



Secondary Drinking Water Contaminants & Standards

CA Public Utilities Commission
Water Division

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California's Human Right to Water

“Every Human Being Has the Right to Safe, Clean, Affordable, Accessible Water Adequate for Human Consumption, Cooking, and Sanitary Purposes.”

2012 AB 685 Governor Edmund G. Brown Jr.

<https://oehha.ca.gov/water/report/human-right-water-california>





Presentation Topics

➤ Water Division

- Health and Safety is an integral part of Cost-of-Service ratemaking

➤ Topics

- Water Action Plan
- CPUC's Regulated Utilities
- Secondary Drinking Water Standards
- Contaminants of Interest
- Cost Recovery Issues





2010 Water Action Plan

➤ Principles-

- Safe, high quality water
- Highly reliable water supplies
- Efficient use of water
- Reasonable rates and viable utilities

➤ Safety Objectives-

- Maintain highest standards of water quality
- Promote water infrastructure investment
- Strengthen water conservation programs
- Rates that balance investment, conservation, and affordability

Key

Investment in water quality infrastructure projects must be balanced with affordability





CPUC's Regulated Water Utilities

Table 1

Class	# service connections	# IOWUs	Total Service Connections
A	More than 10,000	9	1,456,600
B	Between 2,000 and 10,000	5	27,700
C	Between 500 and 2000	22	21,400
D	Less than 500	62	8,000
total		98	1,513,700

Key

Regulated IOWUs make-up about 5.6 million customers or 14.0% of the California's population





Water Safety and Regulations

- SWRCB's Division of Drinking Water- Primacy Agency
 - Implements federal and state SDWA
 - Sets CA drinking water standards
 - CPUC and SWRCB MOU- Share information and closely work together on water quality safety issues

- California Code of Regulations
 - Title 22 – MCLs for Secondary Drinking Water Contaminant Standards and Monitoring Requirements

- Office of Environmental Health and Hazard Assessment (OEHHA)
 - Sets Public Health Goals

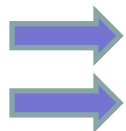




Secondary Drinking Water Contaminants & MCLs

Table 2

CONSTITUENTS	MAX. CONTAMINANT LEVELS/UNITS
Aluminum	0.2 mg/L
Color	15 Units
Copper	1.0 mg/L
Foaming Agents (MBAS)	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Methyl-tert-butyl ether (MTBE)	0.005 mg/L
Odor -- Threshold	3 Units
Silver	0.1 mg/L
Thiobencarb	0.001 mg/L
Turbidity	5 Units
Zinc	5.0 mg/L





Secondary Drinking Water Contaminants

Table 3

<u>Constituent</u>	<u>Units</u>	<u>Maximum Contaminant Level Ranges</u>		
		<u>Recommended</u>	<u>Upper</u>	<u>Short Term</u>
Total Dissolved Solids	mg/L	500	1,000	1,500
Or				
Specific Conductance	$\mu\text{S/cm}$	900	1,600	2,200
Chloride	mg/L	250	500	600
Sulfate	mg/L	250	500	600



No fixed consumer acceptance contaminant level has been established for constituents listed on Table 3





Monitoring Requirements

- Every 3 Years for Groundwater Sources
- Annually for Approved Water Surface Sources
 - Secondary MCLs listed in Table 2 and 3
- Monitor Quarterly- If level of constituents in Table 2 exceeds the MCL
 - Compliance with MCL determined by using annual average of quarterly samples
 - Waiver may be provided after conducting 3 rounds of monitoring and results meet the MCLs
 - Engineering report, customer survey, and public meeting required for waivers of secondary MCL compliance (CCR Section 64449.2)





Contaminants of Interest

- Chromium 6
 - Chromium 6 MCL invalidated because no cost feasibility study conducted to comply with MCL (May 31, 2017 Superior Court judgement);
 - Some utilities incurred capital and operational costs;
 - Cost recovery requests in GRCs filings;
- AB 746- mandatory lead testing of K-12th grade school built before 2010 (deadline July 1, 2019)
- 1,2,3-Trichloropropane(TCP) MCL 0.000005 mg/L adopted Jan. 1, 2018 (quarterly monitoring)





Infrastructure and O&M Cost Recovery

- Cost recovery requests reviewed in General Rate Cases
 - Part of infrastructure/capital improvement projects;
 - Cost-effectiveness review and need for projects;
 - Compliance with water quality drinking standards is determined;

- Capital Improvements Between Rate Cases
 - Customer notice and input required if utility rate base is more than:
 - 10% for Class A and B water utilities;
 - 25% for Class C and D water utilities;

 - If majority of customers opt to retain the existing quality of service (but not unsafe) proposed improvement may be denied and formal application required.





Cost Recovery Issues

- Water treatment costs have a significantly greater impact on rates for smaller water utilities
- Water affordability is an important issue for the State and CPUC as costs of providing water service increase
- Drinking Water State Revolving Fund (DWSRF)
 - Secondary water contaminants are second to last in priority categories for funding





Summary

- Safe drinking water has been and continues to be our top priority.
- Health and safety is an integral part of cost-of-service ratemaking.
- Investment in water quality infrastructure projects must be balanced with affordability.

