

FAX TRANSMITTAL

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NCBC DAVISVILLE
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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Admin.
National Ocean Service
Office of Ocean Resource Conservation and Assessment
Hazardous Materials Response and Assessment Division
c/o EPA Waste Management Division (HEE-6)
J.F. Kennedy Federal Building
Boston, MA 02203
29 March 1996

Ms. Christine Williams
U.S. EPA Waste Management Division
J.F. Kennedy Federal Building
Boston, MA 02203

Dear Christine:

The following is a brief review of the Draft Final Allen Harbor Landfill and Calf Pasture Point Marine Ecological Risk Assessment Report: Volume I: Technical Report prepared by the Naval Construction Battalion Center, Davisville, Rhode Island. Overall, my assessment of the ERA remains unchanged; a fairly good assessment of ecological risk was performed at the Allen Harbor/Calf Pasture Point area of NCBC Davisville.

Previous Concerns

NOAA's previous concerns were not completely addressed in this version of the ERA. My largest concern regarded the lack of substantial evaluation of trophic levels above *Fundulus*. A flatfish and other demersal species and shorebirds likely have completed pathways to source contamination. Both likely feed on shellfish (which showed the highest accumulation of COCs) and other benthic and epibenthic species that live in intimate contact with the sediments. The Navy and their contractors have stated that flounder are not often found in Allen Harbor, an answer I find suspect. Section 5.1, "Known Effects of COCs" which I previously reported as general and prepared from a boilerplate was not modified substantially. Specifically, the section would have been more useful for the rest of the ERA if the individual data sets that were used to calculate ERL/ERM concentrations were discussed. In addition, the section did not present the body of literature associating PAH-contaminated sediments with pathological anomalies in demersal fish.

Although addressing these comments would have made for a more scientifically balanced ERA, they are relatively minor in light of the highly localized nature of contamination in the intertidal and nearshore subtidal areas. The data indicate that contamination is not likely severe enough to make accumulation to higher trophic levels very widespread.

Releases from Calf Pasture Point

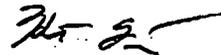
Data have shown significant decreases in amphipod survival and higher incidence of neoplasia in clams at west Calf Pasture Point and wetland areas of south Calf Pasture Point. The highest degree of clam neoplasia (100 percent) in the entire harbor was observed at Station W11 at Calf Pasture Point - West. However, only six clams were collected at this station, so habitat suitability may also be an issue. Bioassay data indicate less severe effects than those observed at landfill areas, but none-the-less significant. The overall biological effects do not appear as great as those observed near the landfill, but do indicate the nearshore is a receptor for a nearby source. The degree of effects observed indicate that source control options should be evaluated at Calf Pasture Point as well as the landfill areas.

Sediment Contamination in the Intertidal Zone

The data indicate a general trend toward the higher concentrations in surface sediments. Several exceptions occurred; however, the data were not sufficient to provide an explanation for the variation. There does not appear to be a correlation with TOC or grain size although these data were not collected at all intertidal stations. The discharge of contaminated groundwater may have occurred at isolated areas, but the relatively low incidence of higher concentrations in deeper sediments likely indicates that this is not widespread. My guess is that bioturbation and different grain sizes at depth may explain most of the variation.

Please let me know if you have any questions or need further information.

Sincerely,



Kenneth Finkelstein, Ph.D.

cc: Tim Prior (USF&WS)
Simeon Hahn (Northern Division)