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# PUBLIC NOTICE

**Date: May 7, 2019**

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**This notice is to explain a revision to the analysis procedure used to determine suitability of dredged materials for open water disposal.**

New England District's evaluation of dredged material disposal projects has been collaboratively developed over a number of years with guidance from the Disposal Area Monitoring System (DAMOS) as well as input from the U.S. Environmental Protection Agency (EPA). It is based on the tiered approach outlined in the New England Regional Implementation Manual (RIM) which was developed by the U.S. Army Corps of Engineers and the EPA and was last updated in 2004 (USACE/USEPA, 2004).

The Weight of Evidence (WoE) approach involves gathering a number of different types of empirical and descriptive datasets including previous sediment testing data; spill records; watershed history and development; oceanographic variables; and physical, chemical and biological test results, as appropriate. Formerly, chemical analysis was performed by comparing bulk sediment chemistry results on project sediments to the chemistry data associated with reference sites at the selected open water disposal site. Biological analysis was performed by assessing the response of test animals incubated with project and control sediments to measure toxicity and bioaccumulation responses. The choice of chemical and/or biological analysis for the purposes of evaluation followed the guidance established in the Ocean Testing Manual (EPA/USACE, 1991), the Inland Testing Manual (EPA/USACE, 1998), and the RIM.

The New England District is now applying a WoE approach that more completely documents this evaluation process, while still employing the tiered approach outlined in the RIM. For each suitability determination the various inputs, non-point sources, watershed influences and local concerns are documented as part of a Conceptual Site Model (CSM) to identify potential contaminants of concern and exposure pathways for a given project as a basis for assessing potential risk associated with in-water placement of the material to be dredged. A discussion is included in each suitability determination to address the watershed history, oceanographic setting and specific

local project history. The results are discussed and placed in context of an updated set of reference site chemistry data and established national sediment screening levels. The implementation of this approach is based on an evaluation of the procedure to appropriately determine the suitability of dredged materials for open water placement.

References:

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Edward R. Long, Donald D. Macdonald, Sherri L. Smith and Fred D. Calder 1995. Incidence of Adverse Biological Effects within Ranges of Chemical Concentrations in Marine and Estuarine Sediments. *Environmental Management* 19:81-97 (1995)

EPA/USACE. 1991. Evaluation of Dredged Material for Ocean Disposal (Ocean Testing Manual) USEPA Office of Water, US Environmental Protection Administration-503/8-91/001.

EPA/USACE. 1998. Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual (Inland Testing Manual). US Environmental Protection Administration Office of Water, EPA-823-B-98-004.

USACE/EPA. 2004. Regional Implementation Manual for the Evaluation of Dredged Material Proposed for Disposal in New England Waters.

If you have any questions, please contact Norm Farris at 978-318-8336.

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