

Memorandum Thru:

Ruth M. Ladd, Chief, Policy Analysis and Technical Support Branch

For: Phill Nimeskern, Project Manager, CENAE-R-B

Subject: Suitability Determination for Town of Wellfleet - CORRECTED, Wellfleet Harbor, Wellfleet, MA, Application Number NAE-2005-1059.

1. Summary:

Based on an evaluation of the data that characterize the material proposed to be dredged, this memorandum addresses the suitability of that material for disposal as proposed at the Cape Cod Bay Disposal Site (CCBDS) in accordance with applicable regulations. The Marine Analysis Section (MAS) finds that the data provide sufficient information to satisfy the evaluation and testing requirements of the appropriate regulations. The determination found that some of the sediments were unsuitable for open water disposal. However, MAS talked to the lab and had them re-examine the method detection limits reported previously. The lab reported back on 23 February that their previous report was in error and submitted a new corrected data report. Examining these new values showed that ALL these sediments are suitable for unconfined open water disposal at CCBDS as proposed.

2. Project Description:

The applicant is proposing to dredge two areas in Wellfleet Harbor. The first area (Area 1) is comprised of the North and South channels, the North Anchorage, and the Access Channel adjacent to L-Pier. This area is approximately 674,309 sq. ft. and would be dredged to depths of - 6 ft. MLW. Approximately 118,300 cu. yds. of material will be removed. The second area (Area 2) is the South Anchorage. This area is approximately 945,688 sq. ft. and would be dredged to depths of - 6 MLW, producing approximately 248,000 cu. yds. of material to be removed. The Town of Wellfleet proposes to mechanically dredge and dispose of this material at the Cape Cod Bay Disposal Site (CCBDS). This area was last permitted to be dredged in part ten years ago.

3. Sampling and Testing:

Charles N. Farris prepared a sampling plan for this project on 25 March 2014. The plan called for 14 cores (W-1 through W-14) to be taken from the project area. Bulk sediment chemistry analyses were conducted on four composites comprised of 14 samples (EXAMPLE: Composite A is comprised of cores W-5 and W-6). See the spreadsheets for details.

Comparison to (CCBDS) Reference Values

Metals: The contaminant concentrations in the sediments represented by Composites A through D were below or near the means plus twice the standard deviations of the contaminant concentrations found at the CCBDS reference site. The exception is copper in Composite A, which is two times larger. See the attached spreadsheets for details.

PAHs: In all of the project sediment samples, the PAH concentrations were below or near the means plus twice the standard deviations of the contaminant concentrations found at the CCBDS reference site. See the attached spreadsheets for details.

4. Regulations governing the determination of the suitability of dredged material for open-water disposal:

The disposal of dredged material seaward of the high tide line in Cape Cod Bay is regulated under Section 404 of the Clean Water Act (CWA).

Subpart G of the Section 404(b)(1) guidelines (40 CFR Section 230.60 and 230.61) describes the procedures for determining the suitability of this material for open-water disposal, including any relevant testing that may be required.

40 CFR 230.60 General Evaluation of Dredged or Fill Material

(a) This subsection states that further testing may not be necessary if it could be determined with the evaluation under paragraph (b) that the sediment is not a carrier of contaminants. Dredged or fill material is most likely to be free from pollutants when it is composed primarily of sand, gravel or other naturally occurring inert material. Based upon our Tier 1 review, the proposed dredge sediment is primarily sand, gravel or other inert material in an area of high current and/or wave energy and evaluation under paragraph (b) below indicates the material is not a carrier of contaminants. Therefore, this subsection does not apply. Based upon our Tier 1 review, evaluation under paragraph (b) below indicates the proposed dredge sediment is a carrier of contaminants so this subsection does not apply.

(b) This subsection states that the site should be evaluated to determine whether it is sufficiently removed from sources of pollution. These factors include records of spills or potential routes of contamination, like outfall pipes. There is a boat ramp and a fuel dock on the main pier as well as a drainage system to control runoff from impervious surfaces. No history of spills was reported by the contractor after examination of the area.

(c) This subsection states that further testing may not be necessary if certain conditions and circumstances make it unlikely that the dredged material would degrade the disposal site. For the project to meet this exclusion, the material to be dredged and the material at the disposal site must be adjacent to each other **and** composed of the same materials **and** subject to the same sources of contaminants. As the project site is not adjacent to the disposal site, this exclusion does not apply to this project

(d) This subsection states that further testing may not be necessary if the material to be dredged is constrained, both to reduce contamination within the disposal site and to prevent transport of contaminants beyond the boundaries of the disposal site. As such constraints in handling are not proposed, this subsection does not apply.

40 CFR 230.61 Chemical, Biological and Physical Evaluation and Testing

(a) This subsection describes the purpose of Part 230.61 and does not give any criteria for the evaluation of sediments.

(b) This subsection states that dredged material may be excluded from testing for water column effects and benthic bioassays if it is determined, by evaluation under 40 CFR Part 230.60, that the likelihood of contamination levels that could exert ecological impacts (as defined in Part 230.60 – is that the right section) is acceptably low. Such testing is not needed, as it was determined, based on evaluation under Part 230.61(c), that the likelihood of contamination is low.

(c) This subsection states that an inventory of the concentrations of the contaminants of concern would aid in an environmental assessment of the impact of their disposal on the designated disposal site. Such an inventory was performed at the dredge site. See Section 3 above and the attached spreadsheets for details. The dredged materials should have minimal impact at the disposal site.

CENAE and the federal agencies did not think an analysis of biological community structure was needed for this project.

(d) This subsection states the importance of the disposal of dredged materials on the characteristics of the physical substrate. MAS determined that the likelihood of physical effects from the disposal of the dredged material at the disposal site should be minimal. Although some benthic marine organisms will be buried by the disposal of the project materials, the disposal site should be rapidly re-colonized.

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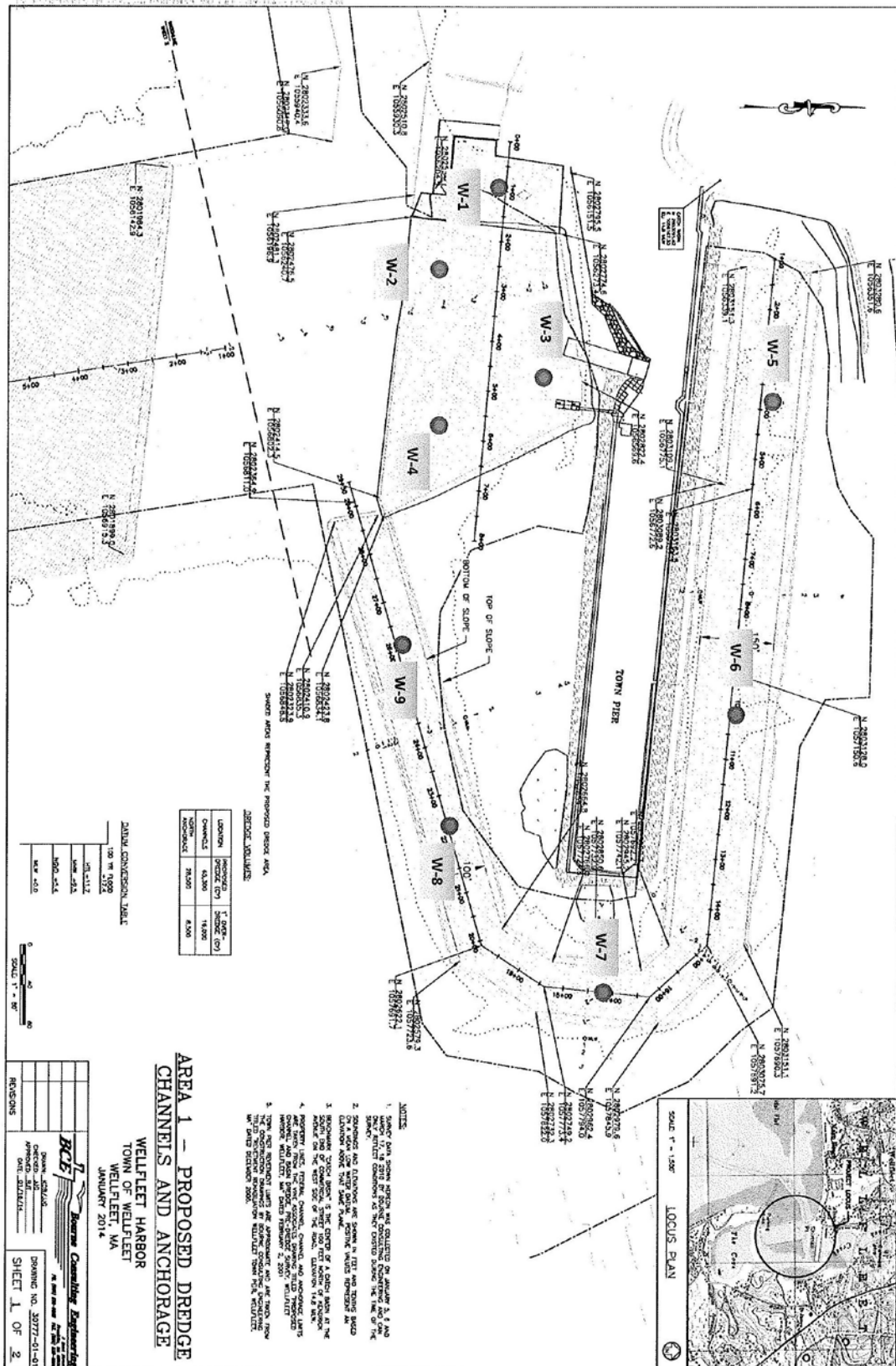
5. Copies of this determination were sent to the MADEP and the USEPA. The EPA concurred with this determination. The MADEP did not respond within the 10-business day review period and their concurrence is assumed.

6. If you have any questions, please contact me at (978) 318-8336 or charles.n.farris@usace.army.mil.

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Project Manager,
Marine Analysis Section

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