CSTF AQUATIC SUBCOMMITTEE MEETING NOTES 10/21/03, POLA, 9:00 – 12:00

<u>Attendees</u>: Jim Fields, Steve Cappellino, Ying Poon, Steve Bay, Nick Buhbe, Josh Burnam, Kathy Anderson, Scott Johnson, Rich Gossett, Michael Lyons, Kathryn Curtis, Tom Johnson, Tom Wang

Year 2 CAD Site Monitoring Data:

Steve Bay and Scott Johnson led a discussion and presentation of the preliminary results for the 2nd year of CAD site monitoring. The following is a summary of their findings.

- Bathymetry had a resolution of about 0.1 meter; showed one small area that had a depression of about 1 meter that was not detected in 2002 (may have been caused by a boat anchor as the area is a known mooring area); and no erosional areas were detected.
- Burrow mound density was 1 burrow/ sq. meter for the NEIBP (2.3 in 2002) and 1.3 burrow/sq. meter for the SEIBP (not monitored in 2002); burrow openings were between 2-7 cm at both sites.
- Core samples were collected from 9 stations (same as previous investigations) and sub-sampled at the surface, LARE interface and just above the interface. One station had all intervals analyzed. All showed similar results as 2002 (surface and middle had low concentrations and LARE had high concentrations). No evidence of chemical migration observed.
- Burrow mound chemistry matches flocculent material on the CAD surface, and is lower in concentration than LARE.
- Benthos results not yet available.

Overall conclusions for the 2nd set of data are:

- The depth and thickness of the cap has been maintained;
- Visual observations and bathymetry indicate the cap is intact;
- The cap has been successful in limiting chemical migration;
- Concentrations in the cap and LARE material are similar to 2002 results;
- Burrow mound chemistry samples were similar to 2002 with elevated metals but low concentrations of PAHs;

• Deposition of flocculent material on the surface of the CAD appears to be the source of metals to the surface subsections of the cores and not from the LARE.

Year 3 CAD Site Monitoring Plan:

Jim Fields led a discussion about the plans for the 3rd year of monitoring at the CAD site. The Corps will take the lead for the 3rd year effort. The Corps still needs to finalize the funding for the project but wanted to start the discussions with the CSTF so that they can make sure the funds are set aside. The goal at this meeting was to discuss the minimum effort needed to answer the pilot study questions regarding CAD site success or failure and to identify other items that could be included to assist other portions of the Strategy Report and/or DMMP. To reach that end, all concluded that the minimum effort needed was collection of the core samples at the same 9 stations and chemical (metals and PAHs) and physical (grain size) analyses to confirm that chemical isolation was occurring. Bathymetry (multi-beam) was also needed to ensure physical integrity of the cap. Benthos sampling, while not critical to meet the objectives, would provide useful data for determining project impacts to existing conditions. We may or may not have enough data from years 1 and 2 to answer that question. Steve Bay suggested going back and looking at the comments provided by Joe Germano a few years ago to see if there was anything useful that could be added.

Options for additional items discussed by the group for consideration included:

- Investigate source and depth of large burrows in the cap surface
 - o Remote operated camera left at the burrow opening
 - Vacuum pump to suck up organisms
 - Burrow castings

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- Identify source of flocculent material on surface of CAP
 - Use sediment traps in LARE and cap surface
 - o PAH fingerprinting of flocculent material
 - Place a tracer in the LARE and San Gabriel River and then look in NEIBP
- Use sub-bottom profiling to map original build depths of pits and thickness of flocculent material for refining consolidation estimates
- Examine surface mixing using radioisotope analyses (Be⁷)

• Evaluate the incidence of gas releases from the LARE material and possible effects on cap surface integrity (possible cause of some of the depressions).

SCCWRP Update on TSS/Transmissivity Correlations:

Steve Bay reported that no new work had been completed since the last meeting because they have not received any new data yet. Steve stated that SCCWRP is still committed to re-analyzing the data once additional results are available. POLB is expected to sponsor some data collection efforts (see next topic).

POLB Data Collections:

Tom Johnson and Nick Buhbe led a discussion on the status of two new sampling efforts that the POLB is about to begin which will provide useful data to the CSTF to support the SCCWRP work on TSS correlations and the resuspension evaluation completed by Anchor. Two projects are planned: dredge monitoring for the Pier T wharf expansion and sediment characterization for the back channel dredging effort. The Pier T work will be conducted by MBC and the back channel work by AMEC.

Pier T – MBC will collect additional water quality data around the dredge to provide TSS/transmissivity data points. They will also collect a sample of the turbid water from near the dredge for AMEC to conduct bivalve embryo tests on the elutriate sample as a direct measure of toxicity. If possible, 2 samples will be targeted for the <20% and 2 for the 20%-70% transmissivity range with 2 events sampled. For each sample, TSS, toxicity and chemistry will occur. Metals will be analyzed for both samples; organics for one of the two samples. Back Channel – AMEC will collect sediments and prepare an elutriate sample in the lab at a 1:4 ratio. They will then use the elutriate sample in bivalve larval bioassays over a period of 48 hours as another evaluation of direct toxicity from resuspension.

Exact details for both studies are still in development with AMEC, SCCWRP and the POLB.

Next Meeting: Scheduled for 11/18/03 from 9-12 at the POLA.