

Contaminant Fate Workgroup Meeting (2005)

Meetings and Milestones:

The most recent CFWG meeting was held on April 15, 2005. CFWG has added Dr. Keith Stolzen Bach of UCLA to the workgroup.

Topics of discussion included the following.

- The PCB Multi-box Model
 - John Oram delivered a presentation of version 1.0 (documented in a February 2005 technical report) and 2.0 beta of the Multi-box model. The latter incorporates recent USGS modifications to their sediment modeling routines which prevent some modeling artifacts resulting in unrealistic sedimentation or erosion in some modeled boxes. Workgroup members suggested areas of improvement for the model, including more regionally specific PCB loading and emissions history, congener specific tracking of degradation, calculations of *in situ* Koc values. Methods to examine model parameters and results were also suggested (PCB loading history and attenuation from deposition in borrow pits, comparing multibox results to the 1-box model using comparable inputs). Work examining these proposed changes to the model continues. Bill Mills of Tetra Tech presented their workplan for stochastic uncertainty testing of the Multi-box v2.0b, to determine which combination of parameters most influence the model results.
- The Food Web Model for the CEP
 - Dr. Frank Gobas of Simon Fraser Univ. presented work on the Food Web Model for CEP. The model is a fugacity based approach to estimating biota sediment accumulation factors (BSAFs) using San Francisco Bay parameters. The model uses published chemical properties to derive locale specific BSAFs. A project for state sediment quality objectives deriving empirical BSAFs may provide data to compare methods. A report to the CEP on the Food Web Model is being written and will be made available to CFWG members and other interested parties.
- A Draft Plan for Core Sampling and Analysis.
 - Donald Yee presented a draft sediment core sampling plan highlighting different approaches and decision points affecting the suitability of data obtained for particular purposes. Although the number of samples that could be collected and analyzed in the near term given current resources would be limited, the workgroup indicated the desirability of planning for supplementing the short term work with the possibility of longer term efforts. A hybrid approach was suggested, with more deterministic

sampling to address particular questions (e.g. loading history and attenuation) combined with (stratified) random sampling toward building a longer term statistically representative sampling of the bay. The work plan is currently under revision to incorporate these suggested changes. The work plan will be sent to CEP this summer for comment. It is anticipated that the sampling will occur late Summer/Fall.

Next meeting is scheduled for Fall 2005.