



DIRECTORS
George Biagi, Jr.
Rudy Mussi
Alfred R. Zuckerman
COUNSEL
Danle John Nomellini
Thomas M. Zuckerman

CENTRAL DELTA WATER AGENCY

235 East Weber Avenue • P. O. Box 1461 • Stockton, CA 95201
Phone 209/465-5883

August 13, 1997

Pending

Rick Woodard
CAL FED Bay-Delta Program
Dept. of Water Resources
1416 - 9th Street
Sacramento, CA 95814

**RE: Comments on Component Report Draft August 1997,
CAL FED Water Quality Program**

Dear Rick:

At the most recent meeting of the Water Quality Technical Work Group, you distributed a copy of the above captioned draft report and requested substantive comments by August 15, 1997. This letter is to convey our substantive comments regarding our continuing concern over how organic carbon issues are being handled in the CAL FED process. Our general view is that a natural process (the breakdown of naturally occurring organic materials in the Delta) is being characterized as "pollution" and laid at the door step of agricultural operations in the Delta. It is our belief that at least an equivalent amount of organic carbon would be generated by the natural decomposition of decaying plant materials and peat soils in the absence of any farming taking place in the Delta. And, in fact, such decomposition of organic materials forms the very basis of the food chain upon which the ecosystem is dependent.

Specifically, we would ask that you modify the following portions of the Component Report as follows:

Executive Summary, page E-4, last paragraph. The second sentence of this paragraph should be modified to read:

Of particular concern to drinking water is organic carbon generated by decomposition of the peat soils and plant bio-mass which occur in the

OK
[Handwritten marks]

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Delta. Much of this organic carbon is currently collected and discharged to the Delta channels by agricultural drainage, although historically the same land mass drained naturally into the sloughs and channels of the Delta, agricultural drainage from Delta Islands because the peat soils of the Delta contribute organic carbon to the agricultural drainage water.

X
N/A

Section 2, page 2-2, second bullet sentence should be modified to read:

Delta exports have elevated concentrations of dissolved organic carbon (DOC) which are comparable to average DOC concentrations found in raw water sources within the Western United States. DOC, when chlorine is used as a disinfectant, is a disinfection by-product (DBP) precursor, and as sea water intrusion occurs in the Western Delta, as a result of low Delta outflow, which is influenced by Delta exports, the potential for formation of brominated DBPs increases along with increases in concentrations of the precursor bromide (Br⁻) which originates in sea water.

Handwritten notes: "this is relevant to add table?"

Page 3-5, first full paragraph, seventh sentence. The existing language should be modified as follows:

Sources of Br⁻ in Delta water are sea water intrusion, San Joaquin River inflow containing agricultural drainage from lands irrigated with water containing bromides delivered by the export projects from the Delta, and possibly connate groundwater, i.e., water trapped within sedimentary rocks that are often highly mineralized).

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Page 3-5, last paragraph; 5th, 6th, 7th & 8th sentences.
The existing language should be modified as follows:

MWQI studies have documented that Delta exports contain relatively-high-concentrations of DOC which are representative of average concentrations found in raw drinking water in the Western United States. Agricultural drainage discharges that contain natural organic matter from decomposing peat soil and crop residues are the major source of DOC in the Delta contribute on the average some 20% of the DOC in the waters which are exported from the Delta (California Department of Water Resources 1994b). Additionally, DOC is carried into the Delta from upstream flows. Minimizing DOC concentrations in source waters is a major water quality goal for drinking water uses to meet new EPA regulations for DBPs. Utilities must undertake studies-efforts to control organic carbon in their source water if TOC exceeds 2 mg/l at the water intake or modify disinfection methods to reduce the formation of THM compounds during disinfection.

*marked
incorporated in
summary
added
SH*

*W
MC*

Thank you for your consideration. I would appreciate your advising me if you are able to accept the requested modifications.

Yours very truly,

THOMAS M. ZUCKERMAN

TMZ:csf
cc: Dante John Nomellini