

MEMORANDUM FOR RECORD

**SUBJECT: DETERMINATION OF THE SUITABILITY OF DREDGED MATERIAL TESTED UNDER DMMP EVALUATION PROCEDURES FOR THE PORT OF EVERETT, 12<sup>TH</sup> STREET MARINA PROJECT FOR DISPOSAL AT THE PORT GARDNER OPEN WATER DISPOSAL SITE.**

1. The Port of Everett proposes to dredge approximately 294,470 cubic yards of material from the 12<sup>th</sup> Street Channel, with proposed construction of a 100-berth public marina. The following summary reflects the DMMP agencies (Corps of Engineers, Department of Ecology, Department of Natural Resources and the Environmental Protection Agency) consensus decision on the acceptability of the sampling plan and all relevant test data to make a determination of suitability for the disposal of the material at a PSDDA open-water disposal site.
2. The ranking for this project is low-moderate, based on a review of previous sampling data. The down-ranking is documented in a 20 June 2000 letter to the project applicant (Attachment 1).
3. A sampling and analysis plan was completed for this project and approved by the PSDDA agencies on 19 October 2000. Sampling for this project was performed from 6 November to 10 November 2000.

SAP approval date	19 October 2000
Sampling dates	6 –10 November 2000
Data Report submittal date	8 February 2001
Recency determination dates	6 November 2005 – 6 November 2007

4. Surface samples were taken from eleven locations within the project and composited for three analyses (CM-1, CM-2 and CM-3). Samples were taken from ten locations and composited for 5 subsurface analyses. The sampling and compositing scheme is detailed in Table 1. Dry compacted sand prevented sampler penetration at sample locations A-5, A-9, A-10 and A-11 into the –12 to –16 feet elevation. This affected the number of samples composited for subsurface DMMUs M-S5, M-S6 and M-S7 as well as the depth of characterization of the dredge prism. A z-sample was taken from the bottom of each core where full penetration did not occur. The z-sample

would be analyzed if there were exceedances of DMMP screening levels in the composite samples.

5. There were no exceedances of 2001 DMMP screening levels. All detection limits were below screening level. A single sample from each surface composite was analyzed for porewater Tributyltin. No TBT was detected, with all samples well below the detection limit.
6. The chemical analytical data were also compared to the State Sediment Management Standards. No chemicals exceeded SMS criteria. Based on this information, the DMMP agencies determined that the sediments from the 12<sup>th</sup> Street Marina are chemically suitable for use in beneficial use projects. Sediment conventional data is included in Table 2.
7. In summary, the DMMP-approved sampling and analysis plan was followed, with minor deviations approved by the DMMP agencies. Quality assurance and quality control guidelines specified by the DMMP were followed. The data gathered were deemed sufficient and acceptable for regulatory decision-making under the DMMP program. Based on the results of the chemical testing, the consensus determination of the DMMP agencies is that all 294,470 cubic yards from the 12<sup>th</sup> Street Marina site are suitable for open-water disposal.
8. This memorandum documents the suitability of proposed dredged sediments for disposal at a DMMP open water disposal site or for beneficial use. It 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 and public input, and after an alternatives analysis is done under section 404 (b) 1 of the Clean Water Act.

Port of Everett  
12<sup>th</sup> Street Marina

Concur:

3/14/00  
Date

Stephanie Stirling  
Stephanie Stirling  
Seattle District Corps of Engineers

4/2/01  
Date

Justine S. Barton  
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Environmental Protection Agency, Region 10

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**Table 1**  
**Sampling and Compositing Scheme**

Composite	Station Number	Core Section Designation
CM-1	A-1	A-1A
	A-4	A-4A
	A-5	A-5A
CM-2	A-6	A-6A
	A-7	A-7A
	A-8	A-8A
	A-9	A-9A
CM-3	A-11	A-11A
	A-12	A-12A
	A-13	A-13A
	A-14	A-14A
CM-S4	A-2R2	A-2B
		A-2C
		A-2D
		A-3B
CM-S5	A-3	A-3B
	A-5	A-5B
		A-5C
CM-S6	A-6	A-6B
		A-6C
		A-6D
	A-7	A-7B
		A-7C
		A-7D
	A-9	A-9B
	A-9C	
CM-S7	A-10	A-10B
		A-10C
	A-11	A-11B
CM-S8	A-13	A-11C
		A-13B
		A-13C
	A-14	A-13D
		A-14B
		A-14C
	A-14D	

**Table 2**  
**Sediment Conventional Parameters**

Parameter	CM-1	CM-2	CM-3	CM-S4	CM-S5	CM-S6	CM-S7	CM-S8
Total Solids (%)	71.9	72.6	67.6	73.9	76.6	73.2	73.2	73.1
Total Organic Carbon (%)	1.4	1.7	1.7	0.92	0.82	0.85	0.93	0.85
Bulk ammonia (mg/kg)	45	25	20	150	34	56	36	47
Total Sulfides (mg/kg)	71	19	16	5.6 U	12	6	3.6 U	640
Grain-size(%)								
Gravel	2.6	2.2	2.2	0.2	0.5	0.4	1.6	1.9
Sand	52.6	51.3	29.9	59.8	53.5	50.4	48.4	57.8
Silt	36.0	37.3	54.3	38.3	38.8	39.9	40.9	31.6
Clay	8.8	9.4	13.1	7.6	7.2	9.4	9.1	8.7