CENWS-OD-TS

MEMORANDUM FOR RECORD MARCH 24, 1998

SUBJECT: TIER IV ASSESSMENT OF DREDGED MATERIAL MANAGEMENT UNITS 1C03 AND 1C06 FROM THE PORT OF SEATTLE TERMINAL 18 DREDGING PROJECT (95-02133) FOR DISPOSAL AT THE ELLIOTT BAY OPEN-WATER SITE.

1. The PSDDA agencies signed a suitability determination dated March 17, 1997 which addressed the disposal of 538,350 cubic yards of material proposed for dredging from East Waterway for improved access to the Port of Seattle's Terminal 18. The suitability determination for an additional 8,080 cubic yards, represented by dredged material management units (DMMUs) 1C03 and 1C06, was held in abeyance until a Tier IV (dredger's option) assessment could be conducted for this material. A Tier IV assessment was required because material in 1C03 exceeded two PSDDA maximum levels (MLs for DDT and PCBs) and because 1C06 exceeded a single ML (benzyl alcohol) by greater than 100%.

2. The agencies assessed DMMU 1C06 and concluded that it did not require additional testing under Tier IV. This DMMU caused no adverse effects in any of the PSDDA bioassays, either acute or sublethal. In addition, benzyl alcohol is not a bioaccumulative chemical of concern, thus posing no adverse ecological effects or human health risk due to long-term uptake or trophic transfer. There was no reason to believe that this DMMU posed an undue environmental risk. Therefore, the PSDDA agencies concluded that DMMU 1C06 could be dredged and placed at the Elliott Bay open-water disposal site.

3. For DMMU 1C03, the agencies' primary concern was the relatively high concentration of PCBs (4,900 ug/kg dw). While Tier III bioaccumulation testing had been designed to address the human health risk posed by the PCBs, the focus in Tier IV was the potential for trophic transfer, biomagnification and adverse effects on birds and marine mammals. The agencies recommended that the Port of Seattle conduct an ecological risk assessment specific to disposal of PCB-contaminated sediment at the Elliott Bay site. However, the agencies and the Port of Seattle could not come to agreement on the assumptions to be made in conducting the risk assessment and the Port of Seattle decided not to pursue the Tier IV assessment of this DMMU. In the absence of a Tier IV assessment, DMMU 1C03 was assumed to be unsuitable for open-water disposal by the PSDDA agencies.

4. In summary, the PSDDA agencies determined that the 4,080 cubic yards in DMMU 1C06 were suitable for disposal at the Elliott Bay open-water disposal site, while the 4,000 cubic yards in DMMU 1C03 were unsuitable for open-water disposal.

5. The PSDDA agencies were emailed a draft of this suitability determination on March 18. Justine Barton of the Environmental Protection Agency, Tom Gries of the Department of Ecology and Ted Benson of the Department of Natural Resources concurred with this determination.

David F. Fox

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