MAG910000 Appendix I NHG910000 Page 1 of 10

Endangered Species Act Guidance and Eligibility Criteria

I. Background

In order to meet its obligations under the Clean Water Act (CWA) 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 the Remediation General Permit (RGP) do not adversely affect endangered and threatened species or critical habitat. Operators seeking coverage under this general permit must assess the impacts of their discharges and discharge-related activities on federally listed endangered and threatened species ("listed species") and designated/proposed critical habitat ("critical habitat") to ensure that those goals are met.

Prior to obtaining general permit coverage, operators must meet the ESA eligibility provisions of this general permit by following the steps in this appendix. EPA strongly recommends that operators begin this process as early as possible to ensure the notification requirements for general permit coverage are complete upon Notice of Intent (NOI) submission. A site that cannot meet any of the ESA eligibility criteria under this general permit must apply for an individual permit.

Operators seeking coverage also have an independent ESA obligation to ensure that their activities do not result in any prohibited "take" of listed species¹. The term "take" is used in the ESA to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering. "Harass" is defined as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns, which include, but are not limited to, breeding, feeding, or sheltering.

Many of the measures required in the RGP and this appendix to protect listed species may also assist in ensuring that the remediation activities do not result in a prohibited take of species in violation of section 9 of the ESA. If the operator has plans or activities in an area where endangered and threatened species are located, they may wish to ensure that they are protected from potential take liability under ESA section 9 by obtaining an ESA section 10 permit (Incidental Take Permit) or by requesting formal consultation under ESA section 7. Operators 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

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 an "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 conversion plan; or (3) where otherwise authorized or exempted under the ESA. This prohibition applies to all entities including private individuals, businesses, and governments.

MAG910000 Appendix I NHG910000 Page 2 of 10

and Wildlife Service (FWS)² office or the National Marine Fisheries Service (NMFS)³, jointly referred to as the Services.

The following are federally protected ESA species in Massachusetts and New Hampshire:

Massachusetts (15)

New Hampshire (12)

Dwarf wedgemussel (*Alasmidonta heterodon*) Dwarf wedgemussel (*Alasmidonta heterodon*) Northeastern bulrush (Scirpus ancistrochaetus) Northeastern bulrush (Scirpus ancistrochaetus) Sandplain gerardia (*Agalinis acuta*) Piping plover (*Charadrius melodus*) Piping plover (*Charadrius melodus*) Red knot (Calidris canutus rufa) Red knot (Calidris canutus rufa) Roseate tern (Sterna dougallii dougallii) Small whorled pogonia (Isotria medeoloides) Roseate tern (Sterna dougallii dougallii) Plymouth redbelly turtle (Pseudemys rubriventis bangsi) Karner blue butterfly (Lycaeides Melissa Bog turtle (*Clemmys muhlenbergii*) samuelis) Small whorled pogonia (*Isotria medeoloides*) Canada lynx (Lynx canadensis) Jesup's milk-vetch (Astragalus robbinsii var. American burying beetle (*Nicrophorus americanus*) Northeastern beach tiger beetle (Cicindela dorsalis Northern long-eared bat (Myotis dorsalis) septentrionalis) Puritan tiger beetle (*Cicindela puritan*) Northern long-eared bat (Myotis septentrionalis) Atlantic sturgeon (Acipenser oxyrinchus)* Atlantic sturgeon (Acipenser oxyrinchus)* Shortnose sturgeon (Acipenser brevirostrum)*

In addition, the following are federally protected marine species that are present in the near coastal waters of Massachusetts and New Hampshire. These species are listed under the jurisdiction of NMFS:

Marine Reptiles (5)

Shortnose sturgeon (*Acipenser brevirostrum*)*

Marine Mammals (2)

Loggerhead sea turtle (Caretta caretta)

Kemp's Ridley sea turtle (Lepidochelys kempii)

Leatherback sea turtle (Dermochelys coriacea)

Green sea turtle (Chelonia mydas)

Hawksbill sea turtle (Eretmochelys imbricata)**

Any operator seeking coverage under the RGP must certify eligibility with respect to ESA. By terms of this permit, EPA has automatically designated operators as non-

^{*} These species are listed under the jurisdiction of NMFS, while all others are listed under the jurisdiction of FWS

^{**} Species rare in near shore Massachusetts and New Hampshire coastal waters

² Generally, consultation for discharges to freshwater receiving waters is between the operator and FWS.

³ Generally, consultation for discharges to saltwater receiving waters is between EPA and NMFS.

MAG910000 Appendix I NHG910000 Page 3 of 10

Federal representatives for the purpose of conducting formal or informal consultations with the *United States Fish and Wildlife Service*. (See 50 CFR §402.08 and §402.13). However, as addressed in Section III of this appendix, EPA will coordinate with the *National Marine Fisheries Service* regarding the anadromous and marine species under its jurisdiction to determine that the terms of the permit adequately address effects to listed species and critical habitat. Formal or informal consultation with the Services has been concluded and, with respect to the *National Marine Fisheries Service*, results have been provided in written concurrence that remediation activity discharges are "not likely to adversely affect" listed species or critical habitat.

When listed species are present, permit coverage is only available if EPA determines, or the operator determines and EPA concurs, that the remediation activity discharges will have "no effect" on the listed species or critical habitat, or are "not likely to adversely affect" listed species and will not cause adverse modification to critical habitat or result in take of listed species. Before submitting a NOI for coverage under this permit, operators must determine whether they meet the ESA eligibility criteria by following the steps in Sections II or III of this appendix. Operators that cannot meet the eligibility criteria in Sections II or III may be required to apply for an individual permit.

II. ESA Eligibility Criteria for the U.S. Fish and Wildlife Service (FWS)

The FWS ESA eligibility requirements of this general permit relating to the dwarf wedgemussel, northeastern bulrush, Jesup's milk-vetch, sandplain gerardia, piping plover, Plymouth redbelly turtle, bog turtle, small whorled pogonia, roseate tern, Canada lynx, puritan tiger beetle, northeastern beach tiger beetle, American burying beetle, Karner blue butterfly, red knot, and northern long-eared bat may be satisfied by documenting that one of the following criteria has been met:

FWS Criterion A: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

FWS Criterion B: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation).⁴

FWS Criterion C: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no

⁴ See FWS Section 7 consultation handbook, available at http://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf for definitions and guidance.

MAG910000 Appendix I NHG910000 Page 4 of 10

effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS.

Steps to Determine if the FWS ESA Eligibility Criteria Can Be Met

To determine eligibility, operators must assess the potential effects of their RGP discharges and related activities on listed species or critical habitat **prior to completing and submitting a NOI.** Operators must follow the steps outlined below and document the results of the eligibility determination.

The FWS Information, Planning, and Conservation (IPaC) online system can be used to develop a preliminary determination of federally listed species or designated critical habitats within the action area of your discharge and related activities. Further information on IPaC is available on the FWS website at http://ecos.fws.gov/ipac/. Instructions for using IPaC are available in an attachment to this Appendix (end of document). Additional information regarding ESA listings under the jurisdiction of FWS is included in Appendix II.

Step 1 – Determine if you meet FWS Criterion A:

You can certify eligibility, according to FWS Criterion A, for coverage by this permit if, upon completing the IPaC online system process, you printed and saved the preliminary determination which indicated that federally listed species or designated critical habitats are not present in the action area.

If you have met FWS Criterion A, skip to Step # 4.
If you have not met FWS Criterion A, go to Step # 2.

Step 2 – Determine if you meet FWS Criterion B:

You can certify eligibility according to FWS Criterion B for coverage by this permit if you answer "Yes" to **all** of the following questions:

1) Does your action area contain one or more of the following species: dwarf wedgemussel, northeastern bulrush, Jesup's milk-vetch, sandplain gerardia, piping plover, Plymouth redbelly turtle, bog turtle, small whorled pogonia, roseate tern, Canada lynx, puritan tiger beetle, northeastern beach tiger beetle, American burying beetle, Karner blue butterfly, red knot, and Northern longeared bat? (IPaC system may be used to answer this question)

MAG910000 Appendix I NHG910000 Page 5 of 10

2) Did your assessment of the discharge and related activities indicate that discharges may affect but are "not likely to adversely affect" listed species or critical habitat?⁵

- 3) Did you contact the FWS and did formal or informal consultation result in either a "no jeopardy" opinion by the FWS (formal consultation) or concurrence by the FWS (informal consultation) that your discharge and related activities would be "not likely to adversely affect" listed species or critical habitat?
- 4) Do you agree to implement all measures upon which the consultation was conditioned?

Use the guidance below Step 3 to understand effects determination and to answer these questions.

If you answered "Yes" to **all** four questions above, you have met eligibility FWS Criterion B. Skip to Step 4.

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

Step 3 – Determine if you meet FWS Criterion C

FWS Criterion C: You can certify eligibility according to FWS Criterion C for coverage by this permit if you answer "Yes" to **both** of the following questions:

- 1) Does your action area contain one or more of the following species: dwarf wedgemussel, northeastern bulrush, Jesup's milk-vetch, sandplain gerardia, piping plover, Plymouth redbelly turtle, bog turtle, small whorled pogonia, roseate tern, Canada lynx, puritan tiger beetle, northeastern beach tiger beetle, American burying beetle, Karner blue butterfly, red knot, and northern long-eared bat? (IPaC system may be used to answer this question)
- 2) Did the assessment of your discharge and related activities indicate that there would be "no effect" on listed species or critical habitat?⁶

Use the guidance below to understand effects determination and to answer these questions.

If you answered "Yes" to **both** questions above, you have met eligibility FWS Criterion C. Go to Step 4.

If you answered "No" to **either** of the questions above, you are not eligible for coverage under this permit. You must submit an application for an individual permit for your remediation activity discharges. (See 40 CFR §122.21).

⁵ See FWS Section 7 consultation handbook, available at http://www.fws.gov/endangered/esa-library/pdf/esa section 7 handbook.pdf for definitions and guidance.

⁶ See FWS Section 7 consultation handbook, available at http://www.fws.gov/endangered/esa-library/pdf/esa-section7 handbook.pdf for definitions and guidance.

Step 4 - Document results of the Eligibility Determination

Once the FWS ESA eligibility requirements have been met, you shall include documentation of FWS ESA eligibility in your NOI. Documentation for the various eligibility criteria are as follows:

- **FWS Criterion A:** A copy of the IPaC generated preliminary determination letter indicating that no listed species or critical habitat is present within your action area. You shall also include a statement on how you determined that no listed species or critical habitat are in proximity to your discharges.
- **FWS Criterion B:** A dated copy of the FWS letter of concurrence on a finding of "no jeopardy" (for formal consultation) or "not likely to adversely affect" (for informal consultation) regarding the ESA section 7 consultation.
- **FWS Criterion C:** A copy of the IPaC generated preliminary determination letter indicating the listed species in your action area. The operator's determination that the discharges and related activities will have "no effect" on listed species or critical habitat OR a dated copy of EPA's determination.

FWS Effects Determination Guidance:

If you are unable to certify eligibility under FWS Criterion A, you must assess whether your discharges or related activities "may affect", will have "no affect" or are "not likely to adversely affect" listed species or critical habitat. Discharges include wastewater from potable water treatment sites which undergoes treatment processes including clarification, coagulation, media filtration, membrane filtration, and/or disinfection. "Discharge-related activities" include Best Management Practices (BMPs) to prevent or minimize the concentration of pollutants in the wastewater.

The scope of effects to consider will vary with each site. If you are having difficulty in determining whether your discharge is likely to cause adverse effects to a listed species or critical habitat, you should contact the FWS for assistance. In order to complete the determination of effects it may be necessary to follow the formal or informal consultation procedures in section 7 of the ESA.

Upon completion of your assessment, document the results of your effects determination. If your results indicate that discharges and related activities will have "no affect" on threatened or endangered species or critical habitat and EPA concurs with your determination, you are eligible under FWS Criterion C of this Appendix. Your determination may be based on measures that you implement to avoid, eliminate, or minimize adverse effects.

MAG910000 Appendix I NHG910000 Page 7 of 10

If the determination is "may affect" or "not likely to adversely affect" you must contact the FWS to discuss your findings and measures you could implement to avoid, eliminate, or minimize adverse effects. If you and the FWS reach agreement on measures to avoid adverse effects, you are eligible under FWS Criterion B. Any terms and/or conditions to protect listed species and critical habitat that you relied on in order to complete an adverse effects determination, must be attached to your NOI.

Effects from remediation activity discharges and/or related activities which could pose an adverse effect include, but are not limited to:

- Water Quality: RGP discharges may induce pH and dissolved oxygen changes in receiving waters. These effects will vary with the volume discharged and the volume and condition of the receiving water. Where a discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.
- Water Quality/Prey Quality: Certain pollutants present in discharges and chemicals used in treatment processes have the potential to cause toxicity in the receiving water. Toxic pollutants in the discharges may have toxic effects on listed species or their prey.
- Habitat Structure and Disturbance: Solids have the potential to settle and cover bottom habitat areas, potentially causing benthic smothering and effluent flow can cause erosion or scouring.

If endangered species issues cannot be resolved: If you cannot reach agreement with the FWS on measures to avoid or eliminate adverse effects, you are not eligible for coverage under this permit. You must seek coverage under an individual permit.

III. ESA Eligibility Criterion for the National Marine Fisheries Service (NMFS)

Listed species under the jurisdiction of NMFS are the Atlantic Sturgeon and the Shortnose Sturgeon, as well as two species of whales and four species of sea turtles in the marine environment. Additional information regarding ESA listings under the jurisdiction of NMFS is included in Appendix II. For sites previously covered under the RGP, EPA and NMFS completed consultation and determined that remediation activity discharges either have no effect or are not likely to adversely affect listed species and result in no effect or no adverse modification of critical habitat or take of listed species. Operators with existing discharges must certify that they remain eligible under this determination. Operators with emergency or new discharges must certify that they are eligible under this determination.

Step 1 – Determine if you meet the NMFS Criterion

NMFS Criterion: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely

MAG910000 Appendix I NHG910000 Page 8 of 10

affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species.

You can certify eligibility according to the NMFS Criterion for coverage under this permit if you can answer "Yes" to **both** of the following questions:

- 1) Will remediation activity discharges either have no effect or are not likely to adversely affect listed species?
- 2) Will remediation activity discharges result in either no effect or no adverse modification of critical habitat and result in no take of listed species?

If you answered "Yes" to **both** questions above, you have met eligibility NMFS Criterion. Go to Step 2.

If you answered "No" to **either** of the questions above, you are not eligible for coverage under this permit. You must contact EPA for further assistance.

Step 2 – Documentation for Eligibility Determination

As aforementioned, EPA completed consultation with NMFS and made the determinations indicated in Step 1, with which NMFS concurred. Operators are encouraged to refer to EPA's effects analysis for listed species and critical habitat in answering the above questions.⁷ Operators must indicate if they have previously completed consultation with NMFS and provide any written determinations. If the operator or EPA determine that consultation with NMFS must be re-initiated for this general permit, EPA will conduct any such consultation.

For sites seeking coverage under the RGP for the *first* time, an operator must provide additional information in the NOI and determine whether there are likely to be adverse effects to listed species or adverse modification of critical habitat. Information that must be included in the NOI related to endangered species under the jurisdiction of NMFS includes:

- Whether the discharge is in the Connecticut, Merrimack, Taunton or Piscataqua Rivers/watersheds.
- Whether the discharge is into marine waters or New Hampshire and Massachusetts.
- Whether species listed under the jurisdiction of NMFS are present, and if so, which life stages.
- Whether there has been any previous formal or informal consultation with NMFS, and the result of the consultation.

⁷ Documents available at: https://www3.epa.gov/region1/npdes/rgp.html.

MAG910000 Appendix I NHG910000 Page 9 of 10

IV. Submittal of Notice of Intent (NOI)

Once the ESA eligibility requirements of Part II and III of this Appendix have been met, and an operator has determined ESA eligibility, an operator may certify ESA eligibility in the Notice of Intent (NOI). Signature and submittal of the NOI constitutes an operator's certification, under penalty of law, of eligibility for permit coverage under 40 CFR §122.21.

V. Duty to Implement Terms and Conditions upon which Eligibility was Determined

Operators must comply with any terms and conditions imposed under the ESA eligibility requirements to ensure that RGP discharges and related activities do not pose adverse effects or jeopardy to listed species and/or critical habitat. If the ESA eligibility requirements of this permit cannot be met, then a site may not receive coverage under this general permit and must apply for an individual permit.

VI. Services Information

United States Fish and Wildlife Service

National websites for Endangered Species Information:

Endangered Species home page: http://endangered.fws.gov

ESA Section 7 Consultations: http://www.fws.gov/newengland/EndangeredSpec-

Consultation.htm

Information, Planning, and Conservation System (IPAC):

http://ecos.fws.gov/ipac/

United States Fish and Wildlife Service New England Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5087

Phone: (603) 223-2541

National Marine Fisheries Service

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

National Marine Fisheries Service Greater Atlantic Region Fisheries Office Protected Resources Division 55 Great Republic Drive Gloucester, MA 01930-2298

Phone: (978) 281-9300 ext. 6505

MAG910000 Appendix I NHG910000 Page 10 of 10

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 online at: http://www.natureserve.org/, which provides websites and other access to a large number of specific biodiversity centers.

New Hampshire Natural Heritage Inventory Department of Resources & Economic Development 172 Pembroke Street, P.O. Box 30370 Concord, NH 03301 603.271.2214

U.S. Fish and Wildlife Service IPaC System Instructions

Follow the instructions provided below to determine if any federally listed species or designated critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service exist in the action area of a site.

Enter site-specific information into the "Initial Project Scoping" feature of the Information, Planning, and Conservation (IPaC) system mapping tool, which can be accessed at:

https://ecos.fws.gov/ipac/

- 1. Indicate the action area¹ for the site by either:
 - a. Drawing the boundary on the map; or
 - b. Uploading a shapefile.
- 2. Select "Continue".
- 3. Select "SEE RESOURCE LIST". The next screen will display a resources list, which can be exported. This list indicates natural resources of concern, which will include a list of Endangered Species Act species. An official species list under "REGULATORY DOCUMENTS" can also be requested. Retain a copy of the resources list for record keeping purposes.

¹ The action area is defined by regulation as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR §402.02). This analysis is not limited to the "footprint" of the action nor is it limited by the Federal agency's authority. Rather, it is a biological determination of the reach of the proposed action on listed species. Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area.

² The documentation used by a Federal action agency to initiate consultation should contain a description of the action area as defined in the Services' regulations and explained in the Services' consultation handbook. If the Services determine that the action area as defined by the action agency is incorrect, the Services should discuss their rationale with the agency or applicant, as appropriate. Reaching agreement on the description of the action area is desirable but ultimately the Services can only consult when an action area is defined properly under the regulations.

³ For remediation/dewatering discharges or discharge related activities, the action area should encompass the following:

[•] The immediate vicinity of, or nearby, the point of discharge into receiving waters.

[•] The path or immediate area through which or over which remediation/dewatering waters flow from the point(s) of removal to the point of discharge into the receiving water. This includes areas in the receiving water downstream from the point of discharge.

[•] Areas that may be impacted by construction or repair activities. This extends as far as effects related to noise (from construction equipment, power tools, etc.) and light (if work is performed at night) may reach.

⁴ The action area will vary with the size and location of the outfall pipe, the nature and quantity of the remediation/dewatering discharges, and the type of receiving waters, among other factors.