

**CA Regional Water Quality Control Board
San Diego Region**

PUBLIC WORKSHOP:

**TENTATIVE CLEANUP AND
ABATEMENT ORDER (CAO)
NO. R9-2005-0126**

June 29, 2005

SELECTED CLEANUP LEVELS

Finding 34 : Alternative Cleanup Levels

Cleanup Levels Greater than Background

	Cleanup	Background	Multiple
Arsenic	10	7.5	1.3x
Cadmium	1.0	0.33	3x
Chromium	81	57	1.4x
Copper	200	121	1.7x
Lead	90	53	1.7x
Mercury	0.7	.57	1.2x
Nickel	20	15	1.3x
Silver	1.5	1.1	1.6x
Zinc	300	129	2.3x
TBT	110 ug/kg	22	5x
Benzo[a]P	1100 ug/kg	202	5x
PCBs	420 ug/kg	84	5x

Alternative Cleanup Levels

Consideration of factors in Resolution 92-49 and Title 23 Section 2550.4 (d)

Cleanup Levels are:

- ◆ Appropriate and reasonably protective of beneficial uses
- ◆ Consistent with Water Quality Control Plans and Policies
- ◆ Consistent with maximum benefit to the people of the state

Evaluation of Cleanup Levels

- ◆ **Comparison to Lower Adverse Effects Threshold (LAET)**
- ◆ **Triad Results**
- ◆ **California Toxics Rule**
- ◆ **Area-Weighted Average**

Comparison to LAET

	As mg/kg	Cu mg/kg	Pb mg/kg	Hg mg/kg	PPAH mg/kg	PCBs mg/kg	TBT ug/kg	Zn mg/kg
Clean-up Levels	10	200	90	0.7	1.0*	0.42	0.11	300
LAET	27	1000	250	3.2	>29	3.0	1.9	1200

Comparison to Triad Results



Comparison to California Toxic Rule Predicted Sediment Concentration

	Cleanup Levels	Predicted	Lower Limit	Upper Limit
Copper	200	90	-367	494
Lead	90	180	67	312
Mercury	0.7	35	19	93
Zinc	300	5958	2969	16,296
PCBs	420 ug/kg	215 ug/kg	-15	1020

Area Weighted Averages (ppb)

	Current	Post Cleanup	Percent Reduction
TBT	148	76	48%
HPAHs	2557	1850	28%
PCBs	314	217	31%