

Regulatory Update

by

Cindy A. Forbes, P.E., Chief

Southern California Drinking Water Field Operations Branch

Presented by

Joseph Crisologo, P.E.

California Department of Health Services

March 2007

First...

"Non-Federal" Regulations

- Recently Adopted
 - Secondary Maximum Contaminant Levels (SMCL)
- Formally Proposed Regulation Packages
 - Perchlorate
 - Waterworks Standards

Next...

Focus on the differences between the Federal versions and California's versions of recently adopted or proposed "Federal" rules

- Recently Adopted
 - Radionuclide Regulation
 - Disinfection/Disinfection Byproducts (Stage 1)
 - Public Notification
- Formally Proposed Regulations
 - Arsenic
 - Interim Enhanced Surface Water Treatment Rule (IESWTR)

Note: California implements Federal regulations until State regulations are adopted

Finally...

Regulations California anticipates, or is in the process of, developing

- Cross-Connection Control
- Groundwater Recharge
- Chromium-6 Proposed regulation text

Secondary Maximum Contaminant Levels (SMCL)

- Recently adopted, with an effective date of **September 28, 2006**
- Clarifies compliance determinations and waiver procedures
- Key Elements of the Regulation:
 - CWS GW sources to monitor once every 3 yrs.; CWS SW sources monitored annually
 - NTNC systems monitor at least once
 - Exceeding a SMCL triggers quarterly monitoring
 - Compliance based on running annual average of quarterly results

SMCL Regulation, cont.

- Eligible for a nine-year waiver if:
 - RAA is not greater than (3 x SMCL),
 - The SMCL has no primary MCL, and
 - RAA is not greater than the State notification level (if applicable)
- The waiver application, which must be submitted within one year of non-compliance, includes the following:
 - Complaint records
 - Engineering report evaluating alternatives and costs for treatment
 - Customer survey/questionnaire results
- Without a waiver, use of a source > SMCL is limited to:
 - 5 consecutive days of use
 - < a total of 15 days per year
 - Also must provide public notification, meter the source, and flush after use

Proposed Perchlorate Reg

- Department is mandated by law to set an MCL [Section 116293(b) of the Health and Safety Code]
- A public health goal of 6 ppb was established in March 2004. As a result, the Department developed the reg package and has proposed an MCL of 6 ppb.
- 45 day public comment period ended November 3rd
- Public hearing was held on October 30th in Sacramento
- The regulation applies to all CWS and NTNC

Proposed Perchlorate Reg, cont.

Key elements:

- Initial monitoring: 2 samples, 5-7 months apart, with at least one taken between May 1 and July 31. *(Note: data collected before June 30, 2001, may be used if meets above criteria)*
- DLR = 4 ppb
- A perchlorate detection leads to:
 - Quarterly monitoring

(Note: may revert back to normal monitoring if 4 consecutive quarterly results < DLR)

Proposed Perchlorate Reg, cont.

- Perchlorate result > 6 ppb means:
 - The lab must notify the system/Dept within 48 hrs
 - Collect confirmation sample within 48 hrs...if not, Tier 1 notification required
 - If average of original sample and confirmation exceeds the MCL, Tier 1 notification within 24 hours
- Keep in mind that perchlorate is an acute contaminant and is therefore handled similarly to Nitrate.

Proposed Waterworks Standards

- The purpose is to address distribution system design, materials, installation, operation and maintenance, planning and permit requirements, and well construction requirements.
- Waterworks Standards are being revised because many of the requirements are out of date or ambiguous
- Draft regs are posted on the DHS website - The public comment period is expected to open in the near future

Proposed Waterworks Standards, cont.

- Requires an amended permit when a system proposes to increase the number of service connections by $> 20\%$
- Requires an amended permit for any proposed new reservoir with 100,000 gallon (or greater) capacity
- Requires a water system O&M plan, based on deficiencies
- New distribution systems are to be designed for 40 psi (excluding fire flow)
- Operating pressure requirement of 20 psi to be maintained at all times

Proposed Waterworks Standards, cont.

- Source capacity – new approach
- Well construction and destruction requirements
- List of situations requiring permit amendments
- Water storage reservoir design and installation requirements
- Distribution system design, materials, installation, and operation
- Indirect additives to drinking water must meet NSF/ANSI 61 standards

Radionuclides

- California's radionuclide rule became effective in June 2006
- Differences between the State rule and the Federal rule:
 - Federal: Uranium MCL = 30 ug/L
 - State: Uranium MCL = 20 pCi/L
 - State rule applies to NTNC water systems, except NTNCs do not need to collect RA-228 occurrence data and they comply with a Total Radium MCL, rather than Combined Radium
 - Conversion between ug/L and pCi/L (X0.67)

Radionuclides, cont.

- Key elements of the regulation:
 - Monitor same month of each quarter
 - Final two quarters may be waived if previous two were $<$ DLR
 - DLRs are specified
 - Subsequent monitoring frequencies are dependent on the initial results
 - Compliance based on a running annual average of all sampling site results

Disinfection/Disinfection Byproducts Rule (Stage 1)

- California's rule became effective in June 2006 and parallels the Federal rule except...
- The State rule applies to CWS and NTNC that add a chemical disinfectant **or serve water that contains a chemical disinfectant**
 - In other words, California's rule applies Stage 1 requirements to consecutive systems
- **All** applicable water systems must submit a monitoring plan, including those serving \leq 3300.
- Systems must apply to DHS for reduced monitoring

Public Notification Rule

- California's rule became effective September 1, 2006
- California's rule parallels the Federal rule except...
 - Public notices must be approved by DHS prior to distribution
 - Federal rule provides for a special NCWS notice for nitrate MCL exceedances. California does not allow for such an exceedance.
- Notification templates available at:

<http://www.dhs.ca.gov/ps/ddwem/notices/index.htm>

Arsenic

The Department has submitted an arsenic MCL regulation package for the formal regulatory process

- Federal MCL of 10 ppb took effect in January 2006 and CDHS will implement it until our own rule has been adopted
- State MCL is uncertain at this time, but must be at least as stringent as the Federal MCL of 10 ppb

Arsenic, cont.

The Department's website provides more arsenic information, such as:

- Health effects
- Funding information
- Treatment technologies
- Arsenic fact sheet
- Monitoring results

Point-of-use procedure memo coming soon if not out yet

IESWTR (Interim Enhanced Surface Water Treatment Rule)

- Individual Filters (>10,000, conv., direct):
 - Revise the federal trigger from 0.5 NTU at 4 hrs to 0.3 NTU at all times after 1 hour
- Combined Filter Effluent (>10,000, conv., direct):
 - Continuous monitoring (already required)
 - Cannot exceed 1 NTU for more than 1 hour
 - Data recording every 15 minutes
- Two different reporting options (4-hour vs. percentile)

IESWTR, cont.

- Ensure turbidity data is not compromised (by system or instrument maintenance, hardware or software problems, signal transmission problems, etc.)
- If CFE turbidimeter fails, collect grab samples every 4 hrs, and resume on-line monitoring within 48 hrs

IESWTR, cont.

Applies to ALL surface water systems

- Monitor source water monthly for total coliform and either fecal coliform or E.coli using density analysis---report monthly
- Conventional plant – monitor settled water turbidity daily---report monthly
- Measure recycled filter backwash turbidity and determine flow rate once/day or during each recycle event---report monthly
- The proposed regulation provides clarification of Operations Plan requirements
- Public comment ends March 30, 2007

LT1ESWTR

- In the process of developing the California regulation package
- Applies most of the IESWTR requirements to systems serving less than 10,000 people

Groundwater Recharge

- Draft currently posted on the website is January 4, 2007
- Looking at different ways and methods to regulate planned groundwater recharge projects
- Stakeholder meetings continue

Cross-Connection Control

- December 2005 draft is on website
- Significant rewrite of the existing regs and will now be part of Title 22
- Hazard assessment – initial, evaluate, re-evaluate for changes
- Hazard assessments to be performed by a specialist (unless otherwise approved)
- Hazard criteria table revised for clarification
- Installation criteria for devices included
- Notification of backflow incidents within 24 hr

Chromium-6 MCL

- The Department is mandated by statute to set a Chromium VI MCL
- The Department is awaiting development of a PHG by the Office of Environmental Health Hazard Assessment (OEHHA)

Follow-up information

- A wealth of information is available on our website at:
<http://www.dhs.ca.gov/ps/ddwem/>
- Contact your local CDHS field office
- Additional district office info on web page
- Follow regulation package movement at:
<http://www.dhs.ca.gov/ps/ddwem/publications/Regulations/statusofregulations.htm>