Los Angeles Contaminated Sediments Task Force
Sediments Thresholds Subcommittee July 18, 2001

Attendees: Michael Lyons (RWQCB), Cynthia Erickson (URS), Kathy Anderson (USACE), Steve Bay (SCCWRP), Paul Johansen (POLA), Steve Cappellino (Anchor), Guangyu Wu (SMBRP), Leo Rubele (Hart Crowser), Nick Bubhe (AMEC), Barry Synder (AMEC), Tom Johnson, (POLB), Rick Cameron (POLB), Omer Kedaster (Kleinfelder), Steven John (EPA)

Agenda:

(1) Progress report of database project (Bay/SCWRRP):

EVS (CSTF database contractor) reports that entry of priority data (including some Marina del Rey data) is going well and on schedule to be completed by the end of July. As many lower priority studies as possible will be added at this time, with the remainder entered at a later date. Integration of electronic data is on track (the Bight '98 and Western EMAP are incomplete and have not been provided to EVS yet; Bight '98 should be available for integration into the CSTF database soon). EVS is extracting southern California data from the National Sediment Inventory database, eliminating duplicate records. SCWWRP is attempting to address metadata gaps for the NSI so it can be included in the CSTF database.

Issues needing to be addressed (future date): documenting the database (technical document describing the database, data format requirements); tools to facilitate future data entry (to supplement blank formats and template); recommendations from EVS on database long term maintenance. Additional topic for future discussion/consideration: release of the database (likely to go only to CSTF with some documentation while reserving wider distribution (internet) until database has been validated completely).

(2) Initial uses of the sediment quality database (Bay/SCWRRP):

CSTF Aquatic subcommittee seeks information on grainsize range for typical dredged materials from the Los Angeles region to calibrate the pilot project work. Database will be employed in the next phase of work for the Sediments Thresholds subcommittee in attempting to develop sediment quality values. The site designation work for the LA3 ocean disposal site is interested in accessing the CSTF database for background information on contamination, distribution, dredging history, etc. Database might be useful in the calculation of TMDLs in the Los Angeles region.

(3) Development of Sediment Quality Values project (Bay/SCWRRP): Handout provided.

Goal -- provide guidance for use of SQVs for evaluation of sediment for disposal; assess how well existing SQVs fit southern California sediments; identify/develop the most appropriate SQVs for southern California; develop guidance for SQV use to identify sediments with "low probability" or "high probability" of adverse effects.

Project components – 1: review candidate SQVs; 2: document reliability and sensitivity of SQVs for southern California; 3: calculate regional SQVs; 4: develop "new & improved" regional SQVs; 5: optional laboratory studies to support/verify results.

Phase 1 – review SQVs. Summarize and compare national and regional SQVs already in use (benthic screening levels concentration (SLC); NOAA ERM/L; Puget Sound AET; Equilibrium partitioning criteria (EqP); Florida PEL/TEL; consensus effects PEC/TEC. Recommend subset for evaluation.

Phase 2 – reliability and sensitivity. CSTF sediment database used to evaluate ability of the candidate SQVs to predict the occurrence of sediment toxicity and benthic community degradation, while determining the frequency of false negatives and positives.

Phase 3 – Regional SQVs. Regional versions of existing SQVs (e.g., ERM, AETs) calculated with original algorithms using CSTF sediment database, evaluate sensitivity and reliability, compare to original SQVs and determine whether there is a significant improvement for regional conditions.

Phase 4 – New and improved SQVs. Apply new/alternate approaches to CSTF database, obtain best performers for CSTF objectives.

The Scientific Advisory Group provided Steve with a number of comments on the CSTF SQV project (e.g., clear statement of CSTF objectives; identify anticipated use/application of the SQVs; level of confidence required) and specific recommendations (e.g., use a composite SQV for the evaluation in Phase 2; evaluation of the performance of the SQVs should use a quotient based approach instead of values for individual chemicals; regional versions of SQVs should use the original equations used to derive the ERM, PEL, AET, CLS, EqP guidance values; recommend logistic regression, floating percentile, tissue residue, NSI approach for bioaccumulative chemicals).

Next meeting of the CSTF Sediments Threshold Subcommittee: August 7, 10am-12noon, at the Port of Los Angeles Conference Center.