

EPA Region 1 Comments:
Sampling and Analysis Plan For South Terminal CDF and Associated Dredge Footprint
Apex Companies, November 2010

Global Comments:

1. The tables shown throughout the plan that describe sampling purpose, method, etc., are incomplete and, at times, confusing. It would help us greatly to have one table for all sampling matrices (e.g., sediment, water column, ground water, soil, etc.) that lists sampling purpose(s); analytical method(s) with laboratory reporting limits; number of samples/location; and analyses to be performed (e.g. PCBs, SVOCs). In addition, it is important to ensure, to the extent possible, the use of analytical methods that have reporting limits below the level of criteria.

2. For all sediment samples taken, you should ensure that sufficient quantities are obtained so that the laboratory can retain a portion of the sample in the event that initial results require more directed analyses for certain constituents. For example, if the metal analytical results are elevated, analysis of TCLP metals may be warranted.

3. The characterization of upland conditions (surface, soil, ground water) at the South Terminal site are relevant to addressing storm water management during construction, which is captured under section 402 of the Clean Water Act. The plan should include references to section 402 and construction storm water management in all appropriate sections.

4. This plan should only address sampling and analysis to characterize conditions at the site pre- and during construction. We will not approve any long term monitoring at this time and will address that issue in our final decision document.

5. In a few sections the phrase "USEPA approved laboratory" is used. EPA does not approve laboratories. We sometimes disapprove (debar) laboratories.

Specific Comments:

Page 5

- bullet 1. Add RCRA as a relevant program.
- bullet 3. Explain specifically the rationale for how the locations of the seven sediment borings and eleven test pits were, or are, to be determined.

Page 6

- bullet 1. (for the proposed dredge footprint) Add RCRA as a relevant program.
- bullet 2. (for air monitoring during the project) Delete "401/404". They are not relevant
- Sampling Table
 - **Add a row to reflect water column sampling**
 - Rows 3, 4, 5, 6: Add "VOCs, if necessary" to the Analyses column
 - Row 9: Add RCRA as a relevant program

- Row 10: Delete "401/404" (irrelevant)
Number of locations listed is 4, however Figure 3 appears to indicate only 3 locations; please clarify
Add "particulates" (i.e., PM-10) to Analyses column

Page 6 - 7

- As indicated in the SAP, the grid sizes for the sub-tidal, inter-tidal and dredge areas were increased from a 100x100-foot grid size. The only justification provided appeared to be based on a volume basis, which is not relevant for the purposes of characterization sampling. Based on the PCB data that EPA has from other projects, EPA is not opposed to the proposed increased grid size. However, please identify substructures (e.g., current or past outfalls, drainage pipes), if any, in the area to be dredged that would direct where sediment samples should be taken.

Page 9

- Section 3.2: Provide a figure/site plan that clearly identifies the lot lines of each separate parcel and its owner on the proposed South Terminal site, and describe the current use of the 2.9 acre developed site owned by the Shuster Corporation..

Page 10

- Section 3.2: The SAP indicates that 7 test borings will be installed and 11 test pits will be excavated to evaluate site conditions. Based on the size of the site, it is not apparent that these data will be sufficient to adequately characterize site conditions. Thus, please provide the environmental assessment (EA) for the Shuster vacant lot as well as any other existing information containing sampling data/results for the entire South Terminal site.

Page 13

- Section 4.1.5, top of page: Delete the sentence reading, "The purpose of constructing the proposed facility" The sentence conflicts with past discussions, existing information, and is unnecessary here.

Page 13

- Under "Water Sampling": Explain specifically how water column samples will be taken so that they "provide a representative sample of conditions at the site." At what depths/intervals will water column samples be obtained? Please explain the basis/rationale for the selected sampling locations for the water column samples.

Page 16

- Section 4.3.4.1 Chemical Analysis: The term "elutriate tests" is used here. In Drawing number P-1, the term "water column elutriate testing" is used. Please clarify what is meant. Water column sampling and elutriate testing are not synonymous.

Page 17

- Section 4.4.1 Geophysical Investigation: The approach to performing hazard screening and targeting borings and test pits is too narrow. The suggested approach could miss potential hazardous materials (e.g., asbestos, especially since it has already been found). See the

comments for Page 5, bullet 3, and Page 10 regarding the EA for the Shuster vacant lot and all other existing information with sampling data for the entire South Terminal site. A more comprehensive approach to directing borings and test pit locations is needed.

Page 18

- Section 4.4.1, last paragraph – Specifically, what procedure(s) will be used to determine if ACM is present? Visual observation is not an approved (or sufficient) method. A laboratory method is normally required.

Pages 18 and 19

- Explain specifically the rationale for how the locations of the seven ground water monitoring wells, test pits, and test borings were, or are, to be determined. Historical aerial photos and site history should be used to aid in selection of sampling locations.

Page 20

- Section 4.4.4 Sampling QC, last paragraph/sentence: Explain why "different analytical methods" might be used as part of QC for sample duplicates. We understand using a different lab, but not different analytical methods.

Page 21

- Section 4.4.5.1.1 Soil: It is indicated that a minimum of one soil sample will be selected from each boring and test pit. Please explain the rationale (e.g., elevated PID readings, visual and olfactory observations; at what depth and why).for how the samples will be selected for further analysis Please explain the sampling rationale in the event there are no drivers to differentiate one interval from another for further analysis.

Page 22

- Section 4.5 Ambient Air Monitoring: To be determined, per your 11/9/10 voice mail message to me regarding proposed revisions to the air monitoring protocol.

Page 24

- Section 5.0 Hydraulic Conductivity: The estimate of existing hydraulic conductivity within the site boundary should include that from the inter- and sub-tidal areas in addition to that generated from the proposed upland ground water monitoring wells. This could be an important component of the modeling of PCB flux from the proposed facility due to expected greater tidal pumping near the perimeter bulkhead than from further upland within the terminal.