

12 April 2001

MEMORANDUM FOR RECORD

SUBJECT: DETERMINATION OF THE SUITABILITY OF DREDGED MATERIAL TESTED UNDER DMMP EVALUATION PROCEDURES FOR THE PORT OF ANACORTES DAKOTA CREEK DREDGING PROJECT WITH PROPOSED DISPOSAL AT THE ROSARIO STRAIT OPEN WATER DISPOSAL SITE.

1. The Port of Anacortes proposes to dredge in the vicinity of Dakota Creek, located on the northern shoreline of the City of Anacortes. The estimated volume of material proposed for dredging is 246,000 cubic yards. 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 area is "moderate" based on the guidance found in the PSDDA User's Manual (1998).
3. A sampling and analysis plan was completed for this project and approved by the DMMP agencies on 14 December 1998. Sampling for this project was performed on 25 April 2000.

SAP approval date	14 December 1998
Sampling date	25 April 2000
Data Report submittal date	June 2000
Recency determination dates	April 2005 to April 2007

4. Samples were taken from eight surface locations and composited for two analyses (D1-A and D2-A). Samples were also taken for analysis of subsurface sediments to confirm the presence of native sediments. Analysis was completed for all chemicals of concern. In addition, pore-water analysis for tributyltin was completed on both surface composites. Two subsurface samples were composited in area D1 (composite D1-B). In area D-2, the sampling device was unable to penetrate the native subsurface and insufficient material was available for analysis. Subsurface samples of native material from D1-B were archived, with testing dependent on the results of the surface samples, and the suitability of the surface material for open-water disposal.

5. There were no exceedances of 1998 DMMP screening levels for the standard list of chemicals of concern in DMMU D1-A. DMMU D2-A had exceedances of screening levels for seven HPAHs as well as for total HPAH. (Table 2 lists the screening level exceedances). TBT was detected in both samples, but well below the screening level. All detection limits were below screening level. The archived native sediment samples for D1-B were not analyzed, based on these results.
6. The Port of Anacortes chose to not pursue bioassay testing for the sediment represented by D2-A. Based on the chemistry data alone, the 16,000 cubic yards of sediment represented by this sample is not suitable for open water disposal. Native subsurface samples were not analyzed due to sampler refusal in the consolidated native sediment. Since chemistry data is not available for this material, a 1-2 foot buffer of native material must be removed with the overlying unsuitable material to assure that only suitable material is left exposed at the surface and only suitable material is placed at the open-water disposal site.
7. In summary, the DMMP-approved sampling and analysis plan was followed, and quality assurance, 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 approximately 230,000 cubic yards (16,000 surface, 214,000 native subsurface) from the Port of Anacortes Dakota Creek dredging project are suitable for open-water disposal at either a dispersive or nondispersive site. Approximately 16,000 cubic yards of material from Dakota Creek is not suitable for open-water disposal.
8. This memorandum documents the suitability of proposed dredged sediments for disposal at a PSDDA 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, including both vertical and horizontal buffers for the unsuitable material. 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.

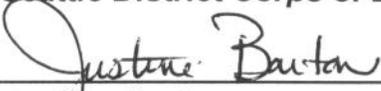
Port of Anacortes
Dakota Creek

Concur:

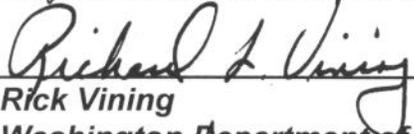
5/1/01
Date


Stephanie Stirling
Seattle District Corps of Engineers

5-17-01
Date


Justine Barton
Environmental Protection Agency, Region 10

5/22/01
Date


Rick Vining
Washington Department of Ecology

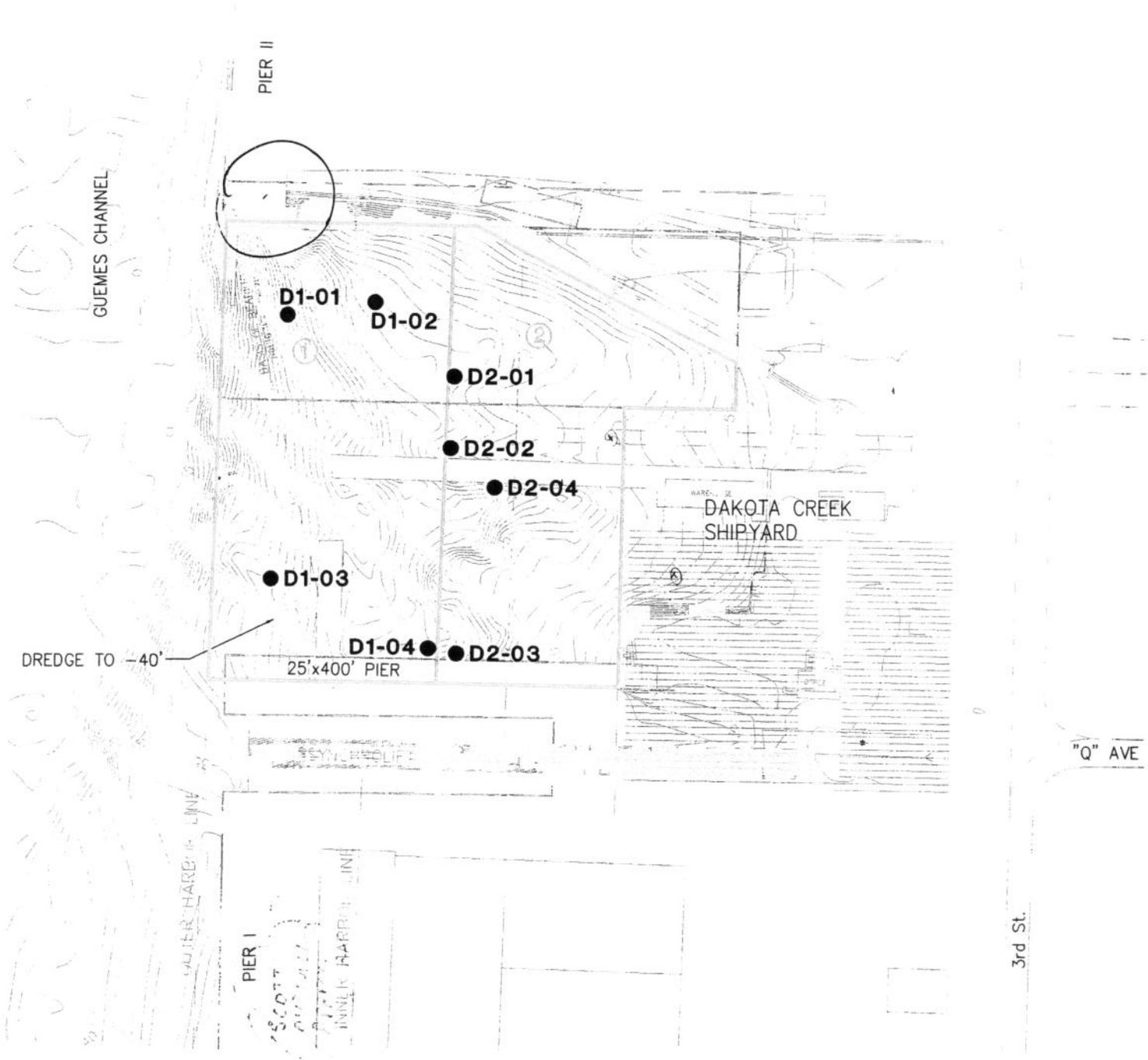
5/18/01
Date


Robert Brenner
WA Department of Natural Resources

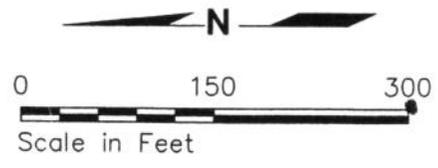
Copies Furnished:

- EPA/Justine Barton
- DOE/Rick Vining
- DNR/Robert Brenner
- CENWS/OD-RG/Olivia Romano

Confirmed Sampling Location Plan Dakota Creek



- DMMU Boundary
- DMMU Designation
- D1-01** Confirmed Sample Location and Number



Note: Base map prepared from electronic file provided by Peratrovich, Nottingham & Drage, Inc., entitled "Shipyard Reconfiguration Surface DMMU's", dated September 1995.

bits 8/3/00 1=1 color.pc2 71540001

Table 1. Sediment Conventional Parameters

Parameter	DMMU D1-A	DMMU D2-A
Total Solids (%)	58.3	56.7
Total Organic Carbon (%)	2.74	1.8
Bulk Ammonia (mg/kg)	30.9	34.2
Total Sulfides (mg/kg)	1140	554
Grain-size		
gravel	11	1
sand	56	48
silt	25	36
clay	8	15

Table 2. Screening Level Exceedances

Analyte (in $\mu\text{g}/\text{kg}$)	DMMP Screening Level (in $\mu\text{g}/\text{kg}$)	DMMU D2-A
Benzo(a)anthracene	1300	3000
Benzo(a)pyrene	1600	2400
Total Benzofluoranthenes	3200	3300
Benzo(g,h,i)perylene	1400	3100
Fluoranthene	1700	5200
Indeno(1,2,3-cd)pyrene	600	1200
Pyrene	2600	6400
Total HPAHs	12000	25270