

**CONTAMINATED SEDIMENTS TASK FORCE
AQUATIC SUBCOMMITTEE MEETING NOTES
DECEMBER 18, 2001**

Meeting attendees: In attendance were Jim Fields, Steve Cappellino, Ying Poon, Kathy Anderson, Russ Boudreau, Jack Caldwell, Laurent Luccioni, Jack Gregg, Michael Lyons, Jessica Morton, Steven Bay, Kathryn Curtis, David Moore, and Tom Wang.

Aquatic Capping Update: Jim Fields provided an update on the status of field operations. The capping phase of the project was initiated on Monday, 12/17/01, and was proceeding smoothly. As of the time of the meeting, approximately 4 barge loads of cap material had been placed in the NEIBP. The initial phase requires that a one-foot layer be placed over the southern half of the site using bottom dump barges. The initial plan was to crack the barges and push them side-ways to release the material. This method, however, did not work well because there was not enough turbulence from the waves to break up the material and keep it flowing from the barge. Therefore, Manson decided to push the barges from the back with the doors opened slightly so that the material could flow out more evenly. Using this process the barges took about an hour to dump completely. After half the pit is covered using this process, the second half will be placed by re-handling the material using the dredge. The current schedule is for the initial phase (one foot layer) to last through this week. Manson will then break on the 22nd for the holidays and resume capping on the 2nd of January. The entire process is expected to take about 2-3 weeks to complete.

Cement Stabilization Bench Scale Study: Russ Boudreau provided an update on the status of the bench scale tests. The data for the pre-test leaching results are back as are the physical results for the entire study. The leaching data for the post treatment samples have just been received and have not yet been processed. Raw (untreated) samples had fairly high chemistry concentrations. Pre-test leaching results showed non-detected values for all samples except some butylitns, metals (arsenic) and a few PAHs (for Consolidated Slip only). Jack Gregg asked Russ how low the detection limits were for the tests and stated that they might not have been low enough for uses other than landfill disposal. Tom Wang stated that since landfill disposal was the primary goal, that dictated the type of leaching tests that should be conducted and hence the associated detection limits. All agreed to look at the issue more closely after the data is all processed.

The results of the physical tests on the treated material showed the following:

<i>Location</i>	<i>% Sand</i>	<i>Min UCS¹ (psf)</i>	<i>Max UCS¹ (psf)</i>	<i>% Increase from Untreated</i>	<i>Permeability Reduction from Untreated (by factor of)</i>	<i>Set Time (Hr)</i>
Marina del Rey	97.5	1,916	2,870	-- ³	10	4~10
LARE	92.8	1,105	13,900	-- ³	4000	5~24
POLA Con. Slip	28.3	7,600	11,040	19-74%	30	5~>24
POLB Channel 2	40.2	5,230	10,720	49% ²	-- ⁴	3~15

1 On 28-day cured material

2 Maximum

3 No data

4 To verify data

The draft report should be available towards the end of January.

Cement Stabilization Field Pilot Study: Ying Poon stated that there was not much new to report for the field study as they are still waiting for the laboratory data to arrive. He expects that the data will be received shortly and plans to present a summary at the January 8th workshop.

Sediment Washing/Blending Studies: Steve Cappellino reported that the sediment washing study was now complete and that WES is waiting for the laboratory data to arrive. They plan to have a summary of the results available for the January 8th workshop. The sediment blending study is still progressing. One of the key items needed for that study is the sediment database being prepared by EVS for the sediment subcommittee. A beta version of the database will be released next week that will allow us to prepare a summary of the regional sediment data for samples that failed open water disposal criteria and may be suitable for blending procedures. A summary of the available work completed thus far will be presented at the January 8th workshop.

NEIBP Sediment Losses: Last month, the Corps reported that the SPI camera showed material located outside of the target disposal pit based on the post-disposal sampling. Samples were collected to help determine the source of the material and the Corps would like to report their findings. Steve Cappellino started the discussion by recounting the chronology of events that occurred related to this subject:

Initial SPI samples collected - ~July 1, 2001

Disposal of material in pit – August 2-25, 2001

Post-disposal SPI sampling – Sept 19-20, 2001

Cleanup dredging (single missed dump on edge of pit) – Sept 24, 2001

Prelim. SPI results – Nov 9, 2001

Additional field sampling – Nov 19, 2001

Prelim. chemistry results – Dec 12, 2001

The observations made by Germano on the SPI photos could not be visually verified in the field so samples were collected to try and identify the source of the material. Since the Corps has coordinates for all the disposal events they know that none of them were in the area of the observed material i.e. outside the disposal pit. Evaluation of the water quality data did not indicate a resuspension event large enough to move the material to the locations identified with the SPI camera. Therefore, one possibility was that this material was caused by a mud wave during the initial dumps for the project and that it was actually existing material from the bottom of the pit and not LARE material. Daily survey data from Manson shows cratering effects from the initial dumps at the site prior to them pushing the barges during disposal.

The new samples collected in the field were analyzed for grain size and PAHs, two distinguishing parameters in the material. Results from these analyses, presented by Ying Poon and David Moore, showed the material that was outside the disposal cell was all contained within the larger NEIBP depression and that the physical and chemical characteristics of the material matched the existing material and not the LARE material. The only area that matched the LARE material was on one of the edges of the pit where

Manson had a drop that was too close to the edge. They subsequently went back into the field and re-handled this material back into the pit. What was detected in the sampling was probably just residual material on the surface.

Steve Bay suggested that we go back and collect core samples in this area to verify that what is left is just on the surface. After some discussion the group decided to try and use a box corer during the post cap sampling to collect depth discreet samples from this area. No other significant comments were received.

Jim Fields mentioned that as far as the Corps is concerned, the issue has been fully characterized and they do not plan to do any further analysis. No evidence was collected to show that this material came from the LARE and since it is all contained within the larger NEIBP it should not be a concern. It will be documented, however, in the final report so that similar events in the future could be conducted without displacing the material.

Market Potential for Treated Sediments: Jack Caldwell and Laurent Luccioni of GeoSyntec gave a presentation on their proposed approach for conducting the marketing assessment for treated sediments. The three tasks for the study include sediment characterization (properties of source material), public perceptions (risk issues), and preparing a marketing plan. The first two tasks should be completed in February and the third task completed in March. A draft report should be available by the end of April. Some data needs that were identified include: a summary of forecast dredging activities for the next 5-10 years, a summary of port construction activities for the next 5-10 years, and copies of any previous marketing studies.

Next Meeting: The next meeting for the aquatic subcommittee was scheduled for January 22nd from 1-3 at the Water Board offices. There will be a CSTF watershed group meeting from 10-12 on that same day.

NOTE: One item that was on the agenda but not discussed was the presentation of the draft outline for the January 8th data review workshop. By the time the meeting ended, most people had already left so it was decided to attach the agenda to these notes and request input from the group. Please send your comments to Steve Cappellino via email (scappellino@anchorenv.com) no later than January 3rd.

**January 8, 2002 CSTF Workshop
11th floor Conference Room
Corps District office
Draft Outline**

1. Evaluation Report Outline
2. Overview of Pilot Studies
 - a. Objectives and scope
3. Cement Stabilization Study (Bench Scale and Field Pilot)
 - a. Summary of Test Design
 - b. Pre-Test Physical and Chemical (Leach Test) Characteristics
 - c. Post-Additive Physical and Chemical (Leach Test) Characteristics
4. Sediment Washing Study
 - a. Summary of Test Design
 - b. Pre-Test Leaching Results
 - c. Post-Wash Leaching Results
5. Sediment Blending Study
 - a. Review of sediment characteristics for typical source material
 - b. Review of sediment blending options/additives
 - c. Review of feasibility evaluation to date
6. Aquatic Capping
 - a. Evaluation Methodology (models, compare predict vs. actual)
 - b. Production Summary
 - c. Water Quality Summary (Dredging and Disposal)
 - i. Chemistry
 - ii. % Light Transmission
 - iii. Water Column Partitioning
 - d. SPI Results
 - e. Sediment Tracer Results