

PRELIMINARY REPORT ON OPERATION OF HOPPER DREDGES

IN THE FREEPORT HARBOR CHANNEL PROJECT

SEPTEMBER 2004 – NOVEMBER 2004

On September 4, 2004 the contract hopper dredge *Eagle I* began work on the Entrance and Jetty Channels of the Freeport Harbor Project. Contract specifications required dredging an estimated 2,164,000 cubic yards (CY) of shoal material. The required depth of dredging was 49 feet below Mean Low Tide (MLT, Corps of Engineers Datum), with 2 feet of allowable overdepth dredging along the Entrance Channel and 47 feet MLT with 2 feet of overdepth along the Jetty Channel.

Dredging began on September 4, 2004, and was completed on November 14, 2004. The *Eagle I* temporarily left the project on September 29 to perform emergency dredging in another District and returned on October 23. A bed leveler was utilized in the absence of the hopper dredge. A total of 921 loads of dredged material were collected and deposited into Placement Area No. 1-A. Dredging was performed between Stations 78+63 along the Jetty Channel and (-)180+00 along the Outer Bar Channel. A total of 1,854,024 CY of material was excavated from this project.

The dredge was initially equipped with rigid draghead turtle deflectors, and 100% inflow screening with a 4-inch square mesh. NMFS-approved turtle observers provided 24-hour/day monitoring of dragheads and screens for each load cycle. The observers were employed by Coastwise Consulting, Inc. under a subcontract to the dredging contractor, Bean Stuyvesant, L.L.C.

During the performance of this dredging, no lethal turtle takes were experienced. The surface water temperature ranged from 21.0°C – 29.0°C. A copy of the observer reports are on the enclosed CD.

Relocation trawling was conducted on a 24-hour daily basis during dredging and bed-leveling operations. One loggerhead was captured on September 24, 2004. This turtle was tagged and released unharmed on September 25. A copy of the tagging and trawl reports are on the enclosed CD.

Coordination was conducted with the Sea Turtle Stranding and Salvage Network (STSSN). There were no reports of stranded turtles that bore injuries consistent with a potential encounter with a hopper dredge.

An abundance of debris and clay caused excessive clogging of the screening aboard the dredge. Some of these screens were modified to alleviate this problem. The resulting mesh size was 9" X 12" resulting in an estimated 90% screening efficiency.