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LETTER AND COMMENTS FROM NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION ON SUPPLEMENTAL SEDIMENT INVESTIGATION REPORT FORMER
DEREKTOR SHIPYARD NS NEWPORT RI
5/4/2012
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Admin.
National Ocean Service
Office of Response and Restoration
Assessment and Restoration Division
c/o EPA Region 1 (OSRR07-1)
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4 May 2012

Ms. Winoma Johnson
U.S. Department of the Navy
Naval Facilities Engineering Command, Mid-Atlantic
9742 Maryland Avenue
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Dear Winoma:

Thank-you for the Supplemental Sediment Investigation Report for the Former Derecktor Shipyard, Naval Station Newport, Newport RI, prepared by Tetra Tech, April 2012. The document is well written and included the promised data. Comments are numbered below

1. The entire BPRG inclusion is a puzzle to me. A PRG relates to a cleanup concentration. The BPRG has nothing to do with a cleanup concentration rather, at this site, it's a chemical concentration equal to the Reference area. And although valuable in its own right for RI/ERA purposes, it has no value as a present or future PRG. Please eliminate it From Table 1-1 and in Section 1.4 (Development of Cleanup Goals) or call it something else. In addition, under 4-1F and 4-1G (as well as 4-2F, 4-2G, 4-3F and 4-3G) the legend indicating that these BPRG values have something to do with Project Action Limits (PALs) is misleading.
2. Despite Item 1 above there are three locations of concern within the top 12 inches with zinc concentrations of 823 mg/kg 799 mg/kg and 678 mg/kg at stations W-17, BB-26, and K-05 respectively that deserves some attention. Because the latter matches up with the highest lead found in the study, I assume the sediment at that locale will be removed and no further zinc risk assessment is necessary. However, the Navy should further assess stations W-17 and BB-26 using a biological testing tool to determine if sediment removal is necessary. Of course, if the AVS is above the SEM at these two locations, the chances of finding bioavailable zinc drops considerably and remove the need for such a study.
3. In my professional opinion, the copper concentrations are not high enough (as are most of the zinc concentrations) to demand further assessment. Granted both may be additive in the toxicity shown by other chemicals above their respective RPRGs but it appears that the high concentrations of organics and inorganics at the surface are mostly independent of each other. That observation indicates two distinct sources of contamination.
4. PCBs are an enigma given that the concentrations are low everywhere except two locations adjacent to Pier 2. Of concern is the concentration of 17 mg/kg at Station K-13.

This station is a combination of high PCBs and lead that puzzles me; likely two independent sources of contamination released relatively near the same time. An obvious sediment removal is necessary but the volume for removal may not be as great as indicated by Figure 4-1C. That because the one high concentration at K-13 results in a large circle because of the distance to the adjoining stations. These red circles may be overestimating the area of concern given the number and location of samples. Another example is the size of the elevated lead area at K-05. Confirmatory sampling preceding sediment removal will likely narrow this area of concern.

5. It seems clear that the TBT is no longer an issue
6. In my opinion, the major debate will concern the sediment at depth. The Navy has conclusively shown that the sediment below 12 inches should stay in place given steady state conditions. But why will the site remain in steady state? Can't one assume that large ship traffic will displace the sediment sometime in the future. What assurance can the Navy provide that contamination below 12 inches will not get mobilized? And lastly, if the top 12 inches are removed, won't the sediment below it become available given that in some places the highest chemical concentrations in each of the three zones are stacked on top of each other.
7. Figure 2-2 shows the Polonium activity bouncing at the bottom of cores 4, 5, and 6, despite no change in grain size. Please explain and indicate if it affects the sedimentation rate?
8. A minor point but Figure 3-1 shows a confusing legend. Given that the depth is below MLLW, the minimum depth should not have a negative sign (i.e., -2.28 ft = 2.28 ft). In addition, I would place the deeper waters at the bottom and the shallow water at the top (i.e., reverse the colors and the water depths). And in Figure 3-2, a legend (i.e., each color equals a specific bottom depth range) would be helpful as the contour lines and values are hard to read.

I look forward to discussing this further.

Sincerely,

Kenneth Finkelstein, PhD

CC: Kymberlee Keckler (EPA)
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