

AGENCY REVISION TEAM

Issue: Bromide.

Is bromide being properly characterized as the predominant drinking water quality concern?

Bromide in drinking water sources can be converted to bromate, a contaminant soon to be regulated under the Safe Drinking Water Act. Depending on bromide levels, water treatment approaches chosen and other operational constraints, finished water may not meet these upcoming standards, which will be enforced before any of the Alternatives can be implemented. Bromide is a component of salinity and comes predominantly from seawater intrusion and from the San Joaquin River. While there is no absolute or regulatory requirement for a specific level of bromide in source water, to the extent possible, lowering bromide levels will reduce treatment costs and enhance utility operational flexibility.

Agency/stakeholder groups concerned

CA DOHS

USEPA

drinking water utilities

environmental and consumer groups

Information needed to resolve/ timing for resolution

Information is needed for the many drinking water utilities using Delta water on their anticipated approaches to complying with upcoming drinking water regulations for bromate. This should include choices of water sources, protection of water quality, treatment choices, other constraints and anticipated costs.

Information is needed prior to decisions on Alternatives, since choice of Alternatives will affect approaches and costs.

Type of resolution

Discrete discision and process to achieve resolution

Work efforts

Some work is underway through the CALFED Water Quality Program, California Urban Water Agencies, other drinking water utilities and USEPA. Water Quality Program core elements relating to improving bromide levels are being developed. Additional resources will be required to collect and characterize the needed information described above.

J. Macler
(Macler, 6/2/98)

EH

AGENCY REVISION TEAM

Issue: Drinking water quality (other than bromide).

Are all water quality concerns for drinking water being properly characterized and addressed by CALFED?

Besides bromide, other materials in drinking water sources can adversely impact the safety of finished water, consumer acceptance; compliance with regulations and operational flexibility. These include (besides bromide, discussed separately) pathogens, total organic carbon (TOC), salinity, turbidity and nutrients.

Pathogens in drinking water pose public health threats. They additionally affect consumer acceptance, compliance with regulations and operational flexibility. They occur from human and animal fecal material from water treatment plants and animal husbandry.

TOC can be converted to a variety of disinfection byproducts, some of which will soon be regulated under the Safe Drinking Water Act. Depending on TOC levels, water treatment approaches chosen and other operational constraints, finished water may not meet these upcoming standards, which will be enforced before any of the Alternatives can be implemented. TOC comes predominantly from agricultural drainage of decayed plant material.

Salinity impacts consumer acceptance and operational flexibility. Salinity comes predominantly from seawater intrusion, the San Joaquin River and agricultural drainage.

Turbidity impacts operational flexibility and consumer acceptance. Finished drinking water must meet regulatory limits on turbidity to ensure adequate disinfection. Turbidity comes predominantly from stormwater runoff, agricultural drainage and urban sources.

Nutrients impact operational flexibility and consumer acceptance. Nutrients can support growth of algae, which are difficult to remove and can produce unacceptable flavors and odors.

While there is no absolute or regulatory requirement for specific levels of these materials in source water, to the extent possible, lowering levels will reduce treatment costs and enhance utility operational flexibility.

Agency/stakeholder groups concerned

CA DOHS

USEPA

drinking water utilities

environmental and consumer groups

Information needed to resolve/ timing for resolution

Information is needed for the many drinking water utilities using Delta water on their anticipated approaches to complying with upcoming drinking water regulations. This should include choices of water sources, protection of water quality, treatment choices, other constraints and anticipated costs.

Information is needed prior to decisions on Alternatives, since choice of Alternative will affect approaches and costs.

Type of resolution

Discrete discision and process to achieve resolution

Work efforts

Some work is underway through the CALFED Water Quality Program, California Urban Water Agencies, other drinking water utilities and USEPA. Water Quality Program core elements relating to improving drinking water quality are being developed. Additional resources will be required to collect and characterize the needed information described above.

(Macler, 6/2/98)