

MEMORANDUM FOR FILE

SUBJECT: PORT OF SEATTLE TERMINAL 18 PORT-DREDGE MONITORING AND ANTI-DEGRADATION DETERMINATION

The DMMP agencies have reviewed the data submitted by the Port of Seattle in the "Terminal 18 Post-Dredge Monitoring Results." Based on our review of this data, we find that three of the four samples do not meet the DMMP antidegradation guidelines for sediment exposed by dredging, and must have some corrective action taken.

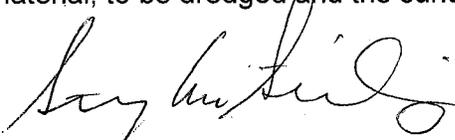
Both bulk and estimated pore-water TBT in sample #133 (610 ug/kg; 1.53 ug/L) exceed TBT in the pre-dredge surface (1.2 mg/L measured or approx. 321 ug/kg). While estimated pore-water TBT concentrations in post-dredge samples #202 (0.55 ug/L) and #132 (0.83 ug/L) do not exceed that in the pre-dredge porewater, they exceed the pore-water bioaccumulation trigger for TBT by more than a factor of 3 (see Table 1).

In a 2008 clarification paper, the DMMP agencies addressed the issue of post-dredge sediment surfaces having lower chemical concentrations than the surface lift but which exceed one or more SLs, BTs or SQSs. In such cases, the DMMP agencies use the results of toxicity or bioaccumulation testing to determine whether or not the exposed surface will have less toxicity or bioaccumulation potential than the surface lift of dredged material. The Port has the option of completing bioaccumulation testing for these 3 locations at T-18. In the absence of pre- and post-dredge bioaccumulation information, the exposed surface is assumed to not meet this guideline.

DMMP guidelines require the applicant to either cap or overdredge the new sediment surface. The Port has problems complying with this requirement at Terminal 18, since much of the wharf face is underlain with rip-rap, and this rip-rap supports the stability of the pier. It is not clear if the samples taken are representative of the area, or represent pockets of sediment interlaced within the rip-rap.

The agencies agree that additional information is needed to assess sources in the area and provide information to determine longer term remedies under the CERCLA program. The Port has agreed to additional sampling as part of the RI/FS process to better understand the T-18 subsurface sediment issues.

The agencies agree that the gathering of additional information for the CERCLA process is the most effective approach for dealing with the DMMP anti-degradation issue at Terminal 18. Any future dredging projects at Terminal 18 must go through the DMMP process to evaluate the material; to be dredged and the surface to be exposed by dredging.



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DMMP Project Manager

Table 1.

Sample #	TOC	TBT dw	as Sn dw	ugSn/L	ugTBT/L
133	1.6	610	250	0.63	1.53
207	1.5	7.6	3	0.01	0.02
132	1.4	290	119	0.34	0.83
202	1.3	180	74	0.23	0.55
Pre-Dredge Surface		321			1.2
Screening Level	2	73	30	0.06	0.15
Bioaccumulation Trigger			219		0.15