



California Department of Public Health
MEMORANDUM

DATE: October 12, 2007

TO: All Community and Nontransient-Noncommunity Water Systems

FROM: Division of Drinking Water and Environmental Management
1616 Capitol Avenue
Sacramento, CA 95899-7377

SUBJECT: **STATE ADOPTION OF A PERCHLORATE STANDARD**

The California Department of Public Health (Department) has been in the process of adopting new regulations setting a drinking water maximum contaminant level (MCL) for perchlorate. The process is now complete, with the new regulations having an effective date of October 18, 2007. The purpose of this memorandum is to inform you of the adoption of the regulation and provide an overview of the requirements. The new regulations have been incorporated into the Department's on-line law book, which is posted on our website at <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Lawbook.aspx>. As always, please contact your local Department District office for further assistance.

1. What is the perchlorate MCL?

The perchlorate MCL is 0.006 mg/L (6 ppb).

2. When do I need to monitor for perchlorate?

This depends on whether you have historical data that can be used to meet the initial monitoring requirements. See question 3 for details on acceptable historical data.

- **If you have no historical data**, by October 18, 2008, you must collect at least two samples, five to seven months apart, with at least one gathered between May 1 and September 30, 2008. This means that monitoring must be performed as noted below. Choose one scenario based on the month you need or would like to begin monitoring. "X" indicates the particular day of the month the sample is taken. See the attached chart for more details.
 - If sample 1 is taken on October X, 2007, sample 2 must be taken after May 1, 2008, but before May X, 2008. Sample 1 should be taken after October 18, 2007, the effective date of the regulation.
 - If sample 1 is taken on November X, 2007, sample 2 must be taken after May 1, but before June X.
 - If sample 1 is taken on December X, sample 2 must be taken after May X, but before July X.
 - If sample 1 is taken on January X, sample 2 must be taken after June X, but before August X.
 - If sample 1 is taken on February X, sample 2 must be taken after July X, but before Sept X.
 - If sample 1 is taken on March X, sample 2 must be taken after August X, but before September 30.
 - If sample 1 is taken on April X, sample 2 must be taken after September X, but before September 30.
 - If sample 1 is taken in May 2008, it must be taken before May 18. Sample 2 must be taken after October 1 and October X (whichever is later), but before October 18, 2008.



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- **If you have historical data that meets the initial monitoring criteria and perchlorate was not detected**, you will need to monitor as follows:

- For a groundwater source, once during the next compliance period (January 1, 2008 – December 31, 2010).
- For a surface water source, you'll need to monitor annually, beginning January 1, 2008.

Unless directed otherwise, all routine (post initial) samples should be taken between May 1st and September 30th. The water system and the Department may conclude that another time of the year is more appropriate.

- **If you have historical data that meets the initial monitoring criteria and perchlorate was detected**, you should monitor as soon as possible, but no later than December 31, 2007.

3. What's considered acceptable historical data?

- The data must have been collected on or after January 3, 2001.
- Monitoring must consist of at least two samples, five to seven months apart, with at least one gathered between May 1 and September 30.
- The samples must have been analyzed by a laboratory certified to analyze for perchlorate.
- The detection limit for purposes of reporting (DLR) must have been no more than 0.004 mg/L.

4. What is perchlorate's detection limit for purposes of reporting (DLR) and what happens if perchlorate is detected?

- The DLR is 0.004 mg/L (4 ppb).
- If perchlorate is detected, **but is below the MCL**, you may continue using the source, but you must initiate quarterly monitoring. You may request monitoring to be reduced from quarterly, back to routine, once you've had four consecutive quarters without perchlorate being detected (i.e. < DLR).

5. What if perchlorate is detected above the MCL?

- First, please make sure you've required your lab to notify you within 48 hours if a result is > MCL and that you have someone available to receive results 24-hours a day. The lab must also be instructed to immediately notify the Department if they are unable to reach your designated contact.
- Any result > the MCL of 6 ppb requires the collection and analysis of a confirmation sample within 48 hours of notification of the result.
 - If the average of the confirmation result and the original result is > MCL, the Department must be notified within 48 hours and **Tier 1** notification must be initiated.
 - If you fail to collect a confirmation result within 48 hours, **Tier 1** notification must be initiated and a confirmation sample must be collected and analyzed within 2 weeks.
 - If the average of the confirmation result and the original result is ≤ MCL, the Department must be notified within 7 days.

Note: A Tier 1 notification template and instructions are available from our website (<http://www.dhs.ca.gov/ps/ddwem/notices/default.htm>) or your area's local Department District Office.



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6. I've completed my initial monitoring and no perchlorate was detected. When will I need to monitor for perchlorate again?

- For a groundwater source, once during the next compliance period following your initial monitoring.
- For a surface water source, you'll need to monitor annually following your initial monitoring.

Unless directed otherwise, all routine samples should be taken between May 1 and September 30. The water system and the Department may conclude that another time of the year is more appropriate.

7. What analytical methods are acceptable for labs to use?

The Environmental Laboratory Accreditation Program (ELAP) has been and continues to certify laboratories for Method 314. ELAP also recently began certifying labs for Methods 314.1, 331.0, and 332.0. Any of these four methods are acceptable, as long as the DLR is met and the lab is certified to perform the analyses using the desired method.

8. If I need to treat my water, what is the best available technology (BAT) for perchlorate?

The Department has designated ion exchange and biological fluidized bed reactor as BATs for perchlorate. A list of perchlorate treatment facilities in California is available on our website (see Contaminant Treatment Summaries at <http://cdphinternet/services/funding/Pages/Prop50.aspx>). As always, you should work closely with your local Department District Office for permitting of any treatment facility.

9. What other requirements were included in the perchlorate regulation package?

There were several other requirements included with the regulation package.

- When determining the classification of a facility treating perchlorate > MCL, five points must be applied. See Table 64413.1-E.
- When treating water > MCL for **any** inorganic contaminant, sampling of the treated effluent must occur at least monthly (more frequent sampling may be required on a case-by-case basis). Treated water > MCL requires confirmation sampling within 48 hours of receiving the result, as well as reporting to the Department. See Section 64432.8 for more details.
- Water systems serving < 10,000 persons may be eligible to apply for a variance from the perchlorate MCL based on its financial situation. See Section 64432.3(f) for more details.

This memorandum serves as a general announcement and is not intended to be a substitute for any regulatory requirement. If you have any questions regarding the content of this memo, please contact your local Department District Office.