MEMORANDUM

SUBJECT: Notice of Availability: Recommended Aquatic Life Ambient Water Quality Criteria for Cadmium – 2016 (Tier 3, SAN 5843) - ACTION MEMORANDUM

FROM: Elizabeth Southerland
Director, Office of Science and Technology

TO: Joel Beauvais
Acting Deputy Assistant Administrator

PURPOSE
Attached for your signature is the *Federal Register* notice announcing the U.S. Environmental Protection Agency's release of the Updated Aquatic Life Criteria for Cadmium. The public will be able to access the draft criteria document through the EPA docket and website www.regulations.gov.

Following closure of the public comment period, the EPA will consider the public comments and revise the document accordingly. Once finalized, the EPA's water quality criteria for cadmium will provide recommendations to states and tribes authorized to establish water quality standards under the Clean Water Act.

DEADLINE
The Updated Aquatic Life Criteria for Cadmium needs to be published by March 30, 2015, in order to maintain a timeline set by a potential lawsuit settlement agreement with Northwest Environmental Advocates.

OVERVIEW
The EPA is in the process of updating the Agency's 304(a) cadmium aquatic life ambient water quality criteria. These criteria provide scientifically sound recommendations to states for levels that are protective of aquatic communities. States may choose to adopt the 304(a) criteria or other scientifically defensible values in their water quality standards. The cadmium criteria revise acute and chronic freshwater and estuarine/marine values that were last updated in 2001. The updated criteria values are very similar to what they were in 2001. The EPA used the approach it routinely uses in developing aquatic life recommended criteria to develop the criteria, and added new toxicity data representing over 75 additional freshwater species.

The driver for updating the cadmium criteria was a lawsuit brought by Northwest Environmental Advocates following the EPA's 2013 disapproval of Oregon's freshwater acute cadmium criterion. The EPA's disapproval triggered a CWA duty for the EPA to propose a replacement criterion for Oregon. The EPA would intend to use the updated criteria document as the scientific basis for the proposed rule. The agency is currently negotiating a settlement with the litigants in which the EPA would commit to propose cadmium criteria for Oregon by March 31, 2016, and take final rulemaking action by January 16, 2017. The 304(a) criteria being proposed are the basis for the rulemaking and, therefore, the document is time sensitive. We proposed the draft criteria for 60 days of public comment on December 1, 2015. The numbers have changed slightly as a result of adopting changes derived from the public comment period. The freshwater acute number is slightly lower than the draft because two relatively insensitive end-points (life stages) were removed from the calculation. The draft one-hour estuarine/marine acute criterion maximum concentration was lowered slightly in the final. The draft document used a shrimp species not found in North America to calculate the criterion, EPA removed this non-native species and replaced it with data recently found for a shrimp species native to North American waters, which resulted in a lower number. Because the chronic value is based on a ratio, the estuarine/ marine chronic value changed in accordance with the acute to chronic ratio.

The basis of the EPA's disapproval of Oregon's cadmium criterion (and the EPA's duty to propose a replacement criterion for Oregon) was a 2012 jeopardy biological opinion from the National Marine Fisheries Service for acute effect to salmon species based on the EPA's 2001 freshwater acute cadmium criterion (which Oregon had adopted as the state's water quality standards). Although the 2016 updated criteria have not changed significantly from 2001, a draft Endangered Species Act analysis prepared by the EPA indicates that the updated freshwater criteria are expected to provide approximately 95 percent protection for endangered salmonids based on acute effects, a minimal effects level associated with the jeopardy opinion. It is likely, however, that the Services may still question these criteria as they expected our update to result in more stringent values.

ANTICIPATED PUBLIC AND STAKEHOLDER RESPONSE

Ex. 5 - Deliberative Process

INTERNAL DEVELOPMENT AND REVIEW PROCESS

Office of Science and Technology partnered within the agency with Office of Research and Development, Office of Chemical Safety and Pollution Prevention, and the Regions (3, 4, 5, 8, 9, and 10) to develop and review the updated criteria. Office of Policy was asked to review the document, but currently has not submitted their response. The EPA also conducted an external contractor-led letter peer review on the criteria document that was completed in 2015.

If you need additional information or have questions regarding this notice, please call Elizabeth Behl at (202) 566-0788.