CHANGE SHEET #1
Proposed Amendments to the Water Quality Control Plan
for Enclosed Bays and Estuaries
Part 1: Sediment Quality

- Please note that, in response to comments received, the following changes are being made to the proposed amendments that were circulated for public review on January 28, 2011.
- The changes being made are not substantive, and are a logical outgrowth from the original proposed amendments as well as the comments received.
- Deletions are displayed in ~~double strikeout~~, and additions are displayed in double underline.
- With respect to Equation #2, Table 6, and Attachment A, all changes reflected in this Change Sheet are being made such that the status quo (existing Part 1) remains. These amendments are being pulled from consideration and will be re-proposed at a future date, to be determined.

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Section II.B.1 pages 1-2

B. RELATIONSHIP TO OTHER NARRATIVE OBJECTIVES

1. Except as provided in paragraph ~~2~~3 below, Part 1 supersedes all applicable narrative water quality objectives and related implementation provisions in water quality control plans (basin plans), to the extent that the objectives and provisions are applied to protect bay or estuarine benthic communities~~, wildlife, and resident finfish~~ from toxic pollutants in sediments~~, and humans exposed to contaminants through consumption of fish and shellfish~~.

2. Except as provided in paragraph 3 below, Part 1 also supersedes all applicable narrative water quality objectives and related implementation provisions in basin plans, to the extent that the objectives and provisions are applied to protect wildlife and resident finfish from toxic pollutants in sediments, unless the State Water Board approves amendments to a basin plan to incorporate new, more stringent, narrative water quality objectives or implementation provisions.

~~2~~3. The supersession provisions in paragraphs 1 and 2 above do~~es~~ not apply to existing sediment cleanup activities where a site assessment was completed and submitted to the Regional Water Board by February 19, 2008.

Section V.H, Equation 2, page 8

b. California Logistic Regression Model (CA LRM), that uses logistic regression models to predict the probability of sediment toxicity associated with the concentration of various chemicals (Table 7 and Equation 2). The CA LRM exposure value is the maximum probability of toxicity from the individual models (P_{max})

Equation 2. $p = e^{B0+B1\,(x)} / (1 + e^{B0+B1\,(x)})$

Where: p = probability of observing a toxic effect;
B0 = intercept parameter;
B1 = slope parameter; and
x = ~~Log (~~concentration of the chemical~~)~~.

Section V.H, Table 6, page 8

Table 6. Category Score Concentration Ranges and Weighting Factors for the CSI

Chemical	Units	Weight	Score (Disturbance Category)			
			1 Reference	2 Low	3 Moderate	4 High
Copper	mg/kg	100	≤52.8	> 52.8 to 96.5	> 96.5 to 406	> 406
Lead	mg/kg	88	≤ 26.4	> 26.4 to 60.8	> 60.8 to 154	> 154
Mercury	mg/kg	30	≤ 0.09	> 0.09 to 0.45	> 0.45 to 2.18	> 2.18
Zinc	mg/kg	98	≤ 112~~3~~	> 112 to 200~~1~~	> 200~~1~~ to 629	> 629
PAHs, total high MW	µg/kg	16	≤ 312~~3~~	> 312~~3~~ to 1325	> 1325 to 9320	>9320
PAHs, total low MW	µg/kg	5	≤ 85.4	> 85.4 to 312	> 312 to 2471	> 2471
Chlordane, alpha-	µg/kg	55	≤ 0.50	> 0.50 to 1.23	> 1.23 to 11.1	>11.1
Chlordane, gamma-	µg/kg	58	≤ 0.54	> 0.54 to 1.45	> 1.45 to 14.5	> 14.5
DDDs, total	µg/kg	46~~45~~	≤ 0.50~~0.77~~	> 0.50~~0.77 to 3.56~~ 2.69	> 2.69~~3.56 to 26.37~~117	> 117~~26.37~~
DDEs, total	µg/kg	31~~33~~	≤ 0.50~~1.19~~	> 0.50~~1.19~~ to ~~6.01~~ 4.15	> 4.15~~6.01 to 45.84~~154	> 154~~45.84~~
DDTs, total	µg/kg	16~~20~~	≤ 0.50~~0.61~~	> 0.50~~0.61~~ to ~~2.79~~ 1.52	> 1.52~~2.79 to 34.27~~89.3	> 89.3~~34.27~~
PCBs, total	µg/kg	55	≤11.9	> 11.9 to 24.7	> 24.7 to 288	> 288

Chemical Name	Chemical Group	Chemical Name	Chemical Group
Total Organic Carbon	General	Alpha Chlordane	Pesticide
Percent Fines	General	Gamma Chlordane	Pesticide
		Trans Nonachlor	Pesticide
Cadmium	Metal	Dieldrin	Pesticide
Copper	Metal	o,p'-DDE	Pesticide
Lead	Metal	o,p'-DDD	Pesticide
Mercury	Metal	o,p'-DDT	Pesticide
Zinc	Metal	p,p'-DDD	Pesticide
		p,p'-DDE	Pesticide
		p,p'-DDT	Pesticide
Acenaphthene	PAH	2,4'-Dichlorobiphenyl	PCB congener
Anthracene	PAH	2,2',5-Trichlorobiphenyl	PCB congener
Biphenyl	PAH	2,4,4'-Trichlorobiphenyl	PCB congener
Naphthalene	PAH	2,2',3,5'-Tetrachlorobiphenyl	PCB congener
2,6-dimethylnaphthalene	PAH	2,2',5,5'-Tetrachlorobiphenyl	PCB congener
Fuorene	PAH	2,3',4,4'-Tetrachlorobiphenyl	PCB congener
1-methylnaphthalene	PAH	2,2',4,5,5'-Pentachlorobiphenyl	PCB congener
2-methylnaphthalene	PAH	2,3,3',4,4'-Pentachlorobiphenyl	PCB congener
		~~2,3,3',4',6-Pentachlorobipheny~~	~~PCB congener~~
1-methylphenanthrene	PAH	2,3',4,4',5-Pentachlorobiphenyl	PCB congener
Phenanthrene	PAH	2,2',3,3',4,4'-Hexachlorobiphenyl	PCB congener
Benzo(a)anthracene	PAH	2,2',3,4,4',5'-Hexachlorobiphenyl	PCB congener
Benzo(a)pyrene	PAH	2,2',4,4',5,5'-Hexachlorobiphenyl	PCB congener
Benzo(e)pyrene	PAH	2,2',3,3',4,4',5-Heptachlorobiphenyl	PCB congener
Chrysene	PAH	2,2',3,4,4',5,5'-Heptachlorobiphenyl	PCB congener
Dibenz(a,h)anthracene	PAH	2,2',3,4',5,5',6-Heptachlorobiphenyl	PCB congener
Fluoranthene	PAH	2,2',3,3',4,4',5,6-Octachlorobiphenyl	PCB congener
Perylene	PAH	2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	PCB congener
Pyrene	PAH	Decachlorobiphenyl	PCB congener