



Cal/EPA

State Water Resources Control Board

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Pete Wilson Governor

DATE: December 4, 1996

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TELECOPY TRANSMITTAL SHEET

TO: Carol Howe PHONE: 924-8844
Montgomery Watson

FROM: Carol Atkins PHONE: 657-0468
State Water Board - DWQ

COMMENTS: CALFED
Comments on Water Quality, Acceptable
Ranges for Parameters of Concern - just
a few of them.

Hardcopy/original to follow w/ documents
mailing them today.

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Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

TO: Carol Howe
Montgomery-Watson
916-924-8844

DATE: December 4, 1996

FROM: Carol Atkins *CAW 12/4/96*
Environmental Specialist
State Water Resources Control Board
916-657-0468

SUBJECT: CALFED Water Quality Acceptable Ranges for Parameters
of Concern

While I have not had time to review the entire draft, I do have the following comments/questions on the ranges listed in the 11/19/96 draft document.

The Central Valley Regional Water Quality Control Plan has a boron objective, what's the rationale for not using it?

It's not clear what the term 'general EPA guidelines' means. Moreover, it is not clear where the ranges for cadmium - below Hamilton City, cadmium - San Joaquin River, cadmium - Delta, copper - San Joaquin River, and zinc - San Joaquin River. I have enclosed the most recent EPA actions on metals criteria for your review and consideration. The Federal Register (May 4, 1995) standards are applicable nationwide, while the Great Lakes criteria are currently only applicable to Great Lake states. There, however, does not seem to be a reason why the recalculated criteria should not be considered for acceptable ranges.

Under footnote c, the hardness equations for cadmium, copper and zinc appear to be written incorrectly. Namely, the subtraction should occur in the superscript of the exponential and multiplication should be by 10 to the minus 3 power. The equations should read as follows:

$$\begin{aligned} \text{Cu} &= e^{(0.905)(\ln \text{ hardness} - 1.612)} \times 10^{-3} \\ \text{Zn} &= e^{(0.830)(\ln \text{ hardness} - 0.289)} \times 10^{-3} \\ \text{Cd} &= e^{(1.160)(\ln \text{ hardness} - 5.777)} \times 10^{-3} \end{aligned}$$

Under footnote x, a clarifying sentence, namely, H = ln hardness should be added.

Enclosures (2)