

19 JUNE 2007

## FINDING OF NO SIGNIFICANT IMPACT

**NAME OF ACTION:** Effects of the NY/NJ 50-Foot Harbor Deepening Project on the U.S. Environmental Protection Agency's Remedial Investigation/Feasibility Study (RI/FS) of the Newark Bay Study Area (NBSA)

**Project Description:** The 50-foot NY/NJ Harbor Deepening Project (HDP) includes deep-draft navigational dredging within the NBSA. The HDP dredging within the NBSA occurs in areas of Newark Bay (NB), Arthur Kill (AK) and Kill Van Kull (KVK). Within the NBSA, the dredging in the AK 41/40 Foot Project, Contract Area 2/3 and the S-KVK-2 Contract Area, was completed in 2007. The remaining contracts for the HDP within the NBSA are scheduled for completion in 2012. This deep-draft navigation program within the NBSA is authorized by Congress and is the subject of this document. Other Federal dredging actions in Newark Bay, which include maintenance dredging, as well as U.S. Army Corps of Engineers (USACE) permitted maintenance dredging under the Clean Water Act Section 404 and Section 10 of the Rivers and Harbors Act of 1899, are assessed as to maintenance dredging effects upon the RI/FS within the cumulative analysis framework of the 2007 Environmental Assessment (EA).

**Coordination:** New York District has coordinated this project with resource and/or regulatory agencies and the interested public in order to inform agencies and individuals of the proposed work and the environmental evaluations. These agencies include the Federal agencies, U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Agency (NOAA) Fisheries Department, U.S. Environmental Protection Agency (USEPA) and the State agencies, New Jersey Department of Environmental Protection (NJDEP), New York State Department of Environmental Conservation (NYSDEC), and the New York State Department of State (NYSDOS).

**Environmental Impacts:** The 2007 EA evaluated the potential effects, including cumulative effects during the project life, of the USACE HDP on the USEPA's Remedial Investigation/Feasibility Study (RI/FS) within the NBSA. The proposed project action is in compliance with all pertinent environmental statutes, laws and regulations. In addition, the 2007 EA addresses the four primary deficiencies identified by the United States District Court for the Southern District of New York (SDNY) in a March 8, 2006 Opinion and Order:

- 1) "[The EA] failed to take a hard look at the effect of resuspension on contaminant concentrations in the surface level sediments for two reasons: 1) it failed to assess resuspension rates for different geomorphic areas and arbitrarily relied on the use of averaging over each contract area; and 2) it did not identify and consider hot spots".

The approach taken in the 2006 EA has been refined significantly through the use of a hydrodynamic and particle transport simulation and deposition model of Newark Bay, combined with a refined analysis that includes the historical chemical data, USACE sediment samples characterizing the dredging area, as well as the recently available USEPA NBSA Phase I sampling data. The

model represents each of the geomorphic areas separately, avoiding the harbor wide averaging employed in the 2006 EA.

The chemical impacts associated with resuspension of sediments from dredging were estimated by apportioning the concentrations of chemicals in the resuspended, transported and newly deposited material with the mass of sediment predicted to be deposited. This conservative analysis was also used to identify areas that may contain "hot spots" known in this document as Areas of Elevated Concentrations (AEC).

In addition to the chemical analyses, a bathymetry analysis was used to locate historical sediment deposition areas in which AECs, if any, might exist, to develop a conservative estimate of the potential impact of AECs on resuspension and deposition of dredged material that may affect the NBSA RI/FS evaluations.

- 2) *"The Corps failed to assess the cumulative impact of maintenance dredging on the RI/FS".*

The cumulative impacts of the HDP, and USACE and non-Federal maintenance dredging in Newark Bay were evaluated quantitatively using the same hydrodynamic and particle transport simulation and deposition model combined with the historical and NBSA Phase I data. Commenters have previously raised a concern regarding the omission of an analysis of an issued permit. It was originally determined that such dredging was not likely to occur within the next five years (remainder of the HDP project life within NBSA); however, to ensure a continued conservative approach to the analysis, a quantitative evaluation including this permit was performed and a determination was made that the conclusions remain the same.

- 3) *"The EA lacked a proper alternatives analysis".*

In addition to the No Action alternative, the alternatives considered to eliminate or reduce impacts on the RI/FS are: 1) the Proposed Action, 2) timing/sequencing alternative for constructing the HDP in the NBSA, and 3) remedial dredging. Each alternative was evaluated for its capacity to meet project objectives within technical, economic, environmental and legal constraints.

- 4) *"The Corps' mitigation measures do not provide substantial assurance that possible impacts will be minimized".*

The past and current analyses have demonstrated that the HDP will not significantly impact the RI/FS. The use of additional Best Management Practices (BMPs) and coordination with USEPA assist in further reducing impacts already considered insignificant.

All practicable mitigation measures that result in avoiding, minimizing and reducing or eliminating potential adverse impacts to the RI/FS have been included in the recommended plan and are as follows:

- The NBSA Inter-Agency Coordination Plan provides ample opportunity for USEPA to perform the required evaluations to support the RI/FS;
- BMPs that are designed to minimize resuspension, will be included, as appropriate, and as required by the State issued WQCs, in the HDP contracts within the NBSA;
- A Total Suspended Solids (TSS) monitoring program, to ensure effective use of BMPs, will be included in the HDP contracts within the NBSA;
- Adaptive Management, which will include 1.) reviewing all available relevant and pertinent data (*e.g.*, TSS data), 2.) coordinating with USEPA and the Natural Resource Damage Assessment (NRDA) trustees at monthly meetings, 3.) timing/sequenced dredging when required and 4.) applying to the states for WQCs (which include public notices and comment periods), will be utilized for each NBSA HDP contract.

The Court also raised concerns regarding coordination between USACE and USEPA. The coordination process, as outlined in Section 7 of the 2007 EA has proved to be an effective tool for resolving potential conflicts. Of particular interest, USACE has provided a finely-resolved evaluation (historical bathymetry) that identifies areas within Newark Bay where considerable sediment deposition occurred over the past 100 years. This work addresses a concern of USEPA by identifying locations with a documented historical record. This information has been provided to USEPA, as well as the states, to support future sample collection. The opportunity now exists for USEPA to sample these areas prior to dredging. USACE will continue to work closely with USEPA and the state(s) on this issue. Finally, the NBSA Inter-Agency Coordination Plan includes a tiered dispute resolution process designed to elevate unresolved technical issues to the policy-level decision makers of the participating agencies.

By addressing the deficiencies identified by the Court, the EA evaluated whether the dredging activities of the HDP will significantly affect the NBSA RI/FS. In conducting this analysis the following conclusions were reached:

- That the data reports, inventories and recent data identified as new sources of relevant information, such as the USEPA NBSA Phase I sampling data and the historical bathymetry data, are sufficient to perform the required analyses;
- That the use of the field calibrated and validated deposition model, in conjunction with the USEPA NBSA Phase I sampling sediment data, produced qualitative and quantitative analyses (*i.e.*, deposition of

resuspended sediments and chemical assessment) with which to take a “hard look” and to base the environmental assessment;

- That the alternatives evaluation revealed that remedial dredging for the purpose of removing Hazardous, Toxic and Radioactive Waste (HTRW) sediments was not the preferred alternative for the HDP NBSA contracts since it had not yet been determined that the sediments are HTRW or that remedial dredging would be the USEPA recommended response action. However, the dredging BMPs which are specifically designed to be protective of the environment and to be used in the USACE’s Recommended Plan (preferred alternative) for the HDP dredging within the NBSA, utilize similar practices to those employed in remedial dredging in addition to meeting the Proposed Action’s primary goal of providing safe navigation without causing adverse effects to the RI/FS;
- That the NBSA Coordination Plan was an appropriate and sufficient plan under which to resolve any issues surrounding the potential for the HDP to adversely affect the RI/FS and that adaptive management was a component in this plan for current and future contract management within the NBSA, as evidenced by the sequencing of construction contracts to accommodate the USEPA’s RI sampling plan(s).

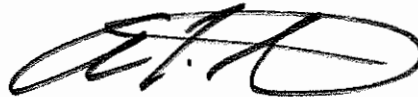
**Mitigation:** As a result of the findings above, the following additional mitigative actions will be implemented:

- The HDP TSS monitoring program will be continued throughout the remaining HDP contracts within the NBSA. This program’s results will be used to ensure the effectiveness of mitigation measures by providing the results to USEPA and both state regulatory agencies.
- Best Management Practices will be employed throughout the life of the HDP within the NBSA, as documented in current and future WQCs.
- The formal NBSA Inter-Agency Coordination Team will continue coordinating the activities of the dredging program and the RI/FS.
- Based upon the extensive alternative analyses performed in the EA, USACE will continue coordination with the USEPA, NJDEP and NYSDEC to revisit the best management practices and other mitigation measures for each NBSA HDP contract area.

Through inter-agency coordination, TSS monitoring and BMPs, potential minimal impacts will be mitigated. Overall, as described within the 2007 EA, the HDP does not significantly impact the RI/FS or require significant changes in USEPA’s methods or protocols for evaluating the sediments within the NBSA for a response action (either a removal or a remedial action).

**Determination:** I have determined that the action, as described within the 2007 EA and previously evaluated in the 1999 Final EIS, 2004 EA, and 2006 EA, will not significantly impact the RI/FS and that there is no significant new information or change in the project or impacts to the quality of the human environment. Therefore, the action does not require the preparation of a detailed statement under Section 102(2)(c) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321, *et seq.* My determination was made considering the potential adverse environmental impacts, alternatives, mitigation and inter-agency coordination as discussed in the 2007 EA.

**Findings:** The proposed dredging of the Harbor Deepening Project in the Newark Bay Study Area would not result in significant impacts to the U.S. Environmental Protection Agency's Remedial Investigation/Feasibility Study and is the alternative that represents sound engineering practices and meets environmental standards; therefore, construction of the project according to the recommended plan should proceed.



Aniello L. Tortora  
Colonel, U.S. Army  
District Engineer

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