Clean Ocean Action



Since 1984

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May 27, 2008

Mr. Thomas Shea, Project Manager Mr. Richard L. Tomer, Chief, Regulatory Branch US Army Corps of Engineers New York District 26 Federal Plaza New York, NY 10278-0900

Mr. Doug Pabst, Team Leader Dredged Material Management Team US Environmental Protection Agency 290 Broadway New York, N.Y. 10007-1866

VIA E-MAIL AND REGULAR MAIL

RE: PN # FP64-SE1-2008 Elizabeth Channel NY/NJ Harbor Deepening, Federal Navigation Project with Placement of Dredged Material at the HARS

Dear Mr. Shea, Mr. Tomer, and Mr. Pabst;

Enclosed are comments on behalf of Clean Ocean Action, including the over 200,000 citizens who signed petitions against ocean dumping of contaminated dredged materials. The project proposes deepening the existing Elizabeth Channel, located in the Newark Bay, Newark and Elizabeth, New Jersey to 50 feet below mean low water, with placement of 715,000 CY of dredged material to be disposed of at HARS. The PN characterizes the material to be placed at HARS as Pleistocene Red Clay and Glacial Till, which would have the effect of allowing it to be placed in the ocean without further testing for various contaminants as otherwise required by federal regulations. However, the core data do not support the Pleistocene designation of some of this dredged material.

Dredged Material Characterization: There are several core logs that describe the "*Pleistocene*" age material as "*red silt*" with overlying Holocene black silt (See core logs E 99-7-5, E 98-16, E 98-17, PA 2-424, PA 2-440, PA 2-441, PA 2-442, PA 2-451, PA 3-088, NB 12, NB 13, NB 16, 4B-24, 4B-33). Any material that is describes as SILT, does not qualify for the testing exemptions allowed for

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Glacial Till or Red Clay^{1,2}. For example, according to the U.S. Army Corps of Engineers (USACOE), it is the physical characteristics of red clay, including it's impermeability, compaction, particle size of less than 2 microns, horizontal configuration and cohesion, that contribute to it's extremely low or absent toxin levels.³ Silt material does not have these important characteristics and therefore must be tested to determine if it is acceptable for use at HARS. Clean Ocean Action would like confirmation that this type of silty material does not qualify as either Pleistocene Glacial Till or Red Clay and must undergo additional toxicity testing to qualify for HARS placement.

In addition, there are at least two core logs that incorrectly describe sediments as Pleistocene age material:

Core Log # PA 3-088: The sediment in this core is described as containing approximately 15 feet of Holocene age material on the top including "*Gray, organic silty clay*" (top ~10 feet) and "*Gray, fine sand*" (~5 feet) followed by Pleistocene age material that is described as "*Gray-brown, silty clay*" (~ 3 feet) and "*Gray-brown fine sand*" (~10 feet).

In a Feb. 27, 2008 Memo⁴ from Dr. Steven Knowles, he finds that "*Gray silt is noted in most of the borings and gray sand identified in several borings*" (Core # PA 3-088 is included in a list of several cores). "*This material was removed in previous dredging or clearly lies outside of the dredging prism*" and "*The silt and clay and sand and gravel that occurs within the dredging prism at elevations below the required depth of the last dredging project (-47'MLW) is clearly red-brown in color*."

It is not clear from Dr. Knowles description how the questionable ~13 feet of material described in core log # PA 3-088 is to be handled and where it is to be disposed. It is clearly **not red-brown in color**, **nor does it lie below the required -47' MLW depth of the last dredging project**, yet this *"gray-brown"* sand and clay is designated as *"Pleistocene"* on the core log.

Core Log # E 99-7-7:

This core is described as containing an upper Pleistocene layer of approximately 3.5 feet of material that includes "*trace shell hash*". Again, in his Feb. 27, 2008 Memo⁵, Dr. Knowles describes several core logs in which shell fragments were identified, but **E 99-7-**7 is not included in this list. He further notes "*No shells or shell fragments were noted in sands or silt and clay deposits that occur within the dredging prism at elevations below the required depth of the last phase of dredging*" The ~3.5 feet of material in question

¹ Memorandum for the Record for Joint USEPA and USACOE Federal Position on Clay Testing in the Newark Bay Complex, January 26, 2000

² USACOE Memorandum for Distribution on the Standard Operating Procedures to determine if proposed dredged sediments from selected areas of New York Harbor are Pleistocene Glacial Till, July 16, 2004

³ Letter to Clean Ocean Action from Richard Tomer, US ACOE addressing our concerns about red clay being placed at HARS. April 16, 2002.

⁴ Memorandum for the Record, Feb 27, 2008, Analysis of SE-1 dredging project core data, Steven C. Knowles, PhD, USACE-NY.

⁵ Memorandum for the Record, Feb 27, 2008, Analysis of SE-1 dredging project core data, Steven C. Knowles, PhD, USACE-NY.

extends to (- 47.5'), which is right at the required depth of the last dredging project. This further supports a finding that this is Holocene material that was recently deposited and does not support a designation of *"Pleistocene"* age material.

The material characterized by cores # PA 3-088 and E 99-7-7 do not qualify as Pleistocene Red Clay or Glacial Till and therefore, must be treated as newly deposited Holocene age material and properly tested to determine if it meets HARS criteria.

- **Material Separation Plan:** COA support the requirement that the applicant provide a "Dredged Material Separation Plan" to "*ensure that only HARS-suitable dredged materials are transported to the HARS*⁶". COA requests a copy of the Material Separation Plan for this project and any additional information on the dredging procedures that describe how the material will be handled to provide acceptable separation.
- **Beneficial Reuse of Holocene Silt:** COA supports the proposed beneficial reuse of the Holocene silt material in an environmentally sound manner at an upland site in New Jersey. In order for the public to adequately review the proposed reuse, the PN must also include specific information on the location of the upland placement site.
- **Placement of Material at HARS:** The 2006 Multibeam Bathymetric and Backscattering Survey of HARS⁷ found areas in the western half of PRA 1 and in the eastern half of PRA 2, where deposits measured up to 19 feet thick. Therefore, the Pleistocene Red Clay and Glacial Till should be deposited within the HARS in a manner that ensures coverage and capping of historically contaminated sediments, not repeated placement over areas that have already received clean cap material.

The core logs and data fail to support the characterization of some of the material in the Elizabeth Channel in Newark and Elizabeth, NJ as Pleistocene Glacial Till or Red Clay and this material must undergo additional site-specific testing before being approved for placement at the HARS. Any exemption from such testing is contrary to both the spirit and letter of the January 26, 2000 Memorandum for the Record for Joint USEPA and USACOE Federal Position on Clay Testing in the Newark Bay Complex and the USACOE July 16, 2004 Memorandum for Distribution on the Standard Operating Procedures to determine if proposed dredged sediments from selected areas of New York Harbor are Pleistocene Glacial Till, as well as the Ocean Dumping Regulations.

A written response to these comments is requested.

Sincerely,

⁶ Memorandum for the Record, Feb 27, 2008, Analysis of SE-1 dredging project core data, Steven C. Knowles, PhD, USACE-NY.

⁷ RESULTS OF THE SUMMER 2006 MULTIBEAM BATHYMETRIC AND BACKSCATTER SURVEYSAT THE HISTORIC AREA REMEDIATION SITE, SHARK RIVER REEF, AXEL CARLSON REEF, AND SANDY HOOK REEF, FINAL REPORT, December 2006, Contract No. SAIC Project No. 01-0236-04-5000-300, SAIC Report No. 716



Cindy Zipf Executive Director

Jennifer C. Aamson

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cc: Suzanne Dietrick, Chief, Office of Sediment and Dredging Technology, New Jersey Department of Environmental Protection