

**Response to Comments on  
Draft National Pollutant Discharge Elimination System (NPDES)  
General Permit for Non-contact Cooling Water (NCCW) Discharges  
MAG250000 and NHG250000**

**Introduction:**

In accordance with the provisions of 40 CFR § 124.17, this document presents EPA's responses to comments received on the draft Non-contact Cooling Water General Permit (NCCW GP). The responses to comments explain and support the EPA determinations that form the basis of the final general permit. The draft permit public comment period began May 16, 2014 and ended June 16, 2014. Comments were received from the National Oceanic and Atmospheric Administration (NOAA) Fisheries (the National Marine Fisheries Service, NMFS) Greater Atlantic regional office and the Massachusetts Office of Coastal Zone Management (CZM).

The final NCCW GP is substantially similar to the draft permit. Changes have been made to Parts 3 and 4 in response to the comments listed below. These changes do not affect any facilities currently covered under the NCCW GP. In addition, minor changes to correct typographical errors have been made throughout the final permit.

**Summary of NMFS comments:**

NMFS expressed concern regarding potential adverse effects to endangered species under its jurisdiction from new facilities seeking authorization under the general permit in areas of the Connecticut, Merrimack, and Piscataqua Rivers that have been identified as Shortnose Sturgeon spawning habitats. NMFS identified impingement and entrainment of larval fish in cooling water intake structures (CWIS) as the largest concerns; the temperature, pH and other limits in the permit are within the acceptable bounds for their ESA-listed species. They recommended the inclusion of the recent CWA Section 316(b) rule velocity threshold of 0.2 fps for facilities within areas where listed larval fish may be present. They also recommended providing guidance on using wedgewire screens with a mesh size <10mm to prevent larval fish entrainment.

**Response to Comments:**

Currently, there are no facilities covered under the NCCW GP that intake non-contact cooling water from any of these waterbodies. Therefore, EPA intends to consult with NMFS on facilities applying for permit coverage for the first time that have the potential to adversely impact endangered sturgeon larvae.

In the final permit, EPA has made a number of changes to the requirements for new applicants with CWIS in certain segments of the Merrimack and Connecticut Rivers in order to protect larval stages of the endangered Shortnose Sturgeon. The changes are:

1. In Part 4.2.2. (Site-Specific Best Technology Available (BTA) requirements), the following language has been added:

*EPA will consult with NMFS regarding new applicants under this permit that intake water for non-contact cooling from the Connecticut, Merrimack, Piscataqua, and Taunton Rivers. Following consultation with NMFS, EPA may require additional facility-specific BTA requirements in order to prevent the take of endangered species under the permit. These measures may include an alternate through-screen intake velocity of 0.2 fps to minimize entrainment of larval sturgeon. These facilities will be required to implement all of the general and facility-specific BTA requirements above in addition to any measures prescribed by EPA in the NOI authorization to protect endangered species.*

EPA has determined that for this general permit, it is not appropriate to fully adopt the NMFS recommendation regarding a through screen velocity reduction to 0.2 ft/sec in areas where egg and larval life stages of protected species may be present. However, in order to allow EPA additional flexibility to minimize entrainment of protected species and to inform facilities authorized to discharge under this general permit the range of options EPA may consider, the reduced intake velocity has been provided as an example BTA requirement. EPA does not expect to implement this velocity requirement in areas where larval stages of endangered sturgeon are not likely to be present, which includes the Taunton and Piscataqua Rivers, based on current information on those waterbodies. However, EPA will continue to consult with NMFS for applicants with intakes in the Taunton and Piscataqua in order to be protective of endangered sturgeon larvae if new information becomes available for these waterbodies. In other cases, EPA will consult with NMFS to determine whether a lower intake velocity is a suitable requirement to protect sturgeon larvae.

A through-screen velocity of 0.2 fps is intended to protect larval sturgeon, as recommended in Appendix D to the Biological Opinion submitted by EPA to NMFS regarding the final 2014 regulations<sup>1</sup> implementing CWA § 316(b). Although section 316(b) does not apply to the facilities eligible for coverage under this permit (the 316(b) rule applies to intakes greater than 2 MGD) the approach velocity requirements to protect larval fish are relevant to cooling water intake structures of any size. While EPA recognizes that a reduction in through screen velocity also has the potential to minimize early life stage (fish eggs and larvae) entrainment, in the case of this permit, EPA identified the discharge limit of one million gallons per day (1 MGD), which in turn provides a maximum water withdrawal of 1 MGD at the CWIS, as the appropriate technology to minimize entrainment at facilities covered under this permit. EPA maintains that the reduction of water withdrawn from a CWIS will result in a direct proportional reduction in the entrainment of aquatic organisms. Historically, EPA has identified a reduction in through screen velocity to 0.5 feet per second (ft/sec) at cooling

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<sup>1</sup> Available at <http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/>; Docket # EPA-HQ-OW-2008-0667; FRL-9817-3.

water intake structures as a technology that will minimize impingement of adult and juvenile life stages of fish.

2. In Part 5.6, the following notice of intent (NOI) submittal requirements were added:

*Facilities must indicate if they withdraw water for non-contact cooling from certain river segments:*

- *The Merrimack River downstream of Haverhill, MA*
- *The Connecticut River between Montague and Holyoke, MA*
- *The Piscataqua River*
- *The Taunton River*

*EPA will initiate consultation with NMFS regarding the protection of endangered sturgeon at these facilities.*

3. In Appendix 2, the ESA eligibility criteria for listed species under the jurisdiction of NMFS was updated to specify that:

- Facilities seeking coverage under the NCCW GP for the first time must indicate if they intend to withdraw water from certain areas of the Connecticut River, the Merrimack River, the Taunton River, or the Piscataqua River
- Additional BTA requirements may be necessary to protect endangered species as referenced in Part 4.2.2. of the final general permit.

4. In Appendix 5, the following requirement was added to Section F, the Endangered Species Act Eligibility Information:

*Please indicate if your facility **directly intakes water for non-contact cooling** from any of the following waterbodies:*

- Merrimack River*
- Connecticut River*
- Piscataqua River*
- Taunton River*

*EPA will consult with the National Marine Fisheries Service on cooling water intakes covered under this permit in areas (in the above waterbodies) of the endangered Shortnose Sturgeon and Atlantic Sturgeon.*

5. In Attachment C to the permit, a recommendation to use fine screen mesh (<10 mm) was added to the example BTA components.

### **Summary of Massachusetts CZM Comments:**

CZM suggested that EPA New England edit the draft Non-Contact Cooling Water (NCCW) General Permit to reflect that no commercial discharges, including NCCW, are allowed in the Commonwealth's five ocean sanctuaries (MGL 132A, Section 15).

The boundaries of the ocean sanctuaries can be found in MGL 132A Section 13 <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIX/Chapter132A/Section13>).

**Response to Comments:**

EPA acknowledges the oversight regarding the Ocean Sanctuaries Act in the draft permit. An exclusion has been added to the permit in Part 3.3.5.:

*New or increased discharges of commercial waste (including cooling water) to Ocean Sanctuaries in Massachusetts in accordance with Massachusetts General Law 132A: The Massachusetts Ocean Sanctuary Act. The boundaries of the five ocean sanctuaries can be found in MGL 132A Section*

*13: <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIX/Chapter132A/Section13>).*