

APPENDIX 1
AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)
IN MASSACHUSETTS

If the project is proposed in one of the communities listed in the following three pages, the project may be located in an Area of Critical Environmental Concern (ACEC). Please see the Massachusetts Department of Conservation and Recreation (DCR) webpage at www.mass.gov/dcr/stewardship/acec.index.htm for the most current listing of ACECs.

To confirm whether the project location is an ACEC, contact the community's Conservation Commission or the Massachusetts Department of Conservation and Recreation ACEC program at :

MA DCR
251 Causeway Street
Suite 7000
Boston, MA 02114
617/626-1250

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

November 2003

Total Approximate Acreage: 240,900 acres
Approximate acreage and designation date follow ACEC names below.

Bourne Back River

(1,850 acres, 1989) Bourne

Canoe River Aquifer and Associated Areas

(17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

Central Nashua River Valley

(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed

(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor

(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog

(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

Golden Hills

(500 acres, 1987) Melrose, Saugus, and Wakefield

Herring River Watershed

(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed

(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

Hockomock Swamp

(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

Inner Cape Cod Bay

(2,550 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin

(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed

(7,000 acres, 1992) Egremont and Mount Washington

Miscoe-Warren-Whitehall Watersheds

(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary

(1,300 acres, 1995) Boston, Milton, and Quincy

Parker River/Essex Bay

(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Petapawag

(25,630 acres, 2002) Ayer, Dunstable, Groton, Pepperell, Tyngsborough

Pleasant Bay

(9,050 acres, 1987) Brewster, Chatham, Harwich, and Orleans

Pocasset River

(150 acres, 1980) Bourne

Rumney Marshes

(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

Sandy Neck/Barnstable Harbor

(8,850 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin

(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit

(37,450 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, Townsend

Waquoit Bay

(2,550 acres, 1979) Falmouth and Mashpee

Weir River

(950 acres, 1986) Cohasset, Hingham, and Hull

Wellfleet Harbor

(12,350 acres, 1989) Eastham, Truro, and Wellfleet

Westborough Cedar Swamp

(1,650 acres, 1975) Hopkinton and Westborough

Weymouth Back River

(950 acres, 1982) Hingham and Weymouth

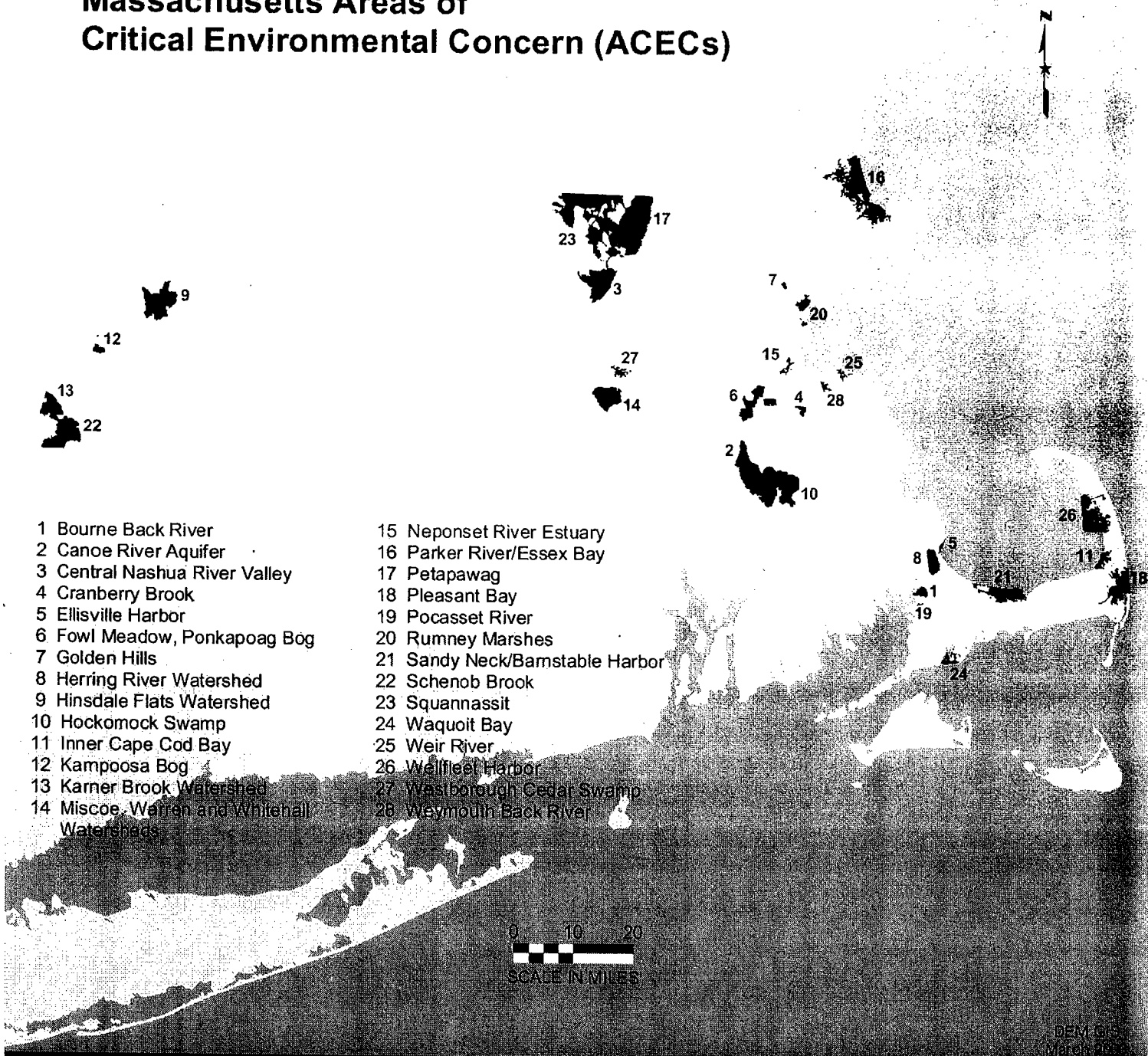
Towns with ACECs within their Boundaries

November 2003

TOWN	ACEC	TOWN	ACEC
Ashby	Squannassit	Norton	Hockomock Swamp
Ayer	Petapawag		Canoe River Aquifer
	Squannassit	Norwood Fowl Meadow and Ponkapoag Bog	
Barnstable	Sandy Neck/Barnstable Harbor	Orleans	Inner Cape Cod Bay
Bolton	Central Nashua River Valley		Pleasant Bay
Boston	Rumney Marshes	Pepperell	Petapawag
	Fowl Meadow and Ponkapoag Bog		Squannassit
	Neponset River Estuary	Peru	Hinsdale Flats Watershed
Bourne	Pocasset River	Plymouth	Herring River Watershed
	Bourne Back River		Ellisville Harbor
	Herring River Watershed	Quincy	Neponset River Estuary
Braintree	Cranberry Brook Watershed	Randolph	Fowl Meadow and Ponkapoag Bog
Brewster	Pleasant Bay	Raynham	Hockomock Swamp
	Inner Cape Cod Bay	Revere	Rumney Marshes
Bridgewater	Hockomock Swamp	Rowley	Parker River/Essex Bay
Canton	Fowl Meadow and Ponkapoag Bog	Sandwich	Sandy Neck/Barnstable Harbor
Chatham	Pleasant Bay	Saugus	Rumney Marshes
Cohasset	Weir River		Golden Hills
Dalton	Hinsdale Flats Watershed	Sharon	Canoe River Aquifer
Dedham	Fowl Meadow and Ponkapoag Bog		Fowl Meadow and Ponkapoag Bog
Dunstable	Petapawag	Sheffield	Schenob Brook
Eastham	Inner Cape Cod Bay	Shirley	Squannassit
	Wellfleet Harbor	Stockbridge	Kampoosa Bog Drainage Basin
Easton	Canoe River Aquifer	Taunton	Hockomock Swamp
	Hockomock Swamp		Canoe River Aquifer
Egremont	Karner Brook Watershed	Truro	Wellfleet Harbor
Essex	Parker River/Essex Bay	Townsend	Squannassit
Falmouth	Waquoit Bay	Tyngsborough	Petapawag
Foxborough	Canoe River Aquifer	Upton	Miscoe-Warren-Whitehall
Gloucester	Parker River/Essex Bay		Watersheds
Grafton	Miscoe-Warren-Whitehall	Wakefield	Golden Hills
	Watersheds	Washington	Hinsdale Flats Watershed
Groton	Petapawag	Wellfleet	Wellfleet Harbor
	Squannassit	W Bridgewater	Hockomock Swamp
Harvard	Central Nashua River Valley	Westborough	Westborough Cedar Swamp
	Squannassit	Westwood	Fowl Meadow and Ponkapoag Bog
Harwich	Pleasant Bay	Weymouth	Weymouth Back River
Hingham Weir River		Winthrop	Rumney Marshes
	Weymouth Back River		
Hinsdale	Hinsdale Flats Watershed		
Holbrook	Cranberry Brook Watershed		
Hopkinton	Miscoe-Warren-Whitehall		
	Watersheds		
	Westborough Cedar Swamp		
Hull	Weir River		
Ipswich	Parker River/Essex Bay		
Lancaster	Central Nashua River Valley		
	Squannassit		
Lee	Kampoosa Bog Drainage Basin		
Leominster	Central Nashua River Valley		
Lunenburg	Squannassit		
Lynn	Rumney Marshes		
Mansfield	Canoe River Aquifer		
Mashpee	Waquoit Bay		
Melrose	Golden Hills		
Milton	Fowl Meadow and Ponkapoag Bog		
	Neponset River Estuary		
Mt Washington	Karner Brook Watershed		
	Schenob Brook		
Newbury	Parker River/Essex Bay		

ACEC STATEWIDE MAP

Massachusetts Areas of Critical Environmental Concern (ACECs)



ACEC PROGRAM

Executive Office of Environmental Affairs
 Department of Environmental Management
 251 Causeway Street, Suite 600-700
 Boston, Massachusetts 02114
 617-626-1250 www.slate.ma.us/dem/programs/acec



APPENDIX 2

ENDANGERED SPECIES ACT REVIEW AND REQUIREMENTS

A. Background

In order to meet its obligations under the Clean Water Act and the Endangered Species Act (ESA), and to promote the goals of those Acts, the Environmental Protection Agency (EPA) is seeking to ensure the activities regulated by this general permit do not adversely affect endangered and threatened species and critical habitat. All facilities seeking coverage must assess the impacts of their discharges and discharge-related activities on federally-listed endangered and threatened species ("listed species") and designated critical habitat ("critical habitat"), to ensure that those goals are met. Prior to obtaining general permit coverage, facilities seeking coverage must meet the ESA eligibility provisions of this permit. Facilities seeking coverage should follow the instructions in this Appendix at the earliest possible stage to ensure that the notification requirements for general permit coverage are complete upon submission.

Facilities seeking coverage also have an independent ESA obligation to ensure that their activities do not result in any prohibited "takes" of listed species¹. Many of the measures required in this general permit and in these instructions to protect species may also assist in ensuring that the facilities seeking coverage activities do not result in a prohibited taking of species in violation of Section 9 of the ESA. If the facility has plans or activities in areas where endangered and threatened species are located, it may wish to ensure that it is protected from potential takings liability under ESA Section 9 by obtaining an ESA Section 10 permit or by requesting formal consultation under ESA Section 7. Facilities seeking coverage that are unsure whether to pursue a Section 10 permit or a Section 7 consultation for takings protection, should confer with the appropriate U.S. Fish and Wildlife Service (USFWS)² office or the National Oceanic & Atmospheric Administration Fisheries Service (NOAA Fisheries), collectively referred to as "the Services".

There are four listed species of concern to facilities seeking coverage 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 NOAA Fisheries and the dwarf wedgemussel, the bog turtle, and the northern redbelly cooter are listed

¹ Section 9 of the ESA prohibits any person from "taking" a listed species (e.g., harassing or harming it) unless: (1) the taking is authorized through a "incidental take statement" as part of completion of formal consultation according to ESA section 7; (2) where an incidental take permit is obtained under ESA Section 10 (which requires the development of a habitat conservation plan); or (3) where otherwise authorized or exempted under the ESA. This prohibition applies to all entities including private individuals, businesses, and governments.

² Discharges to marine waters may require consultation with the NOAA Fisheries instead.

under the jurisdiction of the U.S. Fish and Wildlife Service.

The federally-listed endangered **dwarf wedgemussel** (*Alasmodonta heterodon*) is found in the following areas in Massachusetts and New Hampshire:

1. Connecticut River from Northumberland to Dalton, New Hampshire (Coos County).
2. Connecticut River from Lebanon to North Walpole, New Hampshire (Grafton and Sullivan Counties).
3. Ashuelot River from the Surry Mountain Flood Control Project in Surry to Swanzey, New Hampshire (Cheshire County).
4. South Branch of the Ashuelot River in East Swanzey, New Hampshire (Cheshire County).
5. Mill River from Whately to Hatfield, Massachusetts (Hampshire County).
6. Fort River in Amherst, Massachusetts (Hampshire County).
7. Mill River south of State Route 10 in Northampton, Massachusetts (Hampshire County).

The federally-listed endangered **shortnose sturgeon** (*Acipenser brevirostrum*) is found in the following areas in Massachusetts:

8. Merrimack River from the Essex Dam in Lawrence, Massachusetts to the Merrimack River's mouth (Essex County).
9. Connecticut River from Turners Falls, Massachusetts (Franklin, Hampshire, and Hampden Counties) to the Connecticut River's mouth, Connecticut (Hartford, Middlesex, and New London Counties).

The federally-listed threatened **bog turtle** (*Clemmys muhlenbergii*), is found in the following areas in Massachusetts:

10. bodies of water in the Towns of Egremont and Sheffield (Berkshire County), MA.

The federally-listed endangered **northern redbelly cooter** (*Pseudemys rubriventris*) is found in the following areas in Massachusetts:

11. bodies of water occurring within the following boundaries: in the Towns of Plymouth and Carver, (Plymouth County) MA, west of Route 3 and north of Route 25; east of Route 58 and south of Route 44.

All facilities seeking coverage by this general permit, including owners and operators of facilities discharging into any of the eleven identified areas where the endangered dwarf wedgemussel,

shortnose sturgeon, bog turtle, northern redbelly cooter are found, must determine whether they meet one or more of the ESA eligibility criteria (see Section "C", below) before submitting an NOI. A facility that cannot meet any of the ESA eligibility criteria must apply for an individual permit.

B. The ESA Eligibility Criteria

A facility seeking coverage under this general permit must demonstrate that it meets one or more of the following criteria. See also ESA Section 7 Consultation Handbook posted on the USFWS website, www.fws.gov/endangered/consultations/s7hndbk/s7hndbk.htm.

Criterion A: No endangered or threatened species or critical habitats are in proximity to the point where authorized discharges reach the receiving waters.

Criterion B: (1) In the course of a separate federal action involving the facility, formal or informal consultation with the Fish and Wildlife Service and/or NOAA Fisheries under Section 7 of the ESA has been concluded and that consultation addressed the effects of the discharges and discharge-related activities on listed endangered or threatened species and critical habitat; and ,
(2) The consultation resulted in either a no jeopardy opinion or a written concurrence by USFWS and/or NMFS with a finding that the discharges and discharge-related activities are not likely to adversely affect listed endangered or threatened species or critical habitat.

Criterion C: The activities are authorized under Section 10 of the ESA and that authorization addresses the effects of the discharges and discharge-related activities on listed endangered or threatened species and critical habitat.

(Facilities must follow USFWS and/or NMFS procedures when applying for an ESA Section 10 permit (see 50 CFR §17.22(b)(1) for USFWS and §222.22 for NMFS). Application instructions for Section 10 permits can be obtained by assessing the appropriate websites (www.fws.gov and www.nmfs.noaa.gov) or by contacting the appropriate regional office.)

Criterion D: Using the best scientific and commercial data available, the effects of the discharges and discharge related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by the applicant and affirmed after review by EPA that the discharges and discharge related activity are likely to have no adverse effect on any federally threatened or endangered listed species or designated critical habitat and the Services have concurred with this finding.

Criterion E: The discharges and discharge-related activities have already been addressed in another operator's certification of eligibility, which includes the facility's activities covered under this general permit.

C. The Steps to Determine if the ESA Eligibility Criteria Can Be Met

To determine eligibility, you must determine whether endangered or threatened species or critical habitat are in proximity to your facility or the points where its discharges reach the receiving waters PRIOR to completing and submitting a Notice of Intent (NOI). You must follow the steps outlined below and document the results of your eligibility determination.

Step 1. Determine if You Can Meet Eligibility Criterion "A"

Criterion A. You are eligible for coverage by this permit under Criterion A if you can answer "No" to all of the following questions:

- Are there any Endangered Species in your county? Are there any Critical Habitat Areas in your county?
- Are there any Endangered Species or Critical Habitat Areas in proximity to your facility or discharge locations?

Use Appendix 2.1 and the provisions below to answer these questions, and to: "*Check for Listed Endangered Species in Your County*," "*Check for Critical Habitat in Your County*," and "*Check for Proximity to Your Discharge Locations*."

If you answered "No" to the questions above, you have met ESA eligibility Criterion A. Skip to Step 4.

If you answered "Yes" to either of the questions above, Go to Step 2.

Check for Listed Endangered Species in Your County. Look at the latest county species list to see if any listed species are found in your county. If you are located in proximity to the border of a county or your site or facility is located in one county and your discharge points are located in another, you must look under both counties. Since species are listed and de-listed periodically, you will need the most current list at the time you are conducting your endangered species assessment. See <http://cfpub.epa.gov/npdes/stormwater/esa.cfm>.

Check for Critical Habitat in Your County. Some (but not all) listed species have designated critical habitat. Exact locations of such habitat are provided in the endangered species regulations at 50 CFR Part 17 and Part 226. To determine if discharge locations are within designated critical habitat, you should either:

- Review the regulations (50 CFR Parts 17 and 226) that specify critical habitat. These regulations can be found in many larger libraries or via the Government Printing Office website, www.access.gpo.gov ; or

- Contact the appropriate Fish and Wildlife Service (FWS) or NOAA Fisheries office. A list of FWS and NOAA Fisheries offices for the areas of permit coverage is found in Sections E and F of this Appendix; or

- Contact the Natural Heritage Program for your state. Heritage programs gather, manage, and distribute detailed information about the biological diversity found within their jurisdictions. They frequently have the most current information on listed species and critical habitat. Contact information for the Heritage program is provided in Section G of this Appendix.

Check for Proximity to Your Discharge Locations. You must determine whether listed species or critical habitat are in proximity to your discharges. Listed species and critical habitat, including those in adjacent counties, are in proximity when they are:

- Located in the path or immediate area through which or over which wastewater flows from the facility to the point of discharge into the receiving water. This includes areas in the receiving water downstream from the point of discharge.

- Located in the immediate vicinity of, or nearby, the point of discharge into receiving waters.

The area in proximity to be searched/surveyed for listed species will vary with the size and location of the site, the nature and quantity of the discharges, and the type of receiving waters. You should use the methods which allow you to determine, to the best of your knowledge, whether listed species, including those in adjacent counties, are in proximity to your particular site. These methods may include:

- Conducting visual inspections. This method may be particularly suitable for sites that are smaller in size or sites located in non-natural settings such as highly urbanized areas where there is little or no natural habitat. For other sites, a visual survey may not be sufficient to determine whether listed species are in proximity.

- Contacting the nearest State Wildlife agency, USFWS, or NMFS offices. Many endangered and threatened species are found in well-defined areas or habitats. That information is frequently known by state or federal wildlife agencies.

- Contacting local/regional conservation groups such as natural heritage programs (see Section G below). These groups inventory species and their locations and maintain lists of sightings and habitats.

- Conducting a formal biological survey. Sites with extensive discharges may choose to conduct biological surveys as the most effective way to assess whether listed species are located in proximity and whether there are likely adverse effects.

Step 2. Determine If You Can Meet Eligibility Criteria “B”, “C”, or “E”

Criterion B. You are eligible for coverage by this permit under Criterion B if you can answer “Yes” to all of the following questions:

- Has consultation, under ESA Section 7, already been completed for discharges from your site³?
- Did the previously completed ESA Section 7 consultation consider all currently listed species and critical habitat and address your discharge and related activities?
- Has there been no substantial change, since that previous consultation, in:
 - (1) the nature and amount of your discharge and discharge-related activities,
 - (2) the characteristics of the receiving water, and
 - (3) the status of listed species and their critical habitat?
- Did the ESA Section 7 consultation result in either a “no jeopardy” opinion by the Service (for formal consultations) or a concurrence by the service that your activities would be “unlikely to adversely affect” listed species or critical habitat?
- Do you agree to implement all measures, if any, upon which the concurrence was conditioned?

If you answered “Yes” to all five questions above, you have met ESA eligibility Criterion B. Skip to Step 4.

If you answered “No” to any of the five questions above, check to see if you can meet Criteria C or E, or Go to Step 3.

Criterion C. You are eligible for coverage by this permit under Criterion C if you can answer “Yes” to all of the following questions:

³ A formal or informal ESA Section 7 consultation on this or another federal action (e.g., new source review under NEPA, application for a dredge and fill permit under CWA Sec. 404, application for an individual NPDES permit, etc.) addressed the effects of your site or facility discharges and discharge-related activities on listed species and critical habitat. (See 50 CFR 402.13).

- Has an ESA Section 10 permit already been issued for discharges from your site⁴?
- Does your ESA Section 10 Permit consider all currently listed species and critical habitat, and address your discharges and related activities at your site?
- Has there been no substantial change, since that previous consultation, in:
 - (1) the nature and amount of your discharge and discharge-related activities,
 - (2) the characteristics of the receiving water, and
 - (3) the status of listed species and their critical habitat?

If you answered "Yes" to the three questions above, you have met ESA eligibility Criterion C. Skip to Step 4.

If you answered "No" to any of the three questions above, check to see if you can meet Criterion E, or Go to Step 3.

Criterion E. You are eligible for coverage by this permit under Criterion E if you can answer "Yes" to all of the following questions:

- Did another site or facility operator previously certify ESA eligibility for your site or facility⁵?
- Did the other operator's certification of eligibility consider all currently listed species and critical habitat and address your discharge and related activities?
- Has there been no substantial change, since that previous consultation, in:
 - (1) the nature and amount of your discharge and discharge-related activities,

⁴ You have a permit under section 10 of the ESA and that authorization addresses the effects of your discharges and related activities on listed species and critical habitat. You must follow USFWS procedures when applying for an ESA section 10 permit (see 50 CFR 17.22(b)(1)).

⁵ In order to meet the permit eligibility requirements by relying on another operator's certification of eligibility, the other operator's certification must apply to the location of your site or facility and must address the effects from your discharges and related activities on listed species and critical habitat.

- (2) the characteristics of the receiving water, and
- 3) the status of listed species and their critical habitat?

- Do you agree to implement all measures, if any, upon which the other operator's certification was based?

Before you rely on another operator's certification, you should carefully review that certification along with any supporting information. You also need to confirm that no additional species have been listed or critical habitat designated in the area of your site since the other operator's endangered species assessment was done. If you do not believe that the other operator's certification adequately assessed current circumstances, you may not rely on that prior certification as a basis for meeting these ESA review criteria.

If you answered "Yes" to all four questions above, you have met ESA eligibility Criterion E. Skip to Step 4.

If you answered "No" to any of the four questions above, Go to Step 3.

Step 3. Determine If You Can Meet Eligibility Criterion "D"

Criterion D. You can certify eligibility, according to Criterion D, for coverage by this permit if you can answer "Yes" to all of the following questions:

- Have you determined that your site's discharges and related activities are "likely to have no adverse affect" on any listed species or critical habitat, and you have reached agreement with the appropriate Services office on the determination and/or any measures to avoid, eliminate, or minimize adverse effects?
- Do you agree to implement all measures upon which the determination was conditioned?

If you answered "Yes" to the both questions above, you have met ESA eligibility Criterion D. Go to Step 4.

If you answered "No" to either of the questions above you are not eligible for coverage by this permit. You must submit an individual application for your discharges to EPA. (See 40 CFR Section 122.21)

Step 4. Submit Notice of Intent and Document Results of the Eligibility Determination.

Once you have demonstrated that you meet one or more of the ESA eligibility criteria and have determined National Historic Preservation Act (NHPA) eligibility (See Appendix 3), you may submit the Notice of Intent (NOI). Signature and submittal of the NOI constitutes your certification, under penalty of law, of your eligibility for permit coverage.

You must include documentation of ESA eligibility with the NOI. Documentation required for the various ESA eligibility criteria are as follows:

Criterion A: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.

Criterion B: A copy of the USFWS's and/or NMFS's, as appropriate, biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.

Criterion C: A copy of the USFWS's and/or the NMFS's, as appropriate, letter transmitting the ESA Section 10 authorization.

Criterion D: Documentation of how you determined adverse effects on listed endangered or threatened species and critical habitat were unlikely and that the USFWS and/or NMFS, as appropriate, have concurred with this finding.

Criterion E: A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.

D. Duty To Implement Terms and Conditions Upon Which Eligibility Was Determined

You must comply with any terms and conditions imposed under the ESA eligibility requirements to ensure that your discharges and discharge-related activities do not pose adverse effects or jeopardy to listed species and/or critical habitat. If the ESA eligibility requirements of the permit cannot be met, then you may not be covered under this permit and must apply for an individual permit.

E. U.S. Fish and Wildlife Service Website and Office Information

National Websites For Endangered Species Information:

Endangered Species Home Page: <http://endangered.fws.gov/>

ESA Section 7 Consultations: <http://endangered.fws.gov/consultations/index.html>

Mailing Address:

Supervisor, U.S. FWS Region 5
New England Field Office
US Fish and Wildlife Service
70 Commercial St., Suite 300
Concord, NH 03301

F. NOAA Fisheries Service Website and Office Information

Website: http://www.nmfs.noaa.gov/pr/species/esa_species.htm

Mailing Address:

NOAA Fisheries Service
Northeast Region, Protected Resource Division
Attn: Endangered Species Coordinator
One Blackburn Drive
Gloucester, MA 01930

G. Natural Heritage Network

The Natural Heritage Network comprises 75 independent heritage program organizations located in all 50 states, 10 Canadian provinces, and 12 countries and territories located throughout Latin America and the Caribbean. These programs gather, manage, and distribute detailed information about the biological diversity found within their jurisdictions. Developers, businesses, and public agencies use natural heritage information to comply with environmental laws and to improve the environmental sensitivity of economic development projects. Local governments use the information to aid in land use planning.

The Natural Heritage Network is overseen by NatureServe, the Network's parent organization, and is accessible on-line at: http://www.natureserve.org/nhp/us_programs.htm, which provides website and other access to a large number of specific biodiversity centers.

Massachusetts Natural Heritage & Endangered Species Program
Division of Fisheries and Wildlife
Route 135
Westborough, MA 01581
508/792-7270

New Hampshire Natural Heritage Bureau
Department of Resources & Economic Development
172 Pembroke Street, P.O. Box 1856
Concord, NH 03302-1856
603/271-3623

APPENDIX 2.1

ENDANGERED SPECIES ACT – COUNTY SPECIES LIST

The following list identifies listed or proposed U.S. species by State and County. If you are located close to the border of a county or your site is located in one county and your discharge points are located in another, you must look under both counties. This list has been updated through October 2004. However, since species are listed and de-listed periodically, you will need the most current list at the time you are conducting your endangered species assessment. The Endangered Species Home Page is located at: <http://endangered.fws.gov/>. Species listed below with a status of both endangered (E) and threatened (T) are generally either endangered or threatened within the specified county. Designation of critical habitat (CH) does not mean that the county constitutes critical habitat, only that CH has been designated for that for that species.

Massachusetts:

County	Group name	Inverse name	Scientific name	Action/status
No county details - all permittees should consider	Mammals	Lynx, Canada	Lynx Canadensis	T
Barnstable	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
		Plover, Piping	Charadrius melodus	E,T
		Tern, Roseate	Sterna dougalli dougalli	E,T
	Plants	Gerardia, Sandplain	Agalinus acuta	E
	Reptiles	Turtle, Kemp's (Atlantic) Ridley Sea	Lepidochelys kempii	E
		Turtle, Loggerhead Sea	Caretta caretta	T
Berkshire	Mammals	Bat, Indiana	Myotis sodalist	E
		Cougar, Eastern	Felis concolor cougar	E
	Reptiles	Turtle, Bog	Clemmys muhlenbergii	T
Bristol	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
		Plover, Piping	Charadrius melodus	E,T
	Fishes	Sturgeon, Shortnose	Acipenser brevirostrum	E
	Reptiles	Turtle, Kemp's (Atlantic) Ridley Sea	Lepidochelys kempii	E
		Turtle, Loggerhead Sea	Caretta caretta	T
Dukes	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
		Plover, Piping	Charadrius melodus	E,T

	Reptiles	Turtle, Kemp's (Atlantic) Ridley Sea	Lepidochelys kempii	E
		Turtle, Loggerhead Sea	Caretta caretta	T
Essex	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
		Plover, Piping	Charadrius melodus	E,T
	Fishes	Sturgeon, Shortnose	Acipenser brevirostrum	E
	Plants	Pogonia, Small Whorled	Isotria medeoloides	T
	Reptiles	Turtle, Kemp's (Atlantic) Ridley Sea	Lepidochelys kempii	E
		Turtle, Loggerhead Sea	Caretta caretta	T
Franklin	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
	Fishes	Sturgeon, Shortnose	Acipenser brevirostrum	E
	Plants	Bulrush, Northeastern (= Barbed Bristle)	Scirpus ancistrochaetus	E
Hampden	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
	Fishes	Sturgeon, Shortnose	Acipenser brevirostrum	E
	Plants	Pogonia, Small Whorled	Isotria medeoloides	T
Hampshire	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
	Fishes	Sturgeon, Shortnose	Acipenser brevirostrum	E
	Insects	Beetle, Puritan Tiger	Cincindela puritana	T
	Mammals	Cougar, Eastern	Felis concolor cougar	E
	Plants	Pogonia, Small Whorled	Isotria medeoloides	T
Middlesex	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
Nantucket	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
		Plover, Piping	Charadrius melodus	E,T
	Reptiles	Turtle, Kemp's (Atlantic) Ridley Sea	Lepidochelys kempii	E
		Turtle, Loggerhead Sea	Caretta caretta	T
Norfolk	Reptiles	Turtle, Kemp's (Atlantic) Ridley Sea	Lepidochelys kempii	E
		Turtle, Loggerhead Sea	Caretta caretta	T
		Eagle, Bald	Haliaeetus leucocephalus	T

Plymouth	Birds	Plover, Piping	Charadrius melodus	E,T
		Tern, Roseate	Sterna dougalli dougalli	E,T
	Reptiles	Northern Redbelly Cooter	Pseudemys rubriventris	E, CH

New Hampshire:

County	Group name	Inverse name	Scientific name	Action/status
Belknap	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
	Plants	Pogonia, Small Whorled	Isotria medeoloides	T
Carroll	Plants	Pogonia, Small Whorled	Isotria medeoloides	T
Cheshire	Clams	Mussel, Dwarf Wedge	Alasmidonta heterodon	E
Coos	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
	Clams	Mussel, Dwarf Wedge	Alasmidonta heterodon	E
Grafton	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
	Clams	Mussel, Dwarf Wedge	Alasmidonta heterodon	E
Hillsborough	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
	Plants	Pogonia, Small Whorled	Isotria medeoloides	T
Merrimack	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
	Insects	Butterfly, Karner Blue	Lycaeides melissa samuelis	E
	Plants	Pogonia, Small Whorled	Isotria medeoloides	T
Rockingham	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
		Plover, Piping	Charadrius melodus	T
	Plants	Pogonia, Small Whorled	Isotria medeoloides	T
Strafford	Plants	Pogonia, Small Whorled	Isotria medeoloides	T
Sullivan	Birds	Eagle, Bald	Haliaeetus leucocephalus	T
	Clams	Mussel, Dwarf Wedge	Alasmidonta heterodon	E
	Plants	Milk-Vetch, Jesup's	Astragalus robbinsii var. jesupi	E

APPENDIX 3

NATIONAL HISTORIC PRESERVATION ACT REVIEW & REQUIREMENTS

A. Background

Facilities seeking coverage under the NCCW General Permit must not 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. In addition, facilities must comply with applicable State, Tribal and local laws concerning the protection of historic properties and places and facilities seeking coverage are required to coordinate with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer and others regarding effects of their discharges on historic properties.

B. Determination of Potential Impact

Facilities seeking coverage under this permit must determine whether their site's discharges have the potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places.

For existing facilities with no new or increased discharges, a simple visual inspection may be sufficient to determine whether historic properties are affected. However, any facility proposing a new or increased discharge should conduct further inquiry to determine whether historic properties may be affected by the discharge. In such instances, facilities seeking coverage should first determine whether there are any historic properties or places listed on the National Register or if any are eligible for listing on the register (e.g., they are "eligible for listing").

EPA suggests that facilities seeking coverage first access the "National Register of Historic Places" information listed on the National Park Service's web page: <http://www.nr.nps.gov/nr>. The addresses for State Historic Preservation Officers are listed in Section II of this appendix. Facilities seeking coverage may also contact city, county or other local historical societies for assistance, especially when determining if a place or property is eligible for listing on the register.

C. Permit Eligibility Criteria

The following three scenarios describe how facilities seeking coverage can meet the permit eligibility criteria for protection of historic properties under this permit:

- (1) If historic properties are not identified in the path of a site's discharges, then the applicant is eligible for coverage under this permit.
- (2) If historic properties are identified but it is determined that they will not be affected by the discharges, the applicant has met the NHPA eligibility criteria for coverage under this permit.

(3) If historic properties are identified in the path of discharges and it is determined that there is the potential to adversely affect the property, the applicant can still meet the NHPA eligibility criteria under of this permit, if he/she obtains and complies with a written agreement with the appropriate State or Tribal Historic Preservation Officer which outlines measures the applicant will follow to mitigate or prevent those adverse effects. The written agreement must be kept on site and available for review, if requested.

In situations where an agreement cannot be reached between an applicant and the State Historic Preservation Officer, facilities seeking coverage should contact the Advisory Council on Historic Preservation listed in Section G. below for assistance.

The term "adverse effects" includes but is not limited to damage, deterioration, alteration or destruction of the historic property or place. EPA encourages facilities seeking coverage to contact the appropriate State or Tribal Historic Preservation Officer as soon as possible in the event of a potential adverse effect to a historic property.

Facilities seeking coverage are reminded that they must comply with applicable State, Tribal and local laws concerning the protection of historic properties and places.

D. Internet Information on the National Register of Historic Places

The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service, which is part of the U.S. Department of the Interior.

An electronic listing of the "National Register of Historic Places," as maintained by the National Park Service, can be accessed on the Internet at:
<http://www.cr.nps.gov/nr>.

E. State Historic Preservation Officers (SHPO)

Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125
617/727-8470
TTD: 1-800-392-6090

State Historic Preservation Officer
New Hampshire Division of Historic Resources
P.O. Box 2043
Concord, NH 03302-2043
603/271-6435
TDD: 1-800-735-2964

F. Tribal Historic Preservation Officer

Massachusetts
Wampanoag Tribe of Gay Head (Aquinnah)
Attn: Cheryl Andrews-Maltais
Tribal Historic Preservation Officer
20 Black Brook Road
Aquinnah, MA 02535-1546

G. Advisory Council on Historic Preservation

The Advisory Council on Historic Preservation (ACHP) is an independent federal agency that promotes the preservation, enhancement, and productive use of our Nation's historic resources, and advises the President and Congress on national historic preservation policy.

The goal of the National Historic Preservation Act (NHPA), which established ACHP in 1966, is to have federal agencies act as responsible stewards of our Nation's resources when their actions affect historic properties. ACHP is the only entity with the legal responsibility to encourage federal agencies to factor historic preservation into federal project requirements.

As directed by NHPA, ACHP serves as the primary federal policy advisor to the President and Congress; recommends administrative and legislative improvements for protecting our Nation's heritage; advocates full consideration of historic values in federal decision making; and reviews federal programs and policies to promote effectiveness, coordination, and consistency with national preservation policies.

Main Office

Advisory Council on Historic Preservation
Old Post Office Building
1100 Pennsylvania Avenue, NW, Suite 809
Washington, DC 20004
Phone: (202) 606-8503
Fax: (202) 606-8647/8672
E-mail: achp@achp.gov

APPENDIX 4
NOTICE OF INTENT AND NOTICE OF TERMINATION INSTRUCTIONS
AND SUGGESTED FORMS AND MAILING ADDRESSES
FOR THE NONCONTACT COOLING WATER GENERAL PERMIT

I. Suggested Notice of Intent (NOI) Form

In order to be covered by the Noncontact Cooling Water General Permit (NCCW GP) applicants must submit a written NOI to EPA-New England and the appropriate state agency. The NOI consists of either the suggested NOI form included as Appendix 4.1 or another form of official correspondence that contains all of the information required in the General Permit, the NOI instructions and the suggested form.

A. Instructions for the NOI - At a minimum, the NOI must include the following information for each individual facility. Additional information may be attached as needed.

1. General facility information.

- a) Provide the facility name, facility address and mailing address (if different from location address), and telephone and fax numbers. Provide a facility contact name and email address.
- b) Provide the legal name, address, telephone and fax number of the owner and operator (if not the owner) if different from the facility information. Indicate whether the owner is a Federal, State, Tribal, private or other entity.
- c) Provide the facility's SIC code(s), type of business, and the facility location(s), including its longitude and latitude.
- d) Provide a topographic map indicating the location(s) of the facility and receiving water; discharge point(s); and upstream and downstream temperature monitoring points.
- e) Provide the answer to the following questions:
 - 1. Has a prior NPDES permit been granted for this discharge? If yes, provide the permit number:
 - 2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.2?
 - 3. Is the facility covered by an individual NPDES permit? If yes, provide the permit number.

2. Discharge information.

- a) Provide the name of the receiving water(s) into which each outfall will discharge into and identify if it is freshwater or marine water and its state water quality classification.
- b) Describe the project or activity that generates the discharge(s) to be covered by the permit.
- c) For Massachusetts facilities only: Submit the completed engineering calculation of surface water temperature rise as shown in Attachment A of the General Permit.

- d) Provide the number of outfalls; and for each outfall, provide the following information:
- e) Provide the flow in GPD – both the maximum daily and average flow rate of the discharge in gallons per day; Note: The facility's authorized effluent flow will be limited to the flow reported here.
- f) Provide the maximum daily and monthly average temperature of discharge, in degrees Fahrenheit.
- g) Provide the maximum and minimum monthly pH of discharge (in s.u.);
- h) Is the source of the NCCW potable water? If yes, EPA will calculate the Total Residual Chlorine effluent limit for the facility.
- i) State whether the discharge(s) is continuous, periodic (occurs regularly, for example monthly or seasonally, but is not continuous all year) or intermittent (occurs sometimes but not regularly), or both. If the discharge is periodic, specify the frequency (number of days or months per year) of the discharge and the specific months of discharge. If the discharge is intermittent, specify the number of days per year there is intermittent discharge.
- j) Provide the latitude and longitude of each discharge point with an accuracy of 100 feet (see EPA's siting tool at: http://www.epa.gov/tri/report/siting_tool/) and,
- k) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water. Please attach any calculation sheets used to support stream flow and dilution calculations. See General Permit Attachment B for equations and additional information.
- l) For Massachusetts facilities only: Determine if the discharge is into an Area of Critical Environmental Concern (ACEC) and, if yes, provide the name of the ACEC. See Section 3.4 and Appendix 1 of the General Permit for more information on ACECs.

3. NCCW Source Water Information

- a) Identify the source of the NCCW (i.e., municipal water supply, private well, surface water withdrawal, groundwater); provide the name of the source water. State if the source is registered or permitted under the either the Mass Water Management Act or the NHDES Water User Registration Rule (Env Wq 2202). If yes, provide registration number and amount of the permitted withdrawal.
- b) If the source of the NCCW is from a surface water body, provide the following information: Is it a freshwater river or stream? Is it a lake or reservoir? Is it tidal river, estuary or ocean?
- c) Is the source of the NCCW groundwater? If yes, See Appendix 5 and submit effluent and surface water test results, as required in Section 5.4 of the General Permit.

e) Does the facility use both a primary and backup source of noncontact cooling water? If yes, include information that identifies and explains the primary and backup sources for NCCW and how often the backup supply was used in the last three years.

4. Best Technology Available for CWIS

Are you subject to BTA requirements at Part 4.2 of the General Permit? (The facility's discharge is covered by this General Permit and the facility withdraws noncontact cooling water from surface source water). If no, provide a written explanation.

If yes, provide a facility-specific the BTA description as required in Part 4.3 of the General Permit. For additional information and guidance, see Questions 13- 23 of the NCCW Fact Sheet, posted at <http://www.epa.gov/region1/npdes/permits/noncontactcoolwatermassnh.pdf>.

Provide a map showing the location of each CWIS intake structure; NCCW outfall(s) and any CWIS feature referred to in the BTA description.

Does your description include the measures to meet the (i) General BTA requirements; (ii) 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; (iii) the attributes of the current CWIS; (iv) design measures of the CWIS; (v) operation measures of the CWIS; (vi) historical occurrence of impinged fish for the past five years; (vii) if applicable, a demonstration that the facility's intake rate is commensurate with a closed-cycle recirculation system; and (viii) other components to reduce impingement and/or entrainment of aquatic life?

Provide the following information for each CWIS to support the facility-specific BTA description in the written description.

The design capacity of the CWIS in MGD; maximum monthly average intake of the CWIS during the previous five years in MGD; month in which this flow occurred; and the maximum through-screen design intake velocity in feet/second (fps).

For facilities where the CWIS is located on a freshwater river or stream, provide the following information:

The source water's annual mean flow in cubic feet/second (cfs); the design intake flow as a percent of the source water's annual mean flow and attach the calculations if equal to or less than 5% of annual mean flow; the source water's 7Q10 in cfs (See Attachment B of the General Permit for more information on 7Q10 determinations); and the design intake flow as a percent of the source water's 7Q10.

5. Contaminant Information.

Provide a listing of all non-toxic pH neutralization and/or dechlorination chemicals used as required in Sections I.B.8 and II.B.5 of the General Permit. Include product name and manufacturer; maximum and average daily quantity used as well as the maximum and average

daily expected concentrations (mg/l) in the NCCW discharge; and the vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for aquatic organism(s)).

6. Determination of Endangered Species Act Eligibility

Provide documentation of ESA eligibility as required at Part 3.4 and Appendix 2 of the General Permit and respond to the following questions.

- a) Indicate whether any listed threatened or endangered species, designated critical habitat, or essential fish habitat, are in the proximity of the discharge(s) to be covered by this permit.
- b) Indicate whether any consultation with the Services is completed.
- c) Indicate if the consultation is underway.
- d) Provide the results of the consultation with the Services: a "no jeopardy" opinion; or written concurrence on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat
- e) Identify which of the five eligibility criteria listed in Appendix 2, Section b.2 (criteria A,B,C,D,or E) you have met.

7. Documentation of National Historic Preservation Act Requirements

Respond to the following questions:

- a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?
- b) State whether any state or tribal historic preservation officer (SHPO or THPO) was consulted in such a determination. Provide the results of the consultation.
- c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (requirements 1, 2, or 3) have you met?

8. Supplemental Information

Applicants should provide any supplemental information needed to meet the requirements of the permit, including, any analytical data used to support the application, and any certification(s) required by the permit.

9. Signature Requirements

The Notice of Intent must be signed and dated by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the noncontact cooling water (NCCW) system; (2) the discharge consists solely of NCCW (to reduce temperature) and authorized pH adjustment chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, waste product (other than heat) or finished product; (4) if the discharge of noncontact cooling water subsequently mixes with other wastewater (i.e.stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for noncontact cooling water; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and the

National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

B. Submission of NOI to EPA

Filing with EPA - All operators located in Massachusetts and New Hampshire that apply for coverage under this General Permit must submit a written NOI to EPA-New England. The completed, signed NOI forms and attachments must be submitted to EPA-NE at:

US Environmental Protection Agency
NCCW GP Processing
Municipal Assistance Unit (CMU),
1 Congress Street, Suite 1100
Boston, MA 02114-2023

or electronically mailed to NPDES.Generalpermits@epa.gov,
or faxed to the EPA Office at 617-918-0505.

Filing with the states - A copy of the NOI form filed with EPA-NE must also be filed with state agencies. The state agency may elect to develop a state specific form or other additional information requirements.

1. Discharges in Massachusetts

- a. New or Increased Discharges or Discharges currently covered by an individual permit

Facilities located in Massachusetts with new or increased discharges, or facilities with a NCCW discharge that is currently covered by an individual permit that have been requested to seek coverage under the general permit, must submit a copy of the completed EPA's Suggested Notice of Intent form found in Appendix 4.1; the completed State Transmittal Form; and a **copy** of the check for the appropriate fee to:

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

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

In addition, the appropriate fee and a copy of the transmittal form must be sent to:

Massachusetts Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

b. Administratively Continued Discharges under the expired General Permit

Facilities located in Massachusetts 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 permit expired on April 25, 2005. To obtain coverage under this General Permit, these facilities must submit a completed copy of EPA's Suggested Notice of Intent Form, Appendix 4.1, and a copy of the MassDEP transmittal from their previous application to:

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

All applicants should keep a copy of the complete application package for their records.

a) Discharges in New Hampshire: All applicants must provide a completed copy of EPA's Suggested Notice of Intent Form included as Appendix 4.1 or other official correspondence that contains all of the information required in the General permit, the NOI instructions and the suggested form to:

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

II. Notice of Termination (NOT)

Operators of facilities and/or operations authorized under this permit shall notify US EPA-New England of the termination of discharge(s) authorized under the noncontact cooling water general permit (NCCW GP). The NOT must be either the suggested NOT form (See Appendix V, Attachment B) or another form of official correspondence containing the information required in the instructions below. The NOT must be completed and submitted within 30 days of the permanent cessation of the discharge(s) authorized by the NCCW GP.

A. Instructions for the NOT - The NOT requires the following information:

- 1) Name, mailing address, and location of the facility or site for which the notification is submitted;
- 2) Name, address and telephone number of the operator addressed by the NOT;
- 3) The NPDES permit number assigned;
- 4) An indication that the discharge has been permanently terminated and the reason for the termination (i.e., connected to municipal sewer, conversion to a closed loop system, other); and
- 5) Signatory requirements according to 40 CFR 122.22 (see NOI instructions) in addition to the following certification:

I certify under penalty of law that all discharges from the identified facility that are authorized by the Noncontact Cooling Water General Permit (the NCCW GP), have been terminated. I understand that by submitting this Notice of Termination (NOT), I am no longer authorized to discharge waters covered by the NCCW GP and that discharging pollutants from the activity covered by the NCCW GP is unlawful under the Clean Water Act where the discharge is not authorized by a permit. I also understand that the submission of this NOT does not release an owner/operator from liability for any violation of the NCCW GP or the Clean Water Act.

B. Submission of NOT Forms - Signed and completed NOT forms and attachments must be submitted to EPA-NE at the address below. A copy of the NOT form must also be submitted to the appropriate state agency at the address below.

US Environmental Protection Agency
NCCW-NOT Processing
Municipal Assistance Unit (CMU),
1 Congress Street, Suite 1100
Boston, MA 02114-2023

or electronically mailed to NPDES.Generalpermits@epa.gov, or faxed to the EPA Office at 617-918-0505.

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

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

APPENDIX 4.1

Suggested Form for Notice of Intent (NOI) for the Noncontact Cooling Water General Permit

1. General facility information. Please provide the following information about the facility.

a) Name of facility: _____		Type of Business: _____
Location of facility: longitude: _____ latitude: _____	Facility SIC codes: _____	Facility Address: _____
b) Name of facility owner: _____		Email address of owner: _____
Owner's Tel #: _____ Owner's Fax #: _____		Owner is (check one): 1. Federal _____ 2. State _____ 3. Tribal _____ 4. Private _____ 4. Other _____ (Describe)
Address of owner (if different from facility address) _____		
Legal name of Operator, if not owner: _____		
Operator Contact Name: _____		
Operator Tel Number: _____ Fax Number: _____		
Operator's email: _____		
Operator Address (if different from owner) _____		
d) Attach topographic map indicating the locations of the facility and the receiving water; all NCCW discharge points; upstream and downstream monitoring points. Map attached ? _____		
e) Check Yes or No for the following:		
1. Has a prior NPDES permit been granted for the discharge? Yes _____ No _____ If Yes, Permit Number: _____		
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes _____ No _____		
3. Is the facility covered by an individual NPDES permit? Yes _____ No _____ If Yes, Permit Number _____		
4. Is there a pending application on file with EPA for this discharge? Yes _____ No _____ If Yes, date of submittal: _____		

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)

- a) Name of receiving water into which discharge will occur: _____
State Water Quality Classification: _____ Freshwater: _____ Maritime Water: _____
- b) Describe the discharge activities for which the owner/applicant is seeking coverage: _____
- c) Engineering Calculations: Submit the completed engineering calculation of the surface water temperature rise as shown in Attachment A of the General Permit. Check if attached: _____
- d) Number of outfalls _____ for each outfall
- e) What is the maximum daily and average monthly flow of the discharge? Note that EPA will use the flow reported here as the facility's permitted effluent flow limit Max Daily Flow _____ GPD Average Flow _____ GPD
- f) What is the maximum daily and average monthly temperature of the discharge (in degrees F)? Max Temp. _____ Average Temp. _____
- g) What is the maximum and minimum monthly pH of the discharge (in su)? Max pH _____ Min. pH _____
- h) Is the source water of the NCCW potable water? Yes _____ No _____ If Yes, EPA will calculate the Total Residual Chlorine limit.
- i) Is the discharge continuous? Yes _____ No _____ If No, is the discharge intermittent (I) or seasonal (S)?
- j) _____ and discharge occurs _____ hrs./day; (S) _____ and the discharge occurs in which months? _____
- k) Latitude and longitude of each discharge within 100 feet: pt.1: long. _____ lat. _____; pt.2: long. _____ lat. _____; pt.3: long. _____ lat. _____
(See <http://www.epa.gov/tri/report/sitingtool>)
- l) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water _____ cfs

Please attach any calculation sheets used to support stream flow and dilution calculations. See General Permit Attachment B for equations and additional information.

MASSACHUSETTS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on ACEC.

Areas of Critical Environmental Concern (ACEC): Does the discharge occur in an ACEC? Yes _____ No _____

If yes, provide the name of the ACEC: _____

3. NCCW Source Water Information. Please provide information about the NCCW source water, using separate sheets as necessary:

a) Indicate source of the NCCW (i.e., municipal water supply, private well, surface water withdrawal, surface water): Source: _____ Name of Source Water: _____ _____ Is the source registered/permitted under MA Water Management Act? Yes _____ No _____ If yes, registration number: _____	b) If source water is surface water: i) Is it a freshwater river or stream Yes _____ No _____ ii) Is it a lake _____ or reservoir _____? iii) Is it tidal river _____ or estuary _____ or ocean? _____ c) Is the source water well water? Yes _____ No _____ d) Does the facility use both a primary and backup source of noncontact cooling water? _____ If yes, attach information that identifies and explains the primary and backup sources of noncontact cooling water for and how often the backup supply was used in last three years.
---	---

4. Best Technology Available for CWIS

Are you subject to BTA requirements at Part 4.2 of the General Permit ? (Facility's discharge is covered by this General Permit and the facility withdraws noncontact cooling water from surface source water). Yes _____ No _____ If No, explain: If YES, attach a facility-specific the BTA description as required in Part 4.3 of the General Permit. See Questions 10- 20 of the Fact Sheet for additional information and guidance. Provide a map showing the location of each CWIS intake structure; NCCW outfall(s) and any CWIS feature referred to in the BTA description. Does your description include: _____ Measures to meet the General BTA requirements _____ The attributes of the current CWIS _____ Design measures of the CWIS _____ Operation measures of the CWIS _____ Historical occurrence of impinged fish for the past five years _____ If applicable, a demonstration that the facility's intake rate is commensurate with a closed-cycle recirculation system _____ Other components to reduce impingement and/or entrainment of aquatic life 4. BTA for CWIS continued:

Provide the following information for each CWIS to support the facility-specific BTA description here and/or in the written description.

Design capacity of the of the CWIS _____MGD

Maximum monthly average intake of the CWIS during the previous five years _____MGD

Month in which this flow occurred _____

Maximum monthly percent of surface water withdrawn that is used for cooling purposes, as measured on an average monthly basis during previous years, using available data, not to exceed 5 years _____

Maximum through-screen design intake velocity _____feet/second (fps)

For facilities where the CWIS is located on a freshwater river or stream, provide the following information:

The source water's annual mean flow _____cubic feet/second (cfs)

The design intake flow as a percent of the source water's annual mean flow _____ Attach calculations if equal to or less than 5% of annual mean flow

The source water's 7Q10 _____cfs. See Attachment B of the General Permit for more information on 7Q10 determinations.

The design intake flow as a percent of the source water's 7Q10 _____

5. Contaminant Information

If applicable, attach a listing of all non-toxic pH neutralization and/or dechlorination chemicals used, including chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the NCCW discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for typically acceptable aquatic organism(s)).

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.C.4 and Appendices III and IV. Include copies of documentation of ESA eligibility as required at Appendix III, Part C, Step 4, of the permit.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes _____ No _____
Has any consultation with the federal services been completed? Yes _____ No _____ or is consultation underway? Yes _____ No _____
What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):
a "no jeopardy" opinion _____ or written concurrence _____ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?
Yes _____ No _____ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes _____ No _____
What were the results of that consultation?

7 Supplemental Information

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the noncontact cooling water (NCCW) system; (2) the discharge consists solely of NCCW (to reduce temperature) and authorized pH adjustment chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product (other than heat) or finished product; (4) if the discharge of noncontact cooling water subsequently mixes with other wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for noncontact cooling water; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name:

Operator signature:

Title:

Date:

APPENDIX 4.2

Suggested Form for the Noncontact Cooling Water General Permit **Notice of Termination**

1) Name of facility:	Mailing address of facility:	
2) Name of the operator:	Address of operator:	
3) NPDES permit number assigned:	Telephone number of the operator:	Location of the facility: Latitude: _____ Longitude: _____
4) Has the discharge been permanently terminated? Yes _____ No _____ Reason for termination (i.e., discharge connect to sewer, installed closed loop system, etc):		
5) Signatory requirements according to 40 CFR 122.22 and certification:		
<i>I certify under penalty of law that all discharges from the identified facility that are authorized by the Noncontact Cooling Water General Permit (NCCW GP) have been terminated. I understand that by submitting this Notice of Termination (NOT), I am no longer authorized to discharge waters covered by the NCCW GP and that discharging pollutants from the activity covered by the NCCW GP is unlawful under the Clean Water Act where the discharge is not authorized by a permit. I also understand that the submission of this NOT does not release an owner/operator from liability for any violation of the NCCW GP or the Clean Water Act.</i>		
Signature of operator _____ Date _____		
Title:		

APPENDIX 4.3

US EPA, MassDEP and NHDES Mailing Addresses

For the convenience of applicants, below is a listing of mailing address for the federal and state agencies and a summary of the documentation that applicants are required to submit under the NCCW General Permit.

1. **Email addresses** for state contacts to confirm annual 7Q10 low flow for a facility and other questions on the NCCW General Permit

a. Massachusetts facilities: Keohane.Kathleen@state.ma.us

b. New Hampshire facilities: jandrews@des.state.nh.us or ddudley@des.state.nh.us or swilloughby@des.state.nh.us

2. Mailing Address for US Environmental Protection Agency

a. Notice of Intent for facilities located in Massachusetts and New Hampshire:

US EPA, Region 1

NCCW GP Processing

Municipal Assistance Unit (CMU),

1 Congress Street, Suite 1100

Boston, MA 02114-2023

or electronically mailed to NPDES.Generalpermits@epa.gov, or
faxed to the EPA Office at 617-918-XXXX (to be designated before final issuance)

b. Notice of Termination for facilities located in Massachusetts and New Hampshire

US EPA, Region 1

NCCW-NOT Processing

Municipal Assistance Unit (CMU),

1 Congress Street, Suite 1100

Boston, MA 02114-2023

or electronically mailed to NPDES.Generalpermits@epa.gov, or
faxed to the EPA Office at 617-918-XXXX (to be designated before final issuance)

c. Discharge Monitoring Reports (DMRs) and other required reporting

US EPA, Region 1

Water Technical Unit (SEW)

P.O. Box 8127

Boston, MA 02144-8127

3. Massachusetts Department of Environmental Protection

a. Facilities located in Massachusetts with new or increased discharges or discharges that are currently covered by an individual permit must:

i) submit a completed, signed copy of EPA's Suggested NOI form, found at Appendix 4.1; the completed State transmittal form; and a **copy** of the check for the appropriate fee, as required in Appendix 4, Section I. B.1 of the General Permit to:

MassDEP, Division of Watershed Management
627 Main Street, 2nd floor
Worcester, MA 01608

ii) submit the appropriate fee and a copy of the transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA 02211

b. Facilities located in Massachusetts that are administratively continued discharges under the expired General Permit must submit a completed, signed copy of EPA's Suggested NOI form, found at Appendix 4.1, and a copy of the MassDEP transmittal form from their previous application to:

MassDEP, Division of Watershed Management
627 Main Street, 2nd floor
Worcester, MA 01608

c. All facilities located in Massachusetts must submit Discharge Monitoring Reports and all other required reports to:

MassDEP, Division of Watershed Management
627 Main Street, 2nd floor
Worcester MA 01608

and to the MassDEP regional office where the discharge occurs. A listing of regional office addresses is included as the last page of this Appendix.

4. New Hampshire Department of Environmental Services

a. New Hampshire facilities must submit a copy of the Notice of Intent, Notice of Termination, Discharge Monitoring Reports and all other reports required under the NCCW general permit to:

NH DES
Water Division, Wastewater Engineering Bureau
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095.

Massachusetts Department of Environmental Protection

Addresses and Phone Numbers

Noncontact Cooling Water General Permit - Appendix 4.3 continued

MassDEP Boston
One Winter Street
Boston, MA 02108
Phone: 617-292-5500
Fax: 617-556-1049
TDD: 617-574-6868

William X. Wall Experiment Station
37 Shattuck Street
Lawrence, MA 01843
Fax: 978-688-0352
Division of Environmental Analysis Phone: 978-682-5237
Air Quality Surveillance Phone: 978-975-1138

Office of Watershed Management
627 Main Street
Worcester, MA 01608
Phone: 508-792-7470
Fax: 508-839-3469

MassDEP Western Region
436 Dwight Street
Springfield, MA 01103
Phone: 413-784-1100
Fax: 413-784-1149



Adams	Colrain	Hancock	Montague	Plainfield	Wales
Agawam	Conway	Halford	Monterey	Richmond	Ware
Alford	Cummington	Hardwick	Montgomery	Rowe	Warren
Amherst	Dalton	Hawley	Monson	Royalston	Warwick
Ashfield	Deerfield	Heath	Mount Washington	Russell	Washington
Athol	Easthampton	Hinsdale	New Ashford	Sandisfield	Wendell
Becket	East Longmeadow	Holland	New Marlborough	Savoy	Westfield
Belchertown	Egremont	Holyoke	New Salem	Sheffield	Westhampton
Bernardston	Erving	Huntington	North Adams	Shelburne	West Springfield
Blandford	Florida	Lanesborough	Northampton	Shutesbury	West Stockbridge
Brimfield	Gill	Lee	Northfield	Southampton	Whately
Buckland	Goshen	Lenox	Orange	South Hadley	Wilbraham
Charlemont	Granby	Leverett	Otis	Southwick	Williamsburg
Cheshire	Granville	Leyden	Palmer	Springfield	Williamstown
Chester	Great Barrington	Longmeadow	Pelham	Stockbridge	Windsor
Chesterfield	Greenfield	Ludlow	Peru	Sunderland	Worthington
Chicopee	Hadley	Middlefield	Petersham	Tolland	
Clarksburg	Hampden	Monroe	Pittsfield	Tyringham	

MassDEP Central Region
627 Main Street
Worcester, MA 01608
Phone: 508-792-7650
Fax: 508-792-7621



Acton	Charlton	Hopedale	Medway	Paxton	Sutton
Ashburnham	Clinton	Hopkinton	Mendon	Pepperell	Templeton
Ashby	Douglas	Hubbardston	Milford	Phillipston	Townsend
Auburn	Dudley	Hudson	Milbury	Princeton	Upton
Ayer	Dunstable	Holliston	Millis	Rutland	Uxbridge
Barre	East Brookfield	Lancaster	Millville	Shirley	Webster
Bellingham	Fitchburg	Leicester	New Braintree	Shrewsbury	Westborough
Berlin	Franklin	Leominster	Norfolk	Southborough	West Boylston
Blackstone	Gardner	Littleton	Northborough	Southbridge	West Brookfield
Bolton	Grafton	Lunenburg	Northbridge	Spencer	Westminster
Boxborough	Groton	Marlborough	North Brookfield	Sterling	Winchendon
Boynton	Harvard	Maynard	Oakham	Stow	Worcester
Brookfield	Holden	Medfield	Oxford	Sturbridge	

MassDEP Southeast Region
20 Riverside Drive
Lakeville, MA 02347
Phone: 508-946-2700
Fax: 508-947-6557
TDD: 508-946-2795



Abington	Chatham	Foxborough	Marshfield	Plymouth	Swansea
Acushnet	Chilmark	Freetown	Mashpee	Plymouth	Taunton
Aquinnah	Cohasset	Gosnold	Mattapoisett	Provincetown	Tisbury
Attleboro	Dartmouth	Halifax	Middleborough	Randolph	Truro
Avon	Dennis	Hanover	Nantucket	Raynham	Walpole
Barnstable	Dighton	Hanson	New Bedford	Rehoboth	Wareham
Berkley	Duxbury	Harwich	North Attleborough	Rochester	Wellfleet
Bourne	Eastham	Hingham	Norton	Rockland	West Bridgewater
Braintree	East Bridgewater	Holbrook	Norwell	Sandwich	Westport
Brewster	Easton	Hull	Norwood	Scituate	West Tisbury
Bridgewater	Edgartown	Kingston	Oak Bluffs	Seekonk	Weymouth
Brockton	Fairhaven	Lakeville	Orleans	Sharon	Whitman
Canton	Fall River	Mansfield	Pembroke	Somerset	Wrentham
Carver	Falmouth	Marion	Plainville	Stoughton	Yarmouth

MassDEP Northeast Region
205B Lowell Street
Wilmington, MA 01887
Phone: 978-694-3200
Fax: 978-694-3499



Amesbury	Chelmsford	Haverhill	Methuen	Revere	Wakefield
Andover	Chelsea	Ipswich	Middleton	Rockport	Waltham
Arlington	Concord	Lawrence	Milton	Rowley	Watertown
Ashland	Danvers	Lexington	Nahant	Salem	Wayland
Bedford	Dedham	Lincoln	Natick	Salisbury	Wellesley
Belmont	Dover	Lowell	Needham	Saugus	Wenham
Beverly	Dracut	Lynn	Newbury	Sherborn	Westford
Billerica	Essex	Lynnfield	Newburyport	Somerville	West Newbury
Boston	Everett	Manchester-By-The-Sea	Newton	Stoneham	Weston
Boxford	Framingham	Marblehead	North Andover	Sudbury	Westwood
Brookline	Georgetown	Medford	North Reading	Swampscott	Wilmington
Burlington	Gloucester	Melrose	Peabody	Tewksbury	Winchester
Cambridge	Groveland	Merrimac	Quincy	Topsfield	Winthrop
Carlisle	Hamilton		Reading	Tyngsborough	Woburn

APPENDIX 5
MINIMUM LEVELS AND TEST METHODS FOR GROUNDWATER SOURCES OF NONCONTACT COOLING WATER

Inorganic Parameters	Minimum Levels (ug/l) and Test Methods				
	Flame Atomic Absorption	Inductively Coupled Plasma	Inductively Coupled Plasma Mass Spectrometry	Furnace Atomic Absorption	Other
1. Antimony	200 ug/l	50 ug/l	2 ug/l	5 ug/l	
2. Arsenic		5 ug/l	2 ug/l	2 ug/l	
3. Cadmium	10ug/l	5 ug/l	0.5 ug/l	0.5 ug/l	
4. Chromium Total	50 ug/l	10ug/l	0.5 ug/l	5 ug/l	
5. Chromium VI					10 ug/l Method 218.4
6. Copper	20 ug/l	5 ug/l	0.5 ug/l	3 ug/l	
7. Lead	100 ug/l	40 ug/l	0.5 ug/l	3 ug/l	
8. Mercury					0.2 ug/l Method 245.1
9. Nickel	30 ug/l	10 ug/l	0.5 ug/l	5 ug/l	
10. Selenium		50 ug/l	2.5 ug/l.	5 ug/l	
11. Silver	50 ug/l	10 ug/l	1 ug/l	2 ug/l	
12. Zinc	30 ug/l	10 ug/l	5 ug/l		
13. Iron		Method 6010b and Method 200.7 ¹			
14. Hardness					Approved Part 136 Methods ²
15. Chloride					Approved Part 136 Methods ²
16. pH					Approved Part 136 Methods ²

1. Methods 6010b and 200.7 for metals may only be used when sample prepared with SW-846 digestion method, Method 3010
2. Approved 40 CFR Part 136 test methods that will achieve the lowest available ML