CENAE-R-PT 16 March 2011

MEMORANDUM THRU

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

FOR: William Kavanaugh, Project Manager, CENAE-PP-P-N

SUBJECT: Suitability Determination for Kennebec River Federal Navigation Project, Bath and Phippsburg, Maine.

1. Project Description:

The CENAE is proposing to maintenance dredge two areas in the **Kennebec River**. One area, approximately **23 acres** in Long Reach near Doubling Point will be dredged to -30' MLLW (plus an allowable overdredge depth of 2 feet). Approximately **50,000 cu. yds.** of material from the Long Reach area will be disposed of in a 99' deep portion of Fiddler's Reach. The other area, of **39.2 acres** off Popham Beach, will be dredged to a depth of **-27' mllw** (plus an allowable overdredge depth of 2 feet). Up to **20,000 cu. yds**. of sandy material from Popham Beach will be disposed of at a nearshore disposal site near Jackknife Ledge. The CENAE is proposing to hydraulically dredge this material although mechanical dredging might be used instead, depending on available equipment. This area was last dredged seven years ago. At prior dredging efforts, the sediments were found to be predominantly sand.

A sampling plan for this project was prepared on 22 December 2010 and finalized on 26 January 2011. The plan called for nine cores to be taken from the project area and analyzed for sediment grain size.

2. Summary:

This memorandum addresses compliance with the regulatory evaluation and testing requirements of 40 CFR Section 230.60 and 230.61, subpart G under the Clean Water Act 404(b)(1) guidelines. This evaluation confirms that sufficient information was obtained to properly evaluate the suitability of this material for open water disposal under the guidelines and finds the sediments suitable for disposal as proposed.

3. Clean Water Act Regulatory Requirements:

The disposal of sediments waterward of the high tide line in the Kennebec River and the Gulf of Maine is regulated under Section 404 of the Clean Water Act. Subpart G of the Section 404(b)(1) guidelines describes the procedures for conducting this evaluation, including any relevant testing that may be required.

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§230.60 General Evaluation of Dredged or Fill Material

- (a) Further testing is not necessary as it can be determined with the present information that the sediment is not likely a carrier of contaminants. In both areas the sediment samples were predominately sands and gravel, having 0.1% to 0.8% fines. See the attached table for details. As these areas are also subject to strong currents, this exclusion from further testing applies
- (b) There was a known spill in the vicinity of the project in 2004, when 40 gallons of hydraulic oil was spilled at Bath Iron Works. This exclusion from further testing therefore does not apply.
- (c) The material to be dredged and the material at the disposal site are adjacent, composed of the same materials and subject to the same sources of contaminants. Further testing is therefore not required.
- (d) This subsection states that further testing may not be necessary if the material to be dredged is constrained to reduce contamination within the disposal site and to prevent transport of contaminants beyond the boundaries of the disposal site. As the material meets the requirements in subsections (a) and (c) above, constraints in handling this material are not necessary and this subsection does not apply.
- §230.61 Chemical, Biological and Physical Evaluation and Testing
- (a) This subsection describes the purpose of §230.61 and does not give any criteria for the evaluation of sediments.
- (b) Water column and benthic bioassay testing is not needed as it was determined, on the basis of evaluation of §230.60, that the likelihood of contamination is low.
- (c) An inventory of the total concentration of contaminants is not of value in comparing sediment at the disposal and dredging sites as the materials have already been determined to be the same in section 230.60(c) above.

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

- (d) The physical effects of the disposal of the dredged material at the disposal site should be minimal. Although some benthic marine organisms will be buried by the disposal, the disposal site should be rapidly re-colonized.
- 4. Copies of the above mentioned data and of the draft suitability

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determination were sent to the State DEP, US EPA, and US F&WS for their review. The EPA responded to say that they concur with the determination. No responses were received from the F&WS within the 10-day response period so their concurrence may be assumed.

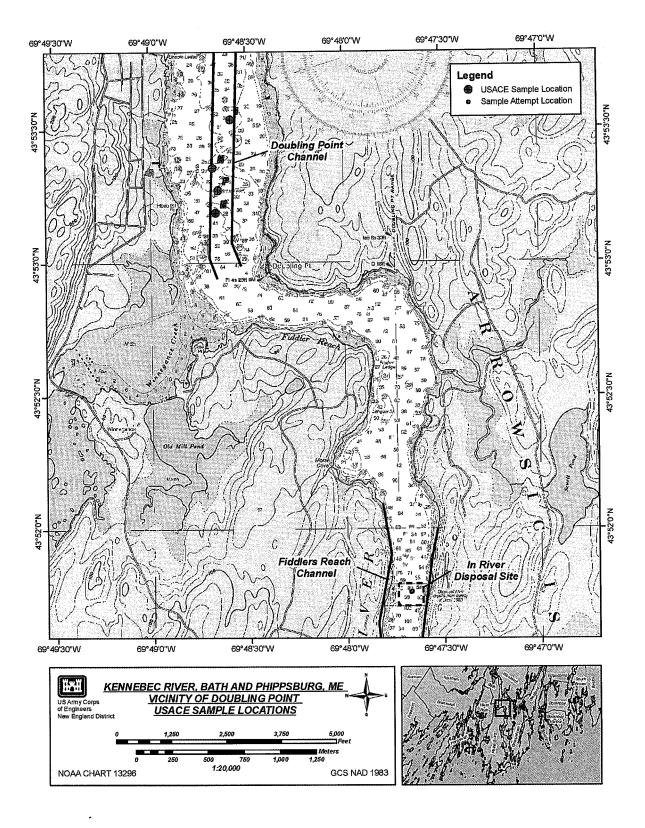
5. If you have any questions, please contact me at (978) 318-8660.

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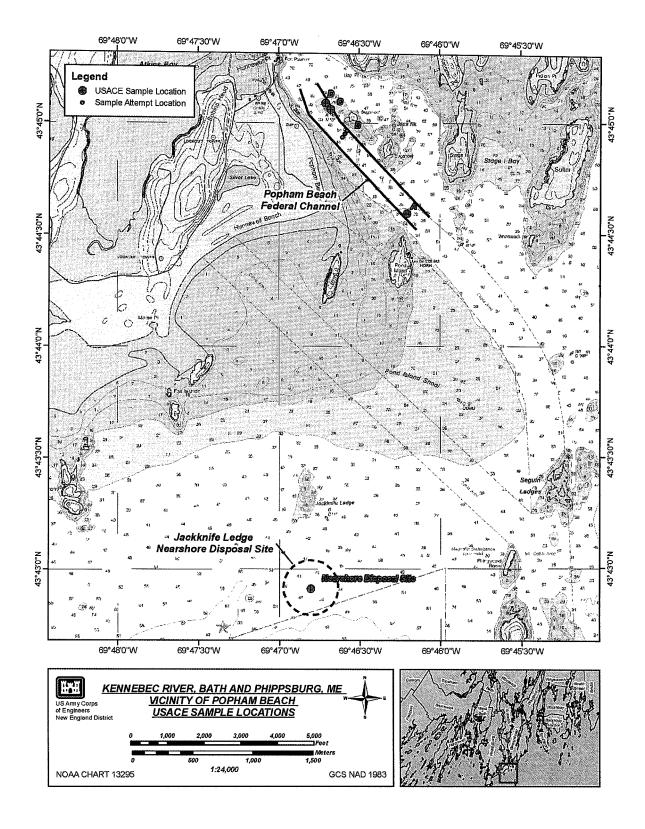
Project Manager,

Marine Analysis Section

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Sample	% Cobble	% Gravel	% Sand	% Fines
A	0	1.1	98.1	0.8
В	Rock ledge,			
С	0	0.6	98.7	0.7
D	0	0.1	99.4	0.5
E	0	0	99.9	0.1
F	0	0.1	99.6	0.3
G	Not able to	collect sample	Rocky bottom	
Н	0	0.4	98.5	1.1
I	0	0.1	99.4	0.5
Disposal Site	0	0.1	99.4	0.5