b>100 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Iron (total recoverable)</b>	<b>1,000 ug/L</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>

<b>B. VOC Sites Containing Other Contaminants</b>				
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
<b>All pollutants listed in Appendix III</b>	<b>See Appendix III</b>	<b>See Appendix III</b>	<b>grab</b>	<b>1/month</b>

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<sup>16</sup>Although the maximum value for PCBs is 0.000064 ug/L, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).

<b>C. Sites Containing Primarily Metals</b>				
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
<b>All Metals listed in Appendix III</b>	<b>See Appendix III</b>	<b>See Appendix III</b>	<b>grab</b>	<b>1/month</b>
<b>Cyanide</b>	<b>SW = 1.0 ug/l , FW = 5.2 ug/l<sup>17</sup></b>	<b>monthly average</b>	<b>grab</b>	<b>1/month</b>
<b>Carbon Tetrachloride</b>	<b>4.4 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>1,2 (or o)-Dichlorobenzene (DCB)</b>	<b>600 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>1,3 (or m)-Dichlorobenzene</b>	<b>320 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>1,4 (or p)-Dichlorobenzene</b>	<b>5.0 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Total Dichlorobenzene</b>	<b>763 ug/l - NH only</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>1,1-Dichloroethane (DCA)</b>	<b>70 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>1,2-Dichloroethane</b>	<b>5.0 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>1,1-Dichloroethylene (DCE)</b>	<b>3.2 ug/</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>cis-1,2-Dichloroethylene</b>	<b>70 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Methylene Chloride</b>	<b>4.6 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Tetrachloroethylene (PCE)</b>	<b>5.0 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>1,1,1-Trichloroethane (TCA)</b>	<b>200 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>1,1,2 Trichloroethane</b>	<b>5.0 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Trichloroethylene (TCE)</b>	<b>5.0 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Vinyl Chloride</b>	<b>2.0 ug/l</b>	<b>daily maximum</b>	<b>grab</b>	<b>1/month</b>
<b>Total Suspended Solids (TSS)</b>	<b>30.0 mg/l</b>	<b>monthly average</b>	<b>grab</b>	<b>1/month</b>

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<sup>17</sup>Limits for cyanide are based on EPA's water quality criteria expressed as micrograms (ug) of free cyanide per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported. Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 10 ug/l).

### 3. Contaminated Construction Dewatering

<b>A. General Urban Fill Sites</b>				
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
All pollutants listed in Appendix III	See Appendix III	See Appendix III	grab	1/month

<b>B. Listed Contamination Sites</b>				
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
All pollutants listed in Appendix III	See Appendix III	See Appendix III	grab	1/month

### 4. Miscellaneous Discharges

<b>A. Aquifer Pump Testing</b>				
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
All pollutants listed in Appendix III	See Appendix III	See Appendix III	grab	1/month

<b>B. Well Development or Rehabilitation</b>				
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
All pollutants listed in Appendix III	See Appendix III	See Appendix III	grab	1/month

<b>C. Hydrostatic Testing of Pipelines and Tanks</b>						
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>		<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>	
TSS	50 mg/l		monthly average	grab	Per Part I.D.8.	
Total residual chlorine (TRC)	FW = 11 ug/l SW = 7.5 ug/l		monthly average	grab	Per Part I.D.8.	
TPH	5.0 mg/l		daily maximum	grab	Per Part I.D.8.	
Benzene	50.0 ug/l		daily maximum	grab	Per Part I.D.8.	
Total BTEX	100 ug/l		daily maximum	grab	Per Part I.D.8.	
Naphthalene	20 ug/l <sup>13</sup>		daily maximum	grab	Per Part I.D.8.	
Ethylene dibromide	0.05 ug/l		daily maximum	grab	Per Part I.D.8.	
MtBE	70.0 ug/l - MA		daily maximum	grab	Per Part I.D.8.	
tert-Butyl Alcohol	Monitor Only (ug/L)		daily maximum	grab	Per Part I.D.8.	
tert-Amyl Methyl Ether	Monitor Only (ug/L)		daily maximum	grab	Per Part I.D.8.	
PAHs	See Appendix III (#'s 35 & 36)		daily maximum	grab	Per Part I.D.8.	
Lead (total recoverable)	In MA: FW = 1.3 ug/L, SW = 8.5 ug/L	In NH: FW = 0.5 ug/L, SW = 8.5 ug/L	monthly average	grab	Per Part I.D.8.	
Nickel (total recoverable)	In MA: FW = 29.0 ug/L, SW = 8.2 ug/L	In NH: FW = 16.1 ug/L, SW = 8.2 ug/L	monthly average	grab	Per Part I.D.8.	
Chromium (trivalent) (total recoverable)	In MA: FW = 48.8 ug/L	IN NH: FW = 27.7 ug/L	monthly average	grab	Per Part I.D.8.	
Chromium (hexavalent) (total recoverable)	In MA: FW = 11.4 ug/L SW = 106 ug/L	In NH: FW = 11.4 ug/L, SW = 190 ug/L	monthly average	grab	Per Part I.D.8.	
Zinc (total recoverable)	In MA: FW = 66.6 ug/L SW = 85.6 ug/L	In NH: FW = 37 ug/L SW = 85.6 ug/L	monthly average	grab	Per Part I.D.8.	
Iron (total recoverable)	In MA: 1,000 ug/L		In NH: 1,000 ug/L	daily maximum	grab	Per Part I.D.8.

<b>D. Contaminated Sumps</b>				
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
All pollutants listed in Appendix III	See Appendix III	See Appendix III	grab	1/month

<b>E. Contaminated Dredge Drain Back Waters (if not covered by Section 401/404 permit)</b>				
<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>	<b>Sampling Frequency</b>
All pollutants listed in Appendix III	See Appendix III	See Appendix III	grab	1/month