

# Foth & Van Dyke Technical Memorandum

November 1, 2005

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FR: Steve Laszewski, Foth & Van Dyke

RE: Proposal for Sub-area A and Sub-area C/D2S Dredge Prism Refinement

This memorandum outlines a proposal to remove portions of Sub-area A and of Sub-area C/D2S from the current dredge prisms. The portion of interest for Sub-area A is referred to as the Northern Region and is shown on Figure 1. For Sub-area C/D2S two portions are proposed for removal, namely the Southern Region of D2S and a Northern Region of C, with both regions shown on Figure 2.

Similar to the East-central portion of Sub-area A these regions are characterized as having PCB concentrations at or less than 2.0 ppm PCBs, high in-situ percent solids (indicating sand/gravel material) with current planned dredge cuts need to reach elevation of only 0.5 feet or less.

Specific characteristics of the regions, with the associated Pre-Design sample location from within that region, include:

<b>Region and Sample ID</b>	<b>PCB Concentration</b>	<b>Region Area</b>	<b>In-Situ Percent Solids</b>
Sub-area A: Northern Region (A-36)	2.0 ppm	59,400 sq.ft.	66%
Sub-area C: Northern Region (C-16)	1.2 ppm	39,800 sq.ft.	79%
Sub-area D2S: Southern Region (D2-19)	1.1 ppm	69,887 sq.ft.	76%

Given the considerable effort demonstrated this year to remove this type of material and the relatively low PCB mass contained in a location where a thin layer of sediment rests upon sand and gravel, it appears reasonable to remove these regions from the dredge prisms. A reduction in the dredging effort required over this combined 170,000 sq. ft. is significant to the project schedule, given the daily target dredge rate of approximately 30,000 square feet per day.

A summary of the PCB mass contained in these regions includes:

<b>Location of Interest</b>	<b>PCB Mass in 1 ppm Isopach</b>
Sub-area A Total	281 kg
Northern Region	0.5 kg
Sub-area C Total	34 kg
Northern Region	0.5 kg
Sub-area D2S Total	4 kg
Southern Region	0.7 kg

As can be seen, the influence or percentage of the estimated PCB mass from the respective regions is small when compared to the total mass in a sub-area or to the total PCB mass in OU1.

Removal of these three Regions from the dredge prisms would reduce the overall amount of planned material to be dredged, dewatered and disposed and would thus have a positive affect on the project schedule.