



RON CHAPMAN, MD, MPH  
Director & State Health Officer

State of California—Health and Human Services Agency  
California Department of Public Health



EDMUND G. BROWN JR.  
Governor

**NOTICE OF PROPOSED RULEMAKING**  
**Title 22, California Code of Regulations**

**SUBJECT: HEXAVALENT CHROMIUM MCL (DPH-11-005)**

**NOTICE IS HEREBY GIVEN** that the California Department of Public Health (Department) will conduct public hearings during which time any interested person or such person's duly authorized representative may present statements, arguments or contentions (all of which are hereinafter referred to as comments) relevant to the action described in this notice.

**PUBLIC HEARING:**

Public hearings have been scheduled for **Friday, October 11, 2013 at 9:00 a.m. to 12:00 p.m. in two locations: Sacramento, CA at the California Department of Public Health, 1500 Capitol Ave, Sacramento, CA 95814 and in Los Angeles, CA at the Metropolitan Water District of Southern California, 700 N. Alameda Street, Los Angeles, CA 90012.**

For individuals with disabilities the Department will provide assistive services such as sign-language interpretation, real-time captioning, note takers, reading or writing assistance, and conversion of written public hearing materials into Braille, large print, audiocassette, or computer disk. **Note:** The range of assistive services available may be limited if requests are received less than ten business days prior to the public hearing. To request such services or copies of materials in an alternate format, please write to Dawn Basciano, Office of Regulations, MS 0507, P.O. Box 997377, Sacramento, CA 95899-7377, or call (916) 440-7367, or use the California Relay Service by dialing 711.

**WRITTEN COMMENT PERIOD:**

Any written comments pertaining to these regulations, regardless of the method of transmittal, must be received by the Office of Regulations by **5:00 p.m., October 11, 2013**, which is hereby designated as the close of the written comment period.

Comments received after this date will not be considered timely. Persons wishing to use the California Relay Service may do so at no cost by dialing 711.

Written comments may be submitted as follows:

1. By email to: [regulations@cdph.ca.gov](mailto:regulations@cdph.ca.gov). It is requested that email transmission of comments, particularly those with attachments, contain the regulation package identifier "DPH -11-005" in the subject line to facilitate timely identification and review of the comment; or
2. By fax transmission: (916) 440-5747; or
3. By mail to: Office of Regulations, California Department of Public Health, MS 0507, P.O. Box 997377, Sacramento, CA 95899-7377; or
4. Hand-delivered to: 1616 Capitol Avenue, Sacramento, CA 95814.

It is requested but not required that written comments sent by mail or hand-delivered be submitted in triplicate.

All comments, including email or fax transmissions, should include the author's name and U.S. Postal Service mailing address in order for the Department to provide copies of any notices for proposed changes to the regulation text on which additional comments may be solicited.

### **INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW:**

All suppliers of domestic water to the public are subject to regulations adopted by the U.S. Environmental Protection Agency (EPA) under the Safe Drinking Water Act of 1974, as amended (42 U.S.C. 300f et seq.), as well as by the Department under the California Safe Drinking Water Act (Health & Saf. Code, div. 104, pt. 12, ch. 4, § 116270 et seq.). California has been granted primary enforcement responsibility, ("primacy") by U.S. EPA for public water systems in California. California has no authority to enforce federal regulations, but only state regulations. Federal law and regulations require that California, in order to receive and maintain primacy, promulgate regulations that are no less stringent than the federal regulations. Currently, U.S. EPA has a drinking water standard for chromium, which includes hexavalent chromium as an element of chromium, but has no standard specifically for hexavalent chromium. Pursuant to Health and Safety Code sections 116350, 116375, 131052, and 131200, the Department has the responsibility and authority to adopt the subject regulations.

In accordance with federal regulations, California requires a public water system to sample their sources and have the samples analyzed for inorganic chemicals to determine compliance with drinking water standards, including MCL. Primary MCL are based on health protection, technical feasibility, and costs. The public water system

must notify the Department and the public when noncompliant with a primary MCL and take appropriate action.

Section 116365.5 of the Health and Safety Code mandates that the Department establish a primary drinking water standard for hexavalent chromium on or before January 1, 2004. Section 116365 of the Health and Safety Code imposes requirements on the Department for adoption of primary drinking water standards. One of those requirements is that the Department set the MCL as close as possible to the public health goal (PHG) established by the California Environmental Protection Agency Office of Environmental Health Hazard Assessment (Cal/EPA OEHHA), to the extent technologically and economically feasible. OEHHA established the PHG for hexavalent chromium on July 27, 2011. OEHHA set the PHG at 0.02 micrograms per liter ( $\mu\text{g/L}$ ), equivalent to 0.00002 milligrams per liter ( $\text{mg/L}$ ).

In 2011, California AB 938 was chaptered, which commencing July 1, 2012, requires the following when a written Tier 1 public notice is given by the public water system:

- It shall be provided in English, Spanish, and in the language spoken by any non-English-speaking group that exceeds 10 percent of persons served by the public water system, and shall contain a telephone number or address where residents may contact the public water system for assistance; and
- For each non-English-speaking group that speaks a language other than Spanish and that exceeds 1,000 residents but is less than 10 percent of the persons served by the public water system, the notice shall contain information regarding the importance of the notice and a telephone number or address where the public water system will provide either a translated copy of the notice or assistance in the appropriate language.

## POLICY STATEMENT OVERVIEW

*Problem Statement:* The California Department of Public Health (Department; formerly, the California Department of Health Services (CDHS)), as well as the U.S. Environmental Protection Agency, establish drinking water standards to ensure the drinking water provided to the public by public water systems is safe, potable, reliable, and protective of public health. For drinking water served to the public, the Department establishes maximum allowable levels for various contaminants that occur in sources of drinking water supplies, whether man-made or naturally occurring. These maximum levels are known as maximum contaminant levels or MCL's, and are also known as primary drinking water standards. A drinking water standard specific for hexavalent chromium does not exist at the national or state level. Section 116365.5 of the Health and Safety Code mandates that the Department establish a primary drinking water standard for hexavalent chromium on or before January 1, 2004. However, a standard for hexavalent chromium could not be adopted without the establishment of a public health goal (PHG). This step was completed in 2011 by the Office of Environment Health Hazard Assessment, an office within California's Environmental Protection Agency. Section 116365 of the Health and Safety Code imposes requirements on the

Department for adoption of primary drinking water standards for the protection of drinking water quality for the human environment. Additionally, in 2011, California Assembly Bill (AB) 938 was chaptered, revising section 116450 of the Health and Safety Code, establishing criteria specific to Tier 1 public notifications provided by a public water system that are more stringent than existing regulations. The regulations are amended to implement, interpret, or make specific the statutory provisions of sections 116365 and 116365.5 of the Health and Safety Code and AB 938.

*Objectives (Goals):* Broad objectives of this proposed regulatory action are to:

- Adopt a drinking water MCL for hexavalent chromium for the protection of public health and the environmental quality of drinking water, consistent with statutory requirements.
- Update existing drinking water public notification regulations, consistent with statutory bilingual notification requirements.

*Benefits:* Anticipated benefits from this proposed regulatory action are:

- Provide increased public health protection by reducing the potential risk of adverse health effects associated with hexavalent chromium.
- Increase the ease at which crucial public health information related to drinking water contamination is disseminated to non-English-speaking groups.

### **SUMMARY OF PROPOSAL:**

These proposed regulations serve two purposes, both required as a result of legislative enactments. The first and primary purpose is to adopt a maximum contaminant level (MCL) for hexavalent chromium in drinking water, as required by sections 116365 and 116365.5 of the California Safe Drinking Water Act (Health and Saf. Code, div. 104, pt. 12, ch. 4, §116270 et seq.). The second purpose is to revise and augment regulations, in a manner consistent with section 116450 of the California Safe Drinking Water Act, related to the public notification of public water systems' violation of provisions of California's Safe Drinking Water Act and regulations adopted thereunder.

These proposed regulations for the establishment of maximum contaminant levels are being adopted by the Department of Public Health. A drinking water maximum contaminant level is a standard applicable to water supplied by public water systems and intended for human consumption, including drinking, cooking, bathing and oral hygiene; and is enforceable under the California Safe Drinking Water Act. The harmful contaminants regulated by maximum contaminant levels may be biological, chemical or mineral, and may be naturally occurring or the result of human activities. State and regional water quality control boards have the authority to regulate contamination of groundwater, including hexavalent chromium contamination of groundwater, which occurred as a result of business or industrial practices. These regional water quality control boards' authorities include requiring violators to take mitigation actions and the

boards may enforce actions they determine to be appropriate, which may be lower than the maximum contaminant level proposed in this regulation. These regulations do not restrict the authority of the regional water quality control boards to order the cleanup of contaminated water.

Pursuant to federal primacy requirements and sections 116350, 116375, 131052, and 131200 of the Health and Safety Code, the Department proposes the below noted changes to title 22. The Department also proposes a number of nonsubstantive changes, which will correct grammar, punctuation, spacing, spelling, typographical error, use of plural and upper/lower case, page numbers referenced in the *Federal Register*, and reference to sections, subsections, and paragraphs; include common alternative terminology; delete subsection and subparagraph designations; and delete redundant text and unnecessary punctuation and text.

- Amend section 64213 (Chemical Quality Monitoring) to make section reference revisions and nonsubstantive changes.
- Amend section 64431 (Maximum Contaminant Levels – Inorganic Chemicals) as follows:
  - (a) to make nonsubstantive changes; and
  - Table 64431-A to adopt a hexavalent chromium MCL.
- Amend section 64432 (Monitoring and Compliance – Inorganic Chemicals) as follows:
  - (a) and (b) to make nonsubstantive changes;
  - (b)(1) to allow “grandfathering” of prior groundwater monitoring of inorganic chemicals when meeting specific criteria;
  - (b)(2) to allow screening for hexavalent chromium using chromium, under certain conditions;
  - (c) and (d) to make nonsubstantive changes;
  - Table 64432-A to adopt a hexavalent chromium detection limit for purposes of reporting;
  - (h)(2)(A) and (B), (m), (n), (o), and (o)(1) and (2) to make nonsubstantive changes; and
  - (p) to establish a directive for a distribution system chromium speciation study.
- Amend section 64447.2 (Best Available Technologies (BAT) – Inorganic Chemicals) as follows:

- First paragraph to make a nonsubstantive change; and
- Table 64447.2-A to adopt best available technologies for hexavalent chromium, include common alternative terminology, and make nonsubstantive changes.
- Amend section 64463 (General Public Notification Requirements) as follows:
  - (b) to clarify that notices for Department review and approval are to be in English, consistent with AB 938; and
  - (d) and (e) to make nonsubstantive changes.
- Amend section 64465 (Public Notice Content and Format) as follows:
  - (a)(10) to make a nonsubstantive change;
  - (c) to adopt Tier 1 public notice bilingual requirements consistent with AB 938, reorganize Tier 2 and 3 public notice bilingual requirements, and include a clarifying notice to specific public water systems subject to the Dymally-Alatorre Bilingual Services Act;
  - Appendices 64465-A and -B to make nonsubstantive changes;
  - Appendix 64465-C to adopt public notification (health effects) language for total radium;
  - Appendix 64465-D to adopt public notification (health effects) language for hexavalent chromium; and
  - Appendices 64465-E, -G, and -H to make nonsubstantive changes.
- Amend section 64481 (Content of the Consumer Confidence Report) as follows:
  - (d)(2)(D)3. to delete an obsolete Consumer Confidence Report reporting requirement;
  - (d)(2)(I) for consistency with appendix 64481-A;
  - (g)(2) to reference the current public notification (health effects) language for surface water treatment contaminants and delete obsolete public notification (health effects) language;
  - (I) for consistency with changes made to public notice bilingual requirements under section 64465(c); and
  - Appendix 64481-A to adopt Consumer Confidence Report (major origins in drinking water) language for total radium and hexavalent chromium.

- Amend section 64530 (Applicability of This Chapter); (c) and Table 64530-A to make nonsubstantive changes.
- Amend section 64534 (General Monitoring Requirements); (a) to make nonsubstantive changes.
- Amend section 64534.2 (Disinfection Byproducts Monitoring) as follows:
  - (a)(2) to make a nonsubstantive change;
  - (c)(2) to delete an obsolete source water bromide monitoring requirement;
  - (c)(3) and (3)(A) to make nonsubstantive changes;
  - (c)(3)(B) to delete an obsolete criterion to resume routine bromate monitoring; and
  - (d)(2) to make a nonsubstantive change.
- Amend section 64534.8 (Monitoring Plans) as follows:
  - (b)(3) to make nonsubstantive changes; and
  - (d)(1) and (2) to make nonsubstantive changes and update *Federal Register* citations.
- Amend section 64535.2 (Determining Disinfection Byproduct Compliance) as follows:
  - (a)(1), (2), and (3) to provide compliance determinations based on the MCL, not a multiple of the MCL; and
  - (b), (d), and (d)(2) and (3) to make nonsubstantive changes.
- Amend section 64535.4 (Determining Disinfectant Residuals Compliance); (a)(1), (2), and (3) to provide compliance determinations based on the Maximum Residual Disinfectant Levels, not a multiple of the Maximum Residual Disinfectant Levels.
- Amend section 64671.80 (Water Quality Parameter or WQP) to make a nonsubstantive change.

The net effects of the proposed regulations would be as follows:

- Community water systems and nontransient noncommunity water systems would be required to monitor for hexavalent chromium, comply with a hexavalent chromium MCL, and report results;
- Community water systems and nontransient noncommunity water systems would be allowed to “grandfather” prior groundwater monitoring for a newly adopted inorganic chemical MCL when meeting specific criteria;
- Community water systems and nontransient noncommunity water systems would be allowed to screen for hexavalent chromium using chromium, under certain conditions;
- Community water systems and nontransient noncommunity water systems would be required, if directed by the Department, to conduct a Department-approved distribution system chromium speciation study;
- The best available technologies would be specified for hexavalent chromium removal;
- The public notices public water systems submit to the Department for review and approval prior to distribution or posting would be required to be in English;
- Public water systems would be required to comply with Tier 1 public notice bilingual requirements consistent with AB 938;
- Nontransient noncommunity water systems that violate the total radium MCL would be required to use specific public notification (health effects) language;
- Community water systems and nontransient noncommunity water systems that violate the hexavalent chromium MCL would be required to use specific public notification (health effects) language.
- Nontransient noncommunity water systems that detect total radium would be required to use specific Consumer Confidence Report (major origins in drinking water) language;
- Community water systems and nontransient noncommunity water systems that detect hexavalent chromium would be required to use specific Consumer Confidence Report (major origins in drinking water) language; and
- Community water systems and nontransient noncommunity water systems would be required to make compliance determinations for disinfectant residuals and disinfection byproducts based on Maximum Residual Disinfectant Levels and MCL, not multiples of Maximum Residual Disinfectant Levels and MCL, respectively.

None of the proposed amendments would affect California's primacy status, because the net effect of these amendments is that the state's regulation would be more stringent than the federal regulation, consistent with section 116270(f) of the Health and Safety Code. The U.S. EPA has not yet proposed or adopted an MCL for hexavalent chromium.

**EVALUATION AS TO WHETHER THE PROPOSED REGULATIONS ARE INCONSISTENT OR INCOMPATIBLE WITH EXISTING STATE REGULATIONS:**

The Department evaluated this proposal as to whether the proposed regulations are inconsistent or incompatible with existing state regulations. This evaluation included a review of the Department's existing general regulations and those regulations specific to hexavalent chromium and Tier 1 public notice bilingual requirements for drinking water. An internet search of other state agency regulations, including those of the State Water Resources Control Board, was also performed. State and Regional water quality control boards currently have the authority to regulate contamination of groundwater, including hexavalent chromium contamination of groundwater, which occurred as a result of business or industrial practices. These regional water quality control boards' authorities include requiring violators to take mitigation actions and the boards may enforce standards they determine to be appropriate, which may be lower than the maximum contaminant level proposed in this regulation. These regulations do not restrict the authority of the regional water quality control boards to order the cleanup of contaminated water. It was determined that no other state regulation addressed the same subject matter and that this proposal was not inconsistent or incompatible with other state regulations. Therefore, the Department has determined that this proposal, if adopted, would not be inconsistent or incompatible with existing state regulations.

**DOCUMENT INCORPORATED BY REFERENCE:**

The following document is incorporated by reference in the regulations as it would be too cumbersome, unduly expensive, or impractical to publish these documents into regulation.

- 40 Code of Federal Regulations part 141.605(b) (74 Fed. Reg. 30953 (June 29, 2009), "National Primary Drinking Water Regulations: Minor Correction to Stage 2 Disinfectants and Disinfection Byproducts Rule and Changes in References to Analytical Methods".

Note: The Federal Register reference may be viewed, at no cost, through the following Internet address: <http://www.gpoaccess.gov/fr/index.html>.

**FORMS INCORPORATED BY REFERENCE:** NA

**MANDATED BY FEDERAL LAW OR REGULATIONS:** NA

**OTHER STATUTORY REQUIREMENTS:** N/A

**LOCAL MANDATE:**

The Department has determined that the proposed regulation would not impose a mandate on local agencies or school districts that require state reimbursement, as the Department is implementing section 116365.5 of the Health and Safety Code and AB 938 (Chapter 514, Statutes of 2011). As a result, local agencies or school districts should not incur costs resulting from the adoption of this regulation.

Local agencies or school districts currently incur costs in their operation of PWS. These costs are not the result of a “new program or higher level of service” within the meaning of Article XIII B, Section 6 of the California Constitution because they apply generally to all individuals and entities that operate PWS in California and do not impose unique requirements on local governments. Therefore, no state reimbursement of these costs is required.

Local regulatory agencies also may currently incur costs for their responsibility to enforce state regulations related to small PWS (fewer than 200 service connections) that they regulate. However, local agencies are authorized to assess fees to pay reasonable expenses incurred in enforcing statutes and regulations related to small PWS (Health & Saf. Code, § 101325). Therefore, no reimbursement of any incidental costs to local agencies in enforcing this regulation would be required (Gov. Code, § 17556(d)).

**AUTHORITY AND REFERENCE:**

The Department proposes to adopt this regulation under the authority granted by Health and Safety Code sections 116350, 116375, 131052, and 131200. This proposal implements, interprets, and makes specific sections 116275, 116340, 116350, 116365, 116365.5, 116370, 116385, 116450, 116460, 116470, 116530, 116555 of the Health and Safety Code.

**FISCAL IMPACT ESTIMATE:**

- A. Fiscal Impact on Local Government: \$16.5 million annually, which is not reimbursable by the State pursuant to Article XIII B, Section 6 of the California Constitution.
- B. Fiscal impact on State Government: \$1.8 million annually, which is anticipated to be absorbable by State agencies within their existing budgets. The Department

estimates that there will be no change to the Drinking Water Program's Safe Drinking Water Account fees and caps. The fees, caps, and annual adjustments are specified in statute under sections 116565, 116570, 116577, 116580, 116585, and 116590, California Health and Safety Code.

- C. Fiscal Impact on Federal Funding of State Programs: None.
- D. Other Nondiscretionary Cost or Savings Imposed on Local Agencies: None.
- E. Mandate on Local Agencies or School Districts: None.
- F. Effect on Small Businesses: The Department has determined that the proposed regulations would not affect small business because Government Code chapter 3.5, article 2, section 11342.610 excludes drinking water utilities from the definition of small business.

**COST IMPACT ON REPRESENTATIVE PRIVATE PERSON OR BUSINESS:**

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action, The estimated annual cost to privately owned water systems is \$1.0 million.

**HOUSING COSTS:**

The Department has determined that the regulations will have no impact on housing costs.

**ECONOMIC IMPACT ASSESSMENT:**

The Department has determined that the proposed regulations would not significantly affect the following:

- The creation or elimination of jobs within the State of California. The requirements summarized above should not have any affect in that there would not be any significant change in PWS or regulatory personnel needed for compliance with the new requirements.
- The creation of new businesses or the elimination of existing businesses within the State of California. The nature of the drinking water industry is such that the adoption of this proposed regulation would not result in the creation or elimination of businesses. The impact of the proposed regulations would be insignificant.
- The expansion of businesses currently doing business within the State of California. Since PWS size is basically a function of the number of service

connections (consumers) served, the proposed regulations should not have any effect on expansion.

- The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment. The Department has made a determination that the proposed regulations would improve the protection of the public's health and welfare through the control of hexavalent chromium and its associated risk in the public's drinking water supply, with no adverse impacts to worker safety or California's environment.

**SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESS, INCLUDING ABILITY TO COMPETE:**

The Department has determined that the proposed regulatory action would have no significant adverse economic impact on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states. The proposed regulations apply only to PWS, as defined pursuant to Health and Safety Code section 116275, which are not businesses or individuals. PWS are water companies providing drinking water to the public and, pursuant to Government Code section 11342.610, are exempt from the definition of a small business.

**BUSINESS REPORT:**

The Department has determined that the proposed regulations would not require reports from businesses.

**ALTERNATIVES STATEMENT:**

The Department must determine that no reasonable alternative considered by the agency or that has otherwise been identified and brought to the attention of the agency would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

**CONTACT PERSONS:**

Inquiries regarding the substance of the proposed regulations described in this notice may be directed to Mike McKibben of the Center of Environmental Health at (619) 525-4023.

All other inquiries concerning the action described in this notice may be directed to Dawn Basciano of the Office of Regulations, at (916) 440-7367, or to Alana McKinzie, at (916) 440-7689, the designated backup Office of Regulations contact person. .

**Please identify the action by using the Department regulation package identifier, DPH-11-005: Hexavalent Chromium MCL in any inquiries or written comments.**

**AVAILABILITY OF STATEMENT OF REASONS, TEXT OF PROPOSED REGULATIONS, AND RULEMAKING FILE:**

The Department has prepared and has available for public review an initial statement of reasons for the proposed regulations, all the information upon which the proposed regulations are based, and the text of the proposed regulations. The Office of Regulations, 1616 Capitol Avenue, Sacramento, CA 95814, will be the location of public records, including reports, documentation, and other material related to the proposed regulations (rulemaking file).

In order to request that a copy of this public notice, the regulation text, and the initial statement of reasons or alternate formats for these documents be mailed to you, please call (916) 440-7367 (or the California Relay Service at 711), send an email to [regulations@cdph.ca.gov](mailto:regulations@cdph.ca.gov), or write to the Office of Regulations at the address previously noted. Upon specific request, these documents will be made available in Braille, large print, audiocassette, or computer disk.

**AVAILABILITY OF CHANGED OR MODIFIED TEXT:**

The full text of any regulation which is changed or modified from the express terms of the proposed action will be made available by the Department's Office of Regulations at least 15 days prior to the date on which the Department adopts, amends, or repeals the resulting regulation.

**AVAILABILITY OF FINAL STATEMENT OF REASONS:**

A copy of the final statement of reasons (when prepared) will be available upon request from the Office of Regulations.

**AVAILABILITY OF DOCUMENTS ON THE INTERNET:**

Materials regarding the action described in this notice (including this public notice, the regulation text, and the initial statement of reasons) that are available via the Internet may be accessed at [www.cdph.ca.gov](http://www.cdph.ca.gov) by clicking on these links, in the following order: Decisions Pending and Opportunity for Public Participation > Regulations > Proposed.

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

Date:

Ron Chapman, MD, MPH  
Director