Emerging ContaminantWorkgroup Meeting

Goals and Objectives

April 17th, 2009



Goals for the Day

- Review and rank pilot studies for 2010
 - Need a recommendation for TRC/SC meeting in July/August
- Review and approve chemicals and outline for white paper



Emerging ContaminantPriority Question

 What emerging contaminants have the greatest potential to adversely impact beneficial uses in the Bay?



CECs from Five-year Plan

Priority	Compound	Widely Used	Bioaccu- mulative	Persist	Toxic	Methods Available	Concern for Bay	Panel Recom	Comments
1	Brominated flame retardants (PBDEs and alternatives)	•	•	•	•	•	•	•	Wide class of compounds. Restricted use of PBDEs and some evidence of declining trends. Alternative brominated flame retardants appear to be on the increase. Methods may not be available for all alternatives.
2	Perfluorinated compounds	•	•	•	•	•	•	•	Wide class of compounds. Restricted use of PFOS/PFOA in US and Canada (Toxic substance). Some evidence of declines of PFOS in northern latitude; however, the impact of the use of alternative perfluorinated compounds needs to be determined. Listed by Environment Canada as CEPA-Toxic; USEPA has listed PFOA on the draft Contaminant Candidate list released in February 2008 for potential chemicals to regulate under Safe Drinking Water Act.
3	Pharmaceuticals/ Personal care products	•	0	0	0	0	0		Wide class of compounds. Preliminary pilot study results suggest that these compounds may be of less of a concern. Should focus on those compounds which are highly toxic such as carbamazepine, diclofenac, indomethacine, sulfamethoxazole or have been shown to have a documented environmental effect.
4	Alkylphenol ethoxylates	•		•		•			Preliminary SF Bay data in the Bay suggests concentration of nonylphenol is several orders of magnitude below the ambient water quality criterion. Areas near the outfalls may have higher concentrations.
5	Chlorinated paraffins	•	•	•	•	•	•		Produced since the 1930s for use as additives in lubricants and cutting fluids, as well as flame retardants in plastics and sealants. Preliminary work on sport fish, cormorant eggs, and harbor seal blubber showed very low concentrations

CECs from Five-year Plan

6	Chlorinated napthalenes	•	•	•	•	•	•	Dioxin-like toxicity. Byproducts in PCB mixtures and with several other applications. Correlate with PCB concentrations in Great Lakes fish. Commercial production ceased in 1980. Recommendation from Region 2 not to monitor because the PCB TMDL will address chlorinated naphalenes.
7	Siloxanes	•	•	•	•	0		Few analytical methods available. Listed on the Canadian Domestic Substance List (Batch 2) priority.
8	Pesticides	•						May be better addressed through Causes of Toxicity element of S&T. Based on EC panel recommendation, pyrethroids have been included in S&T sediment sampling.
	Fipronil							
	Brominated Dioxins							
	Pentachloro- phenol							
	Broad scan of SF Bay biota							