**From:** Lisa Holm <lholm@ccwater.com>
**To:** "'303dlist@rb5s.swrcb.ca.gov'" <303dlist@rb5s.swrcb.ca.gov>
**Date:** Tue, May 15, 2001 9:51 AM
**Subject:** public solicitation of water quality information

Hard copy to follow by mail (two attachments are hard copy only)
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May 15, 2001

R41-A

Joe Karkoski, 303(d) List Update Coordinator
California Regional Water Quality Control Board
Central Valley Region
3443 Routier Road, Suite A
Sacramento, CA 95827-3003

*Subject: Public Solicitation of Water Quality Information*

Dear Mr. Karkoski:

Thank you for the opportunity to submit water quality information to support the Regional Water Quality Control Board's (RWQCB) 303(d) list update. Contra Costa Water District (CCWD) is a municipal and industrial water supplier, with drinking water intakes located in Rock Slough, in Old River, and in Mallard Slough - all of these are in Contra Costa County. These intakes are impacted by the water quality of the Sacramento River, the San Joaquin River and the Sacramento-San Joaquin Delta.

Contra Costa Water District is a member of the California Urban Water Agencies organization, which has budgeted funds to support the development of a Drinking Water Policy to be included in the triennial review of the Sacramento and San Joaquin River Basin Water Quality Control Plan. CCWD recommends that the RWQCB take a more proactive role in considering drinking water contaminants in its 303(d) evaluation of water bodies with municipal use as a beneficial use. Drinking water contaminants are currently regulated through the US Environmental Protection Agency (EPA) and the California Department of Health Services. Attached to this letter are the specific contaminant concerns of CCWD, source water data related to these concerns, and the EPA Drinking Water Candidate Contaminant List. Some other sources of water quality data are the Municipal Water Quality Investigations program, the Sacramento River Watershed Monitoring Program, the San Joaquin River Watershed Monitoring Program, the California Department of Water Resources and the US Bureau of Reclamation.

Attached to this letter is the most recent sanitary survey conducted by the Contra Costa Water District (dated May 1997) and the most recent Consumer Confidence Report. A Source Water Assessment will be available by the end of this year. CCWD appreciates the opportunity to assist the RWQCB in updating the 303(d) list, as well as the establishment of a Drinking Water Policy to use when considering the contamination in the Sacramento and San Joaquin Rivers and Delta.

CCWD collects additional ambient source water data as a part of its regulatory sampling requirements, as well as daily chloride data from its Delta intakes (daily samples are not taken at Mallard Slough). This data can be made available by request, but takes time to process (it is currently stored in an older format, but will soon be updated to a SCADA database).

If you have any questions, please contact Lisa Holm at (925) 688-8106 or me at (925) 688-8187.

Sincerely,

Richard A. Denton
Water Resources Manager

LMH

Attachments:
A. Adverse impacts to CCWD caused by increased salinity and concentrations of organic carbon and other constituents of concern at CCWD's intakes
B. Drinking Water Candidate Contaminant List
C. CCWD Consumer Confidence Reports, 1997 - 1999
D. CCWD Sanitary Survey
E. Limited CCWD Laboratory Data on Source Waters

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**Adverse impacts to CCWD caused by increased salinity and concentrations of organic carbon and other constituents of concern at CCWD's intakes**

A higher salinity adversely impacts on the District's municipal and industrial water supply and the District's customers in the following ways:

- Increased salinity (quantified as total dissolved solids, chloride, bromide, and sodium concentrations) will impact industrial and municipal uses by increasing corrosion and causing health problems. Increased salinity in source water also reduces the potential and feasibility of recycling (water reuse) and conjunctive uses.

- A higher bromide in source water leads to higher disinfection by-products such as bromate and brominated trihalomethanes, makes it more difficult for urban agencies to meet increasingly stringent drinking water regulations and increases health risk.

- A higher salinity at CCWD's intakes reduces the performance of the Los Vaqueros Project by decreasing the frequency CCWD could meet its delivered water salinity goal and by increasing the pumping cost associated with replenishing blending water releases from the Reservoir. The water quality goal of CCWD's $450,000,000 Los Vaqueros Project is to provide its customers with a delivered water quality of 65 mg/L chloride or less. The Los Vaqueros Project improves the quality of CCWD's water supply by storing high quality Delta water (typically water with a chloride concentration of less than 50 mg/L), when it is available, in the Los Vaqueros Reservoir for blending with Delta diversions later on when salinity in Delta water is high. The Los Vaqueros Project also includes a new Delta intake, at Old River south of Broden Highway (State Route 4), which usually has a better water quality than CCWD's existing intake at Rock Slough. A higher salinity in the Delta will decrease the amount of water available for storage in the Los Vaqueros Reservoir and increase the salinity of both the stored water and water diverted directly from the Delta.

Increases in organic carbon concentration at CCWD's intake adversely impacts the District's municipal water supply and the District's customers in the following ways:

- A higher particulate and dissolved organic carbon concentration in the source water requires a higher disinfectant (ozone) dosage and increases treatment cost.

- A higher ozone dosage also increases the level of disinfection by-products such as bromate in the treated water, increases health risk to the public, and makes it more difficult to comply with existing and future drinking water regulations. This impact could be further aggravated by a simultaneous increase in bromide level caused by salinity increase.

- Increased organic carbon level increases formation of disinfection by-products such as

trihalomethanes and haloacetic acids during chlorination and chloramination, increases health risk to the public, and makes it more difficult to comply with existing and future drinking water regulations.

Increases in pathogens and other water quality constituents of concern at CCWD's intake adversely impacts the District's municipal water supply and the District's customers in the following ways:

- Higher pathogens level (in particular protozoan such as *Cryptosporidium parvum* and *Giardia lamblia*) in the source water requires a higher level of disinfection. This leads to higher disinfection by-products concentrations, increases public health risk, and makes it more difficult to comply with existing and future drinking water regulations. It also increases treatment cost.

- Higher concentrations of pesticides, heavy metals, and other toxins could lead to exceedance of national drinking water standards for primary pollutants. The number of regulated pollutants has been increasing steadily in the past thirty years and will increase further under the recently re-authorized federal Safe Drinking Water Act.

The California water user community has expended a great deal of effort to develop programs for improving water quality in the Delta. Contra Costa Water District, in collaboration with a number of urban water agencies, has been an active participant in the development and implementation of the Bay-Delta Accord, implementation of the Central Valley Project Improvement Act, and the CALFED Bay-Delta Program. CCWD has contributed both funding and in-kind services to stop degradation of Delta water quality and improve conditions in the Delta. The District believes that source control is one of the critical elements in these efforts. Potential degradation of Delta water quality, if left unmitigated, will significantly reduce the benefits or nullify these efforts which have been made at significant costs.

**DRINKING WATER CANDIDATE CONTAMINANT LIST**

| Chemical Contaminants | Chemical Contaminants (continued) |
|---|---|
| 1,1,2,2-Tetrachloroethane | Methyl bromide |
| 1,2,4-Trimethylbenzene | Metolachlor |
| 1,1-Dichloroethane | Metribuzin |
| 1,1-Dichloropropene | Molinate |
| 1,2-Diphenylhydrazine | MTBE |
| 1,3-Dichloropropane | Naphthalene |
| 1,3-Dichloropropene | Nitrobenzene |
| 2,4,6-Trichlorophenol | Organotins |
| 2,2-Dichloropropane | Perchlorate |
| 2,4-Dichlorophenol | Prometon |
| 2,4-Dinitrophenol | RDX |
| 2,4-Dinitrotoluene | Sodium |
| 2,6-Dinitrotoluene | Sulfate |
| 2-Methyl-phenol | Terbacil |
| Acetochlor | Terbufos |
| Alachlor ESA and other degradation products of acetanilide pesticides | Triazines and degradation products (including, but not limited to, Cyanazine and atrazine-desethyl) |
| Aldrin | Vanadium |
| Aluminum | |
| Boron | **Microbiological Contaminants** |
| Bromobenzene | Acanthamoeba (guidance expected for contact lens wearers) |
| DCPA Mono-acid degradate | Adenoviruses |
| DCPA Di-acid degradate | Aeromonas hydrophilia |
| DDE | Cyanobacteria (Blue-green algae), and other freshwater algae, and their toxins |
| Diazinon | Calciviruses |
| Dieldrin | Coxsackieviruses |
| Disulforton | Echoviruses |
| Diuron | Heliobacter pylori |
| EPTC | Microsporidia (Enterocytozoon and Septata) |
| Fonofos | Mycobacterium avium intracellulare (MAC) |
| Hexachlorobutadiene | |
| p-Isopropyltoluene | |
| Linuron | |
| Manganese | |

Source: Final Drinking Water Contaminant Candidate List published by USEPA in the March 2,

1998 Federal Register (63 Code of Federal Regulations 10273).