DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

REPLY TO
ATTENTION OF

February 7, 2002

Doug Hotchkiss
Port of Seattle
P.O. Box 1209
Seattle, WA 98111

Subject: Stage 1a Sediment Evaluation, PN # 95-2-02133

Dear Mr. Hotchkiss:

This letter provides the DMMP consensus review response to the December 17, 2001 memorandum prepared by Anchor Environmental, for the Port of Seattle, regarding the recency of East Waterway Stage I data collected in 1997. The DMMP agencies have determined after considering the rationale for no further testing needed, that at least limited retesting at three or four locations will be required before dredging at the Stage 1a area with disposal at the Elliott bay siste can commence. The DMMP review comments on the memorandum and rationale for requiring additional testing are discussed below.

1. Page 2, 2nd paragraph. The description provided for the Stage 1a project area dredging (Station 15+00 to 49+50) does not match the boundaries depicted on Figure 1-2, where the northernmost boundary shown is near Station 13+00. Please provide hatching on future figure to show which material is suitable, including discussion on the top of page 6 on buffer cuts. DMMU 1C13 is unsuitable and the figure should be shaded.

2. Page 2, 2nd paragraph. Please provide more information on the additional proposed berth dredging in the south apron area (49+50 to 57+50), which appears to be within the Stage II testing area, and which has a suitability determination dated November 2, 1999. Has the Port of Seattle initiated a Section 10/404 permit action for this area? This material also exceeds the 2-year recency guideline, and may be subject to additional testing after a DMMP agency "reason-to-believe" review.

3. Page 5, 3rd paragraph. This paragraph addresses the sloughing potential of material (presumably subsurface) left *after completion* of the Stage 1a dredging. The DMMP agencies are also concerned about contamination of the Stage 1a area from adjacent unsuitable DMMUs due to unsuitable surface material that may have sloughed into the Stage 1a area *during dredging* in the adjacent contaminated DMMU (especially since it appears that the Stage 1a area was at a lower elevation than the pre-dredged Stage 1 area).

4. Page 6 (Sources of contamination) and Page 12 (Effects of Dredging). These sections omit discussion of contamination from turbidity and displaced material from the

problematic Phase 1 dredging. The recency determination review memorandum should have acknowledged the problems observed during the Phase 1 dredging. Various accounts of activities occurring during this dredging documented equipment and sediment management problems during the Phase I dredging which led to water quality standard exceedances for turbidity. Therefore, in the opinion of the DMMP, the resuspension factor (R) used in Table 4-1 based on various buckets and associated losses, is not a conservative estimator. The bulleted list of possible sources of sediment suspension associated with dredging (page 12) should also include barge overflow.

5. Page 7, 2nd paragraph. Please define (quantitatively) what is meant by "far field" and "near field". More information should be provided to substantiate the statement that CSO contamination within East Waterway has not "significantly migrated to surrounding areas".

6. Page 8 (Source Control). This section focuses mostly on planned reductions in overflow events. How do these plans translate to a demonstration that no significant contamination has occurred in the Phase 1a area since characterization in 1999?

7. Page 9 (Oil spills). While 200 gallons may constitute a "minor leak" in the world of spill cleanup, it does not appear to be minor in it's potential for contamination of the area near DMMUs 1C18 and 1C23. Have there been any sediment samples taken in this area to confirm that the spill was confined to the riprap and pilings underneath T-18? What are the official boundaries of the "hot zone" where pressure washing has occurred?

8. Page 15, 2nd paragraph. Use of PSEP's guidelines for precision of analytical replicates is not an acceptable means to determine whether differences in the chemical concentrations of field measurements are significant or not. It is appropriate, however, to use these guidelines to evaluate the differences between lab replicates.

9. Page 15, 3rd paragraph. There should be a summary of the recent Windward/Port of Seattle "Nature and Extent" data collection effort in support of Superfund/East Waterway decisions, especially at locations along the T-18 Pier.

10. Page 16 (conclusions). The DMMP agencies disagree with the Port's findings in this memorandum that samples obtained in 1999 representing the Phase 1a sediments continue to be representative of the area. The information provided indicates that there are several factors that may have induced significant changes to the sediment matrix within the Stage 1a area since the last characterization. These include:

    - Influence of Phase 1 dredging, including potential sloughing, spillage, and redistribution of bottom sediments.
    - Contamination of surrounding sediments from the 200 gallon oil spill in the immediate vicinity of 1C18 and 1C23.
    - Ongoing shipping activity at T-18 and in the immediate vicinity of the Phase 1a sediments and an acknowledged hot spot in the vicinity of 9+00.

Given the above issues and the fact that almost five years have elapsed since the T-18 characterization, the DMMP agencies have determined that it is necessary to recharacterize the Stage 1a area, and propose a tiered resampling/retesting approach. After reviewing the data, the DMMP agencies propose reconfiguring the DMMU boundaries for the 27,000 cy of material within the Stage 1a footprint as follows:

- **DMMU-1:** Composite of 1C5 and 1C6, which is near unsuitable 1C4 and the hot spot to the north.
- **DMMU-2:** Composite of 1C9 and 1C10
- **DMMU-3:** Composite of 1C15, 1C18, and 1C23 near the oil spill area located at Station 32+00.
- **DMMU-4:** Composite of 1C28, 1C29, and 1C34.
- **DMMU-5:** Composite of 1C35, 1C40, and 1C41, near the southern end of Stage 1a, where sloughing is a concern.
- **DMMU-6:** Composite of 1C46 and 1C47, or analyzed separately as two individual DMMUs.

DMMU's 1, 3, and 5 will be analyzed initially for chemicals of concern (including TBT), while DMMU's 2, 4, 6 will be archived pending results of the analyses of DMMU 1, 3, and 5. If characterization of the three DMMUs analyzed indicate the areas are no longer chemically and/or biologically suitable for open-water-unconfined disposal, additional analyses of archived DMMUs may be required. The agencies would be required to exercise best professional judgement (BPJ) in making the decision on whether or not to analyze archived samples after reviewing initial testing results.

Please call me (206/764-3768) if you have any questions about our response.

Sincerely,

David R. Kendall

David R. Kendall, Ph.D.
Chief, Dredged Material Management Office

Copies Furnished:
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DMMO File