

MEMORANDUM FOR RECORD

18 May 1999

SUBJECT: DETERMINATION ON THE SUITABILITY OF PROPOSED MAINTENANCE DREDGED MATERIAL FROM THE DUWAMISH YACHT CLUB DREDGING PROJECT (1998-2-02213) EVALUATED UNDER SECTION 404 OF THE CLEAN WATER ACT (CWA) FOR OPEN-WATER DISPOSAL AT THE ELLIOTT BAY DISPOSAL SITE.

1. The following summary reflects the consensus determination of the Agencies' (U.S. Army Corps of Engineers, Department of Ecology, Department of Natural Resources, and the Environmental Protection Agency) with jurisdiction on dredging and disposal on the suitability of the estimated 24,000 cy of maintenance material from the marina located on the Duwamish Waterway in Seattle, Washington for unconfined open-water disposal at the Elliott Bay disposal site.
2. The project was ranked high for testing purposes, and sampling consisted of collecting two core samples with the Hart Tent Peg Sampler from each of the six dredged material management units (DMMUs) on March 4 and 5, 1999 by the contractor (Hart Crowser) from the proposed dredging footprint (see figure 1). Two samples from each of the DMMUs were composited into six surface DMMUs for analysis.
3. The Agencies' approved sampling and analysis plan for testing the surface DMMUs were followed, and quality assurance/quality control guidelines specified by the Puget Sound Dredged Disposal Analysis Users Manual were generally complied with. The data gathered were deemed sufficient and acceptable for decision making by the Dredged Material Management Program (DMMP) agencies based on best professional judgment.
4. Table 2 summarizes the sediment conventional parameters for the six composited DMMUs analyzed. Chemical analysis of the composited DMMUs indicated that there were no detected or undetected exceedances of screening levels for all routine 58 chemicals of concern, including TBT (only DMMUs C1 and C6 analyzed as per tiering protocol).
5. Relevant dates for regulatory tracking purposes are included in Table 1.

Table 1. Regulatory Tracking Dates

SAP Received: November 9, 1998

SAP Approval date:	December 21, 1998
Sampling date(s):	March 4-5, 1999
Data report submittal date:	April 30, 1999
Recency Determination Date: High Concern (2 years)	March 2001

SAP received 11/9/98

**Table 2. Sediment Conventional Results.**

Parameter	DMMU C1	DMMU C2	DMMU C3	DMMU C4	DMMU C5	DMMU C6
Grain Size:						
% Gravel	0	0	0	0	0	0
% Sand	18	7	18	22	21	20
% Silt	72	74	69	67	70	69
% Clay	10	19	13	11	9	11
% Fines (clay+silt)	82	93	82	78	79	47
Total Solids, %	48	45	47	49	48	47
Volatile Solids, %	7.9	7.1	8.1	7.4	7.7	6.1
Total Organic Carbon, %	2.8	2.2	2.8	2.6	2.2	2.4
Total Sulfides, mg/kg	1200	740	760	900	830	750
Total Ammonia, mg/kg	39	52	30	32	33	22

- The agencies concluded that all six DMMUs passed PSDDA non-dispersive disposal site guidelines for open-water disposal. The 24,000 cy of material is suitable for placement at the Elliott Bay open-water disposal site.
- This memorandum documents the suitability of proposed dredged maintenance material from the Duwamish Yacht Club for disposal at the Elliott Bay non-dispersive open-water disposal site. However, this suitability determination does not constitute final agency approval of the project. A dredging plan for this project must be completed as part of the final project approval process. A final decision will be made after full consideration of agency input, and after an alternatives analysis is done under Section 404(b)(1) of the Clean Water Act.

Concur:

5/28/99

Date

David R. Kendall  
David Kendall, Ph.D., Seattle District Corps of Engineers

5/20/99

Date

Justine Barton  
Justine Barton, Environmental Protection Agency

5/25/99

Date

Richard L. Vining  
Rick Vining, Washington Department of Ecology

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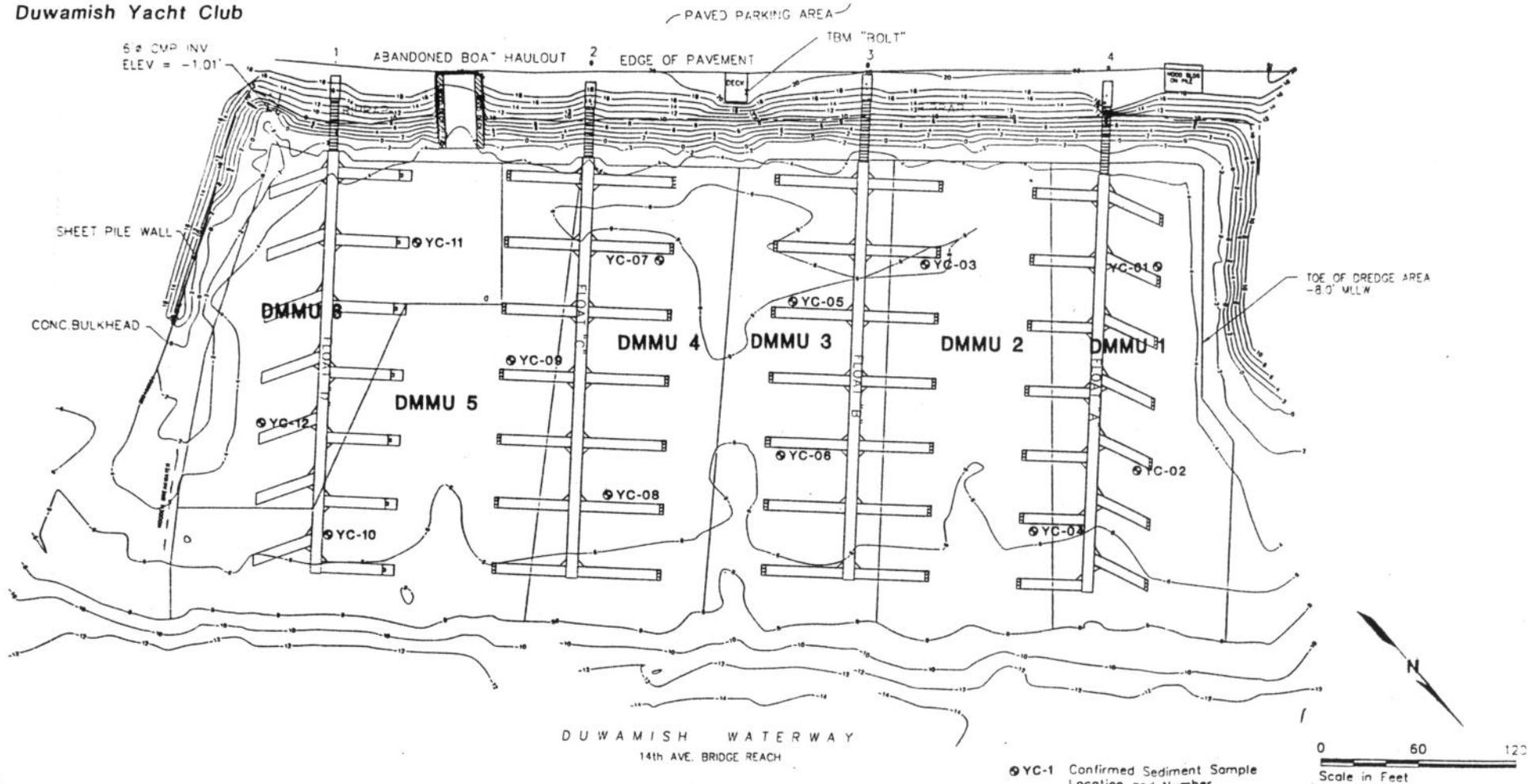
Date

Ted Benson  
Ted Benson, Washington Department of Natural Resources

**Copies Furnished:**

Corps Regulatory Branch Project Manager  
Justine Barton, EPA  
Rick Vining, Ecology  
Ted Benson, DNR  
DMMO File

**Confirmed Sample Location Plan  
Duwamish Yacht Club**



⊙YC-1 Confirmed Sediment Sample Location and Number

Note: Base map prepared from electronic file provided by Peratrovich, Nottingham, & Drago, Inc. dated 1998. Survey performed August 1998.

**HARTCROWSER**

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Figure 2

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