California Code of Regulations
Title 22. Social Security
Division 4. Environmental Health
Chapter 1. Introduction

ARTICLE 1. DEFINITIONS

(1) Amend Section 60001 as follows:

Section 60001. Department.

Whenever the term “department” or “Department” is used in this division, it means the State Department of Public Health Services, unless otherwise specified.

(2) **Amend Section 60003 as follows:**

Section 60003. Director.

Whenever the term "director" is used in this division, it means the Director, State Department of Public Health Services, unless otherwise specified.

ARTICLE 2. MONITORING AND REPORTING REQUIREMENTS – SCOPE

(3) Adopt Section 60098 as follows:

Section 60098. Monitoring and Reporting Requirements.

The phrase “The monitoring and reporting requirements as specified in regulations adopted by the department that pertain to maximum contaminant levels” as used in Health and Safety Code section 116275, subdivision (c)(3) includes, but is not limited to, the requirements of Articles 18 and 20 of Chapter 15, Title 22, California Code of Regulations.

Chapter 4. Water Treatment Devices

ARTICLE 3. APPLICATION REQUIREMENTS

(4) Repeal Section 60430 as follows:

Section 60430. Processing Time.

(a) Within 45 calendar days of receipt of an application for certification, or modification of a certified water treatment device or certified treatment component, the Department shall inform the applicant in writing that the application is complete and accepted for filing, or that it is incomplete and what specific information is needed.

(b) Within 90 calendar days from the date of filing a completed application for certification or modification of a certified water treatment device or certified treatment component, the Department shall inform the applicant in writing of its decision.

(c) Within 30 calendar days of receipt of an application for renewal of certification, the Department shall inform the applicant in writing that the application is complete and accepted for filing, or that it is incomplete and what specific information is needed.

(d) Within 30 calendar days of receipt of a completed application for the renewal of certification, the Department shall inform the applicant in writing that certification has or has not been extended.

Chapter 13. Operator Certification

ARTICLE 3. OPERATOR EXAMINATION CRITERIA AND APPLICATION

(5) Amend Section 63790 as follows:

Section 63790. Examination Scheduling and Application Processing

Filing Deadline and Requirement for Identification at Examination.

(a) For admission to an examination, the completed application shall be postmarked by the final filing date established by the Department.

(b) Each applicant for examination shall be notified of the Department’s decision regarding compliance with the minimum requirements to take the examination set forth in section 63775 or section 63780 within 75 days after the receipt of a complete application. If the Department determines that the application does not meet the requirements, the notice shall include the reasons for the disqualification. If the Department determines that the application does meet the requirements the notice shall include the date of the examination for which they have been accepted.

(c) An examinee shall present their driver’s license, photo identification (ID) card issued by the Department of Motor Vehicles, or passport upon entry to the exam.

(6) Amend Section 63835 as follows:

Section 63835. Certification and Renewal Application Resubmittal Processing.

(a) Each applicant submitting an application or reapplication for certification or renewal shall be notified of the Department’s decision regarding compliance with the requirements set forth in Sections 63800, 63805, 63830, or 63840 within 75 days after the receipt of the application or reapplication. If the Department determines that the application or reapplication does not meet the requirements, the applicant shall be notified of the reasons for the disqualification.

(b) An applicant, whose application for certification failed to meet the requirements of this Article or Article 5, as determined by the Department, may reapply within 12 months of the original submittal date without payment of an additional certification or renewal fee.

(c) The Department’s median, minimum, and maximum processing times for applications for operator certification are as follows:

   ___ Median -- 25 calendar days
   ___ Minimum -- 5 calendar days
   ___ Maximum -- 60 calendar days

Chapter 14. Water Permits

ARTICLE 1. APPLICATIONS

(7) Amend Section 64001 as follows:

Section 64001. Water Permit Application.

(a) Within 30 calendar days of receipt of an application for a permit or petition for permit modification pursuant to Section 4011 or 4019, Health and Safety Code, the Department shall inform the applicant in writing that it is either complete and accepted for filing or that it is deficient and what specific information or documentation is required to complete the application. A public water system shall submit an application for a permit or amended permit pursuant to section 116525 or section 116550, Health and Safety Code, respectively. An application is considered complete if it is in compliance with the requirements of Section 4012, Health and Safety Code. For proposed water system improvements, new water systems, or a “project” as defined in Section 15378, Title 14, California Administrative Code of Regulations where environmental documentation is required, a copy of such documentation shall be included in the application.

(b) Within 90 calendar days from the date of filing of a completed application, the Department shall inform the applicant in writing of its decision regarding an application.

(8) **Proposed S2DD PR 8 of 128**

**9/13/2010**

Proposed S2DDBPR

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ARTICLE 3. STATE SMALL WATER SYSTEMS

(9) Amend Section 64211 as follows:

Section 64211. Permit Requirement.

(a) No person shall operate a state small water system unless a permit to operate the system has been issued by the local health officer. Within 30 calendar days of receipt of an application for a permit, the local health officer shall inform the applicant in writing that the application is either complete and accepted for filing or that it is deficient and what specific information or documentation is required to complete the application.

(b) The state small water system shall submit a technical report to the local health officer as part of the permit application. The report shall describe the proposed or existing system as follows: service area, distribution system including storage and pumping facilities, the water source including source capacity, water quality, and any water treatment facilities. The report shall identify the owner of the system and the party responsible for day to day operation of the system. The report shall include a plan for notification of those served by the system under emergency conditions. The report shall describe the operating plan for the system and shall specify how the responsible party will respond to failure of major system components.

(c) Within 90 calendar days from the date of filing of a completed application, the local health officer shall inform the applicant in writing of its decision regarding an application.

(d) A change in ownership of a state small water system shall require the submission of a new application.
(e) By July 1, 1992, each state small water system in existence on January 1, 1992, shall submit to the local health officer a plan for notification of those served by the system under emergency conditions.

(fd) Each state small water system shall provide the following notice to the consumers served by the state small water system: “The domestic water supply for this area is provided by a state small water system. State regulatory requirements for operation of a state small water system are less extensive than requirements for larger public water systems. If you have questions concerning your water supply, you should contact [insert (1) name of water system, (2) name of responsible person, and (3) telephone number] or your local health department.” This notice shall be by direct delivery on an annual basis or by continuous posting at a central location within the area served by the state small water system.

(10) Amend Section 64212 as follows:

Section 64212. Bacteriological Quality Monitoring.

(a) Each water supplier operating a state small water system shall collect a minimum of one routine sample from the distribution system at least once every three months. The sample shall be analyzed for the presence of total coliform bacteria by a laboratory certified by the Department for bacteriological analyses pursuant to Section 4025 of the Health and Safety Code Article 3, commencing with section 100825, of Chapter 4 of Part 1 of Division 101, Health and Safety Code. The results of the analyses shall be reported to the local health officer no later than the 10th day of the month following receipt of the results by the state small water system.

(b) If any routine sample is total coliform-positive, the water supplier shall collect a repeat sample from the same location within 48 hours of being notified of the positive result. If the repeat sample is also total coliform-positive, the sample shall also be analyzed for the presence of fecal coliforms or Escherichia coli (E. Coli). Escherichia coli (E. coli). The water supplier shall notify the local health officer within 48 hours from the time the results are received and shall take corrective actions as directed by the local health officer to eliminate the cause of the positive samples.

(c) The local health office may require a state small water system to sample the distribution system each month, in lieu of the requirements of subsection (a), if the system has bacteriological contamination problems indicated by more than one total-coliform positive sample during the most recent 24 months of operation. The monthly sample shall be analyzed for the presence of total coliform bacteria by a laboratory certified by the Department for bacteriological analyses pursuant to Section 4025 of the Health and Safety Code Article 3, commencing with section 100825, of Chapter 4 of Part
1 of Division 101, Health and Safety Code. The results of the analyses shall be reported to the local health officer no later than the 10th day of the month following receipt of the results by the state small water system.

(11) Amend Section 64213 as follows:

Section 64213. Chemical Quality Monitoring.

(a) Each water supplier operating a state small water system shall sample each source of supply prior to any treatment at least once. The sample shall be analyzed by a laboratory, certified by the Department pursuant to Section 4025 of the Health and Safety Code Article 3, commencing with section 100825, of Chapter 4 of Part 1 of Division 101, Health and Safety Code, for fluoride, iron, manganese, chlorides, total dissolved solids, and the inorganic chemicals listed in Table 64431-A, Section 64431(a).

(b) Each groundwater source which has been designated as vulnerable by the local health officer pursuant to criteria set forth in Sections 64445(d)(1) and (2) shall be sampled by the water supplier operating the state small water system at least once prior to any treatment and analyzed for volatile organic compounds according to Environmental Protection Agency Method 502.2, “Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water,” September 1986 in accordance with approved methods specified in section 64415. The analysis shall be performed by a laboratory certified by the Department to perform Method 502.2 analyses for organic chemicals pursuant to Section 4025 of the Health and Safety Code Article 3, commencing with section 100825, of Chapter 4 of Part 1 of Division 101, Health and Safety Code.

(c) The results of the laboratory analyses shall be submitted to the local health officer by the state small water system no later than the 10th day of the month following receipt of the results by the state small water system. A copy of the results of the analyses and a comparison of the results with the maximum contaminant levels for
those contaminants listed in Table 64431-A and B, Section 64431(a) and Table 64444-A, Section 64444 shall be distributed by the state small water system to each regular user of the water system within 90 days of receiving the results. A copy of the distribution notice shall be provided to the local health officer.

(d) The water supplier operating a state small water system shall comply with any corrective actions ordered by the local health officer for any chemical contaminant which exceeds the maximum contaminant level.

ARTICLE 4. LOCAL PRIMACY DELEGATION

(12) Amend Section 64252 as follows:

Section 64252. Primacy Delegation Application.

(a) The primacy delegation application submitted by a local health officer pursuant to section 116330 of the Health and Safety Code shall describe how the primacy requirements of this article will be complied with and shall contain the following information relating to the small water system program to be delegated:

(1) The number of staff persons, percentage of time and personnel classification of each staff person, and a description of the program responsibilities of each person involved in the small water system program.

(2) A proposed program budget projecting both revenues and expenditures for the first year of the program. The expenditures categories shall include personnel, general expense (i.e., rent, supplies and communications), travel, equipment, data management, any other specific services to be provided (e.g., laboratory), administrative overhead and other indirect charges. The anticipated revenues shall specify all planned sources of revenues to be used for support of the small water system program.

(3) A description of engineering and legal resources to be used in conducting the program.

(4) A description of the electronic data management system to be used to comply with the requirements of section 64256-(e) and the compatibility of the proposed system with the data management system used by the Department.

(5) A description of the current status of compliance with Division 5, Part 1, Chapter 7; Division 104, Part 1, Chapters 4 and 5; Division 104, Part 12, Chapters 1 through 64.
and 5 of the Health and Safety Code and California Code of Regulations, Title 22, Division 4, Chapters 15, 15.5, 17, and 17.5 of the small water systems within the county. This description shall include the following:

   (A) All violations of drinking water monitoring or reporting requirements by any of the systems during the 12 months preceding the submission of the application for primacy;

   (B) All violations of standards of California Code of Regulations, Title 22, Division 4, Chapters 15, 15.5, 17, and 17.5 during the 12 months preceding the submission of the application for primacy; and

   (C) All enforcement actions against small water systems taken by the county during the 12 months preceding the submission of the application for primacy.

(6) A current inventory list of the small water systems within the county. For each small water system the inventory list shall specify the system name, water system identification number, mailing address, type of system (community, nontransient noncommunity or noncommunity), name and address and phone number of the responsible party, type of ownership, type of water source, type of treatment if any, dates of operation for seasonally operated systems, and either:

   (A) For a community water system, the number of service connections; or

   (B) For a noncommunity or nontransient noncommunity water system, the average monthly population served.

(b) For applications submitted by March 1, 1993, the primacy application shall demonstrate that the local primacy program requirements specified in Article 4.1, sections 64253 through 64258 will be complied with by June 30, 1994. If these
requirements cannot be fully complied with by June 30, 1994, the application shall set forth a priority implementation schedule for activities to be conducted such that the program requirements will be fully complied with by June 30, 1995.

(e7) For applications submitted for fiscal years subsequent to the fiscal year 1993-94, the application shall demonstrate that the local primacy agency will be able to immediately undertake the activities specified as local primacy program requirements in section 64253 at the time of delegation.; and

(8) An annual workplan, as required pursuant to section 64260, which, at the discretion of the Department, may be submitted separately following the Department's review of the remainder of the application.

(eb) The application shall be signed by the local health officer or by a local official with the authority to submit the application on behalf of the county.

(e) Within 15 working days of receipt of an application for local primacy delegation the department shall inform the applicant in writing that the application is either complete and accepted for filing, or that it is deficient and what specific information or documentation is required to complete the application.

(f) Within 5 working days of being notified of deficiencies in its application the local health officer shall resubmit an application with the deficient items included or corrected.

(g) Within 15 working days of receipt of the resubmitted application the department shall determine that the application is complete or reject the application as incomplete and find that the local health officer is not capable of meeting the primacy program requirements.
(h) Within 20 working days of being notified that the application is complete the local health officer shall submit the annual workplan required pursuant to section 64260.

(i) Within 20 working days from the date the workplan is submitted the department shall inform the applicant in writing of its determination regarding the local health officer’s capability of meeting the primacy program requirements.

(13) Amend Section 64254 as follows:

Section 64254. Permits.

(a) Each local primacy agency shall issue and maintain a valid drinking water permit for all small water systems within its jurisdiction in accordance with Sections 116525 through 116550 of the Health and Safety Code. The permit shall include terms and conditions, including compliance schedules, that are necessary to assure that water served will comply with Division 5, Part 1, Chapter 7; Division 104, Part 1, Chapters 4 and 5; Division 104, Part 12, Chapters 1 through 64 and 5 of the Health and Safety Code, and Title 22, Division 4, Chapters 15, 15.5, 16, 17, and 17.5, and Title 17, Division 1, Chapter 5, Groups 2 and 4 of the California Code of Regulations.

(b) All existing permits shall be reviewed and updated as necessary at least every ten years.

(c) A copy of all permit applications for proposed new community water systems under the jurisdiction of the local primacy agency that are designed to serve 200 or more service connections shall be submitted to the Department. The local primacy agency shall not issue a permit for these systems unless the Department concurs that the systems are capable of complying with Division 5, Part 1, Chapter 7; Division 104, Part 1, Chapters 4 and 5; Division 104, Part 12, Chapters 1 through 64 and 5 of the Health and Safety Code, and Title 22, Division 4, Chapters 15, 15.5, 16, 17, and 17.5, and Title 17, Division 1, Chapter 5, Groups 2 and 4 of the California Code of Regulations.

**Amend Section 64255 as follows:**

**Section 64255. Surveillance.**

(a) The local primacy agency shall establish and maintain an inventory of all small water systems under its jurisdiction. The inventory shall be updated at least annually and shall include the following information for each system:

1. All of the information specified in section 64252(a)(6).

2. The name and telephone number of the operator of any treatment facilities utilized by the system; and

3. A copy of the current emergency notification plan required pursuant to section 4029116460 of the Health and Safety Code.

(b) The local primacy agency shall conduct a routine inspection of each small water system within its jurisdiction as follows:

1. At least once every two years on each small water system utilizing a surface water source as defined in section 64651.10.

2. At least once every two years on each small water system utilizing groundwater that is treated in order to meet drinking water standards; and

3. At least once every five years on each small water system utilizing groundwater without treatment.

(c) Each local primacy agency shall conduct a sanitary survey of each small water system within its jurisdiction at least once every five years. A sanitary survey may be conducted in lieu of any routine inspection.

(d) The local primacy agency shall identify any deficiencies found during the routine inspection or sanitary survey and shall submit a follow-up notice to the small water system describing such deficiencies and prescribing a time schedule for
corrective action. The notice shall be sent to the small water system within 60 days of the routine inspection or sanitary survey.

(e) The local primacy agency shall complete a routine inspection or sanitary survey report for each routine inspection or sanitary survey conducted within 90 days of completion of the sanitary survey or routine inspection.

(f) The local primacy agency shall determine which small water systems under its jurisdiction utilize surface water or groundwater under the direct influence of surface water and are subject to surface water treatment requirements as specified in section 64650.

NOTE: Authority Cited: Sections 4010.7 and 4023.3(h) 116350, 116375, 131052 and 131200, Health and Safety Code. Reference: Sections 4010.7 and 4023.3(h) 116330, 116375 and 116735, Health and Safety Code.
(15) Amend Section 64256 as follows:

Section 64256. Sampling and Monitoring.

(a) The local primacy agency shall notify each small water system under its jurisdiction in writing of the monitoring requirements for that system pursuant to Title 22, Division 4, Chapters 15, 15.5, 17, and 17.5 of the California Code of Regulations. The notice shall identify the specific contaminants to be monitored, the type of laboratory analyses required for each contaminant, the frequency of sampling, and any other sampling and reporting requirements applicable to that system.

(b) The local primacy agency shall ensure that each small water system under its jurisdiction complies with the sample siting plan requirements of section 64422.

(c) The local primacy agency shall establish a tracking system to assure that all required sampling and laboratory analyses are completed and reported by the small water systems pursuant to Title 22, Division 4, Chapters 15, 15.5, 17, and 17.5 of the California Code of Regulations. The tracking system shall include the date the sample was collected, the type or purpose of the sample, and the laboratory result.

(d) A local primacy agency shall maintain an ongoing record of the status of compliance with monitoring and reporting requirements of California Code of Regulations, Title 22, Division 4, Chapters 15, 15.5, 17, and 17.5 of each small water system shall be maintained by the local primacy agency.

(e) A local primacy agency shall establish a system shall be established by the local primacy agency to assure that the water quality monitoring data submitted by the small water systems is routinely reviewed for compliance with the requirements of Title 22, Division 4, Chapters 15, 15.5, 17, and 17.5 of the California Code of Regulations.
The monitoring reports shall be reviewed each month for each small water system and the data entered into the data management system at least monthly.

(16) Amend Section 64257 as follows:

Section 64257. Reporting.

(a) The following reports shall be submitted monthly in an electronic data format to the Department no later than the last day of the month following the period being reported:

(1) A report listing all small water systems that failed during the previous month to comply with drinking water monitoring and reporting regulations of Title 22, Division 4, Chapters 15, 15.5, 17, and 17.5 of the California Code of Regulations and

(2) A compliance report containing the following information for each small water system under the jurisdiction of the local primacy agency that is in violation of Title 22, Division 4, Chapters 15, 15.5, 17, and 17.5 of the California Code of Regulations:

(A) The name and water system identification number of the system;

(B) A description of the type of violation and the standard violated and

(C) A description of any enforcement action taken by the local primacy agency with respect to the violation.

(b) The following reports shall be submitted quarterly in an electronic data format to the Department no later than the last day of the quarter following the quarter being reported:

(1) A list of domestic water supply permits for small water systems that have been issued, amended, or renewed during the reporting period. The list shall include the name and the identification number of the water system and

(2) A list of the small water systems for which a routine inspection or sanitary survey was conducted during the reporting period. The list shall indicate the name and
identification number of the small water system and the type of routine inspection or sanitary survey performed.

(c) An updated inventory of small water systems under the jurisdiction of the local primacy agency shall be submitted annually in an electronic format to the Department no later than August 15 of each year.

(17) Amend Section 64258 as follows:

Section 64258. Enforcement.

(a) The local primacy agency shall take enforcement actions as necessary to assure that all small water systems under the jurisdiction of the local primacy agency are in compliance with Division 5, Part 1, Chapter 7; Division 104, Part 1, Chapters 4 and 5; Division 104, Part 12, Chapters 1 through 6 of the Health and Safety Code, and California Code of Regulations, Title 17, Division 1, Chapter 5, Groups 2 and 4, and Title 22, Division 4, Chapters 14, 15, 15.5, 16, 17, and 17.5.

(b) Each local primacy agency shall notify each small water system under their jurisdiction of any new state or federal drinking water requirements applicable to those systems.

(18) Amend Section 64259 as follows:

Section 64259. Program Management.

(a) Each local primacy agency shall establish and maintain a time accounting system for determining the amount of reimbursement to be billed to each small water system pursuant to section 4019.40116595 of the Health and Safety Code. The hourly cost rate of the local primacy agency shall be determined using the criteria set forth in section 4019.35 (b)116590(b) of the Health and Safety Code.

(b) Each local primacy agency shall establish and maintain an individual file for each small water system under its jurisdiction. The following information shall be maintained in the file:

(1) The current operating permit and all technical reports supporting it;

(2) Permit applications, permit technical reports, permits, and amended permits for a minimum of 10 years;

(3) The most recent plans, specifications, and other information submitted by the water system pertaining to sources of supply, treatment works, storage facilities, and distribution system, including water quality monitoring plans and total coliform siting plans;

(4) Inspection and sanitary survey reports for a minimum of 10 years;

(5) Copies of bacteriological water quality analyses for a minimum of 5 years; copies of all other water quality analyses for a minimum of 10 years;

(6) Correspondence, memoranda, and other written records pertaining to the system issued or written within the past three years; and

(7) Copies of all compliance orders, citations, court actions, and other enforcement documentation.
NOTE: Authority Cited: Sections 4010.7 and 4023.3(h) 116350, 116375, 131052 and 131200, Health and Safety Code. Reference: Sections 4010.7 and 4023.3(h) 116330, 116375, 116590 and 116595, Health and Safety Code.
Chapter 15. Domestic Water Quality and Monitoring Regulations

ARTICLE 1. DEFINITIONS

(19) Adopt Section 64400.05 as follows:

Section 64400.05. Combined Distribution System.

"Combined distribution system" means the interconnected distribution system consisting of the distribution systems of wholesale systems and of the consecutive systems that receive finished water.

(20) Adopt Section 64400.29 as follows:

Section 64400.29. Consecutive System.

“Consecutive system” means a public water system that receives some or all of its finished water from one or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

(21) Adopt Section 64400.36 as follows:

Section 64400.36. Dual Sample Set.

“Dual sample set” means a set of two samples collected at the same time and same location, with one sample analyzed for TTHM and the other sample analyzed for HAA5.

(22) **Adopt Section 64400.41 as follows:**

**Section 64400.41. Finished Water.**

“Finished water” means the water that is introduced into the distribution system of a public water system and is intended for distribution and consumption without further treatment, except as treatment necessary to maintain water quality in the distribution system (e.g., booster disinfection, addition of corrosion control chemicals).

(23) Amend Section 64400.45 as follows:

Section 64400.45. GAC10.

“GAC10” means granular activated carbon filter beds with an empty-bed contact time of 10 minutes based on average daily flow and a carbon reactivation frequency of once every 180 days, except that the reactivation frequency for GAC10 used as a best available technology for compliance with the TTHM and HAA5 MCLs monitored pursuant to section 64534.2(d) shall be once every 120 days.

(24) Adopt 64400.46 as follows:

Section 64400.46. GAC20.

“GAC20” means granular activated carbon filter beds with an empty-bed contact time of 20 minutes based on average daily flow and a carbon reactivation frequency of once every 240 days.

(25) **Adopt Section 64400.66 as follows:**

**Section 64400.66. Locational Running Annual Average or LRAA.**

“Locational running annual average” or “LRAA” means the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

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(26) Adopt Section 64400.90 as follows:

Section 64400.90. Operational Evaluation Levels or OEL.

“Operational evaluation level” or “OEL” means the sum of the two previous quarters’ TTHM results plus twice the current quarter’s TTHM result, divided by 4 to determine an average; or the sum of the two previous quarters’ HAA5 results plus twice the current quarter’s HAA5 result, divided by 4 to determine an average.

(27) **Adopt Section 64402.30 as follows:**

**Section 64402.30. Wholesale System.**

“Wholesale system” means a public water system that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another public water system. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

ARTICLE 2. GENERAL REQUIREMENTS

(28) Amend Section 64415 as follows:

Section 64415. Laboratory and Personnel.

(a) Except as provided in subsection (b), required analyses shall be performed by laboratories approved certified by the Department to perform such analyses by the Department, pursuant to Section 116390 Article 3, commencing with section 100825, of Chapter 4 of Part 1 of Division 101, Health and Safety Code. Unless directed otherwise by the Department, analyses shall be made in accordance with EPA approved methods as prescribed at 40 Code of Federal Regulations Sections parts 141.21 through 141.40, 141.41, 141.42, 141.66, and 141.89.

(b) Sample collection, and field tests including color, odor, turbidity, pH, temperature, and disinfectant residual shall be performed by a water treatment operator certified by the Department pursuant to Section 106875 of the Health and Safety Code or by personnel trained to collect samples and/or perform these tests perform such sample collections and/or tests by the Department, a certified laboratory, or a certified operator.

(1) The Department;

(2) A laboratory certified pursuant to subsection (a); or

(3) An operator, certified by the Department pursuant to section 106875(a) or (b) of the Health and Safety Code and trained by an entity in paragraph (1) or (2) to perform such sample collections and/or tests.

ARTICLE 4.5. TRIHALOMETHANES

(29) Repeal Section 64439 as follows:

Section 64439. Requirements.

Community water systems shall comply with the National Interim Primary Drinking Water Regulations for the control of Trihalomethanes in Drinking Water, Sections 141.2(p), (q), (r), (s) and (t), 141.6, 141.12 and 141.30 of Title 40, Code of Federal Regulations, as published in the November 29, 1979, Federal Register (Vol. 44, No. 231) and revised in the March 11, 1980, Federal Register (Vol. 45, No. 49), the December 16, 1998, Federal Register (Vol. 63, No. 241) and the January 16, 2001, Federal Register (Vol. 66, No. 10).

ARTICLE 18. NOTIFICATION OF WATER CONSUMERS AND THE DEPARTMENT

(30) Amend Section 64463.1 as follows:

Section 64463.1. Tier 1 Public Notice.

(a) Each water system shall give public notice pursuant to this section and section 64465 if any of the following occurs:

(1) Violation of the total coliform MCL when:

(A) Fecal coliform or E. coli are present in the distribution system; or

(B) When any repeat sample tests positive for coliform and the water system fails to test for fecal coliforms or E. coli in the repeat sample;

(2) Violation of the MCL for nitrate, nitrite, or total nitrate and nitrite, or when the water system fails to take a confirmation sample within 24 hours of the system’s receipt of the first sample showing an exceedance of the nitrate or nitrite MCL;

(3) Violation of a Chapter 17 treatment technique requirement resulting from a single exceedance of a maximum allowable turbidity level if:

(A) The Department determines after consultation with the water system and a review of the data that a Tier 1 public notice is required; or

(B) The consultation between the Department and the water system does not take place within 24 hours after the water system learns of the violation;

(4) Occurrence of a waterborne microbial disease outbreak, as defined in section 64651.91, or other waterborne emergency, a failure or significant interruption in water treatment processes, a natural disaster that disrupts the water supply or distribution system, or a chemical spill or unexpected loading of possible pathogens into the source water that has the potential for adverse effects on human health as a result of short-term exposure;
(5) Other violation or occurrence that has the potential for adverse effects on human health as a result of short-term exposure, as determined by the Department based on a review of all available toxicological and analytical data; or

(6) Violation of the MCL for perchlorate or when a system is unable to resample within 48 hours of the system’s receipt of the first sample showing an exceedance of the perchlorate MCL as specified in section 64432.3(d)(3); or

(7) For chlorite:
   (A) Violation of the MCL for chlorite;
   (B) When a system fails to take the required sample(s) within the distribution system, on the day following an exceedance of the MCL at the entrance to the distribution system; or
   (C) When a system fails to take a confirmation sample pursuant to section 64534.2(b)(4); or

(8) Violation of the MRDL for chlorine dioxide; or when a system fails to take the required sample(s) within the distribution system, on the day following an exceedance of the MRDL at the entrance to the distribution system.

(b) As soon as possible within 24 hours after learning of any of the violations in subsection (a) or being notified by the Department that it has determined there is a potential for adverse effects on human health [pursuant to paragraph (a)(4), (5), or (6)], the water system shall:

   (1) Give public notice pursuant to this section;

   (2) Initiate consultation with the Department within the same timeframe; and
(3) Comply with any additional public notice requirements that are determined by the consultation to be necessary to protect public health.

(c) Each water system shall deliver the public notice in a manner designed to reach residential, transient, and nontransient users of the water system and shall use, as a minimum, one of the following forms:

(1) Radio or television;

(2) Posting in conspicuous locations throughout the area served by the water system;

(3) Hand delivery to persons served by the water system; or

(4) Other method approved by the Department, based on the method’s ability to inform water system users.

(31) Amend Section 64463.4 as follows:

Section 64463.4. Tier 2 Public Notice.

(a) Each water system shall give public notice pursuant to this section if any of the following occurs:

(1) Any violation of the MCL, MRDL, and treatment technique requirements, except:

(A) Where a Tier 1 public notice is required under section 64463.1; or

(B) Where the Department determines that a Tier 1 public notice is required, based on potential health impacts and persistence of the violations;

(2) All violations of the monitoring and testing procedure requirements in sections 64421 through 64426.1, article 3 (Primary Standards – Bacteriological Quality), for which the Department determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations;

(3) Other violations of the monitoring and testing procedure requirements in this chapter, and chapters 15.5, 17 and 17.5, for which the Department determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations; or

(4) Failure to comply with the terms and conditions of any variance or exemption in place.

(b) Each water system shall give the notice as soon as possible within 30 days after it learns of a violation or occurrence specified in subsection (a), except that the water system may request an extension of up to 60 days for providing the notice. This extension would be subject to the Department’s written approval based on the violation or occurrence having been resolved and the Department’s determination that public
health and welfare would in no way be adversely affected. In addition, the water system shall:

(1) Maintain posted notices in place for as long as the violation or occurrence continues, but in no case less than seven days;

(2) Repeat the notice every three months as long as the violation or occurrence continues. Subject to the Department's written approval based on its determination that public health would in no way be adversely affected, the water system may be allowed to notice less frequently but in no case less than once per year. No allowance for reduced frequency of notice shall be given in the case of a total coliform MCL violation or violation of a Chapter 17 treatment technique requirement; and

(3) For turbidity violations pursuant to subsections 64652.5(c)(2) and 64653(c), (d) and (f), as applicable, a water system shall consult with the Department as soon as possible within 24 hours after the water system learns of the violation to determine whether a Tier 1 public notice is required. If consultation does not take place within 24 hours, the water system shall give Tier 1 public notice within 48 hours after learning of the violation.

(c) Each water system shall deliver the notice, in a manner designed to reach persons served, within the required time period as follows:

(1) Unless otherwise directed by the Department in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, community water systems shall give public notice by;

(A) Mail or direct delivery to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment
building owners, or large private employers), and other service connections to which water is delivered by the water system; and

(B) Use of one or more of the following methods to reach persons not likely to be reached by a mailing or direct delivery (renters, university students, nursing home patients, prison inmates, etc.):

1. Publication in a local newspaper;
2. Posting in conspicuous public places served by the water system, or on the Internet; or
3. Delivery to community organizations.

(2) Unless otherwise directed by the Department in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, noncommunity water systems shall give the public notice by:

(A) Posting in conspicuous locations throughout the area served by the water system; and

(B) Using one or more of the following methods to reach persons not likely to be reached by a public posting:

1. Publication in a local newspaper or newsletter distributed to customers;
2. E-mail message to employees or students;
3. Posting on the Internet or intranet; or
4. Direct delivery to each customer.

(32) Repeal Section 64468.5 as follows:

Section 64468.5. Health Effects Language – Disinfectants and Disinfection Byproducts.

Pursuant to Section 64467, the explanation of potential adverse health effects for disinfectants and disinfection byproducts shall include the following mandatory language for the designated contaminants:

(a) Chlorine: “The California Department of Health Services (DHS) sets drinking water standards and has determined that chlorine is a health concern at certain levels of exposure. Chlorine is added to drinking water as a disinfectant to kill bacteria and other disease-causing microorganisms and is also added to provide continuous disinfection throughout the distribution system. Disinfection is required for surface water systems. However, at high doses for extended periods of time, chlorine has been shown to affect blood and the liver in laboratory animals. DHS has set a drinking water standard for chlorine to protect against the risk of these adverse effects. Drinking water which meets this DHS standard is associated with little to none of this risk and should be considered safe with respect to chlorine.”

(b) Chloramines: “The California Department of Health Services (DHS) sets drinking water standards and has determined that chloramines are a health concern at certain levels of exposure. Chloramines are added to drinking water as a disinfectant to kill bacteria and other disease-causing microorganisms and are also added to provide continuous disinfection throughout the distribution system. Disinfection is required for surface water systems. However, at high doses for extended periods of time, chloramines have been shown to affect blood and the liver in laboratory animals. DHS has set a drinking water standard for chloramines to protect against the risk of these
adverse effects. Drinking water which meets this DHS standard is associated with little to none of this risk and should be considered safe with respect to chloramines."

(c) Chlorine Dioxide: “The California Department of Health Services (DHS) sets drinking water standards and has determined that chlorine dioxide is a health concern at certain levels of exposure. Chlorine dioxide is used in water treatment to kill bacteria and other disease-causing microorganisms and can be used to control tastes and odors. Disinfection is required for surface water systems. However, at high doses, chlorine dioxide-treated drinking water has been shown to affect blood in laboratory animals. Also, high levels of chlorine dioxide given to laboratory animals in drinking water have been shown to cause neurological effects on the developing nervous system. These neurodevelopmental effects may occur as a result of a short-term excessive chlorine dioxide exposure. To protect against such potentially harmful exposures, DHS requires chlorine dioxide monitoring at the treatment plant, where disinfection occurs, and at representative points in the distribution system serving water users. DHS has set a drinking water standard for chlorine dioxide to protect against the risk of these adverse effects.” [In addition to this language, systems with a violation at the treatment plant, but not in the distribution system, shall include the language in paragraph (1); systems with a violation in the distribution system shall include the language in paragraph (2) and provide notification pursuant to section 64464.1(a)—Method 1.]

(1) “The chlorine dioxide violations reported today are the result of exceedances at the treatment facility only, and do not include violations within the distribution system serving users of this water supply. Continued compliance with chlorine dioxide levels
within the distribution system minimizes the potential risk of these violations to present consumers.”

(2) “The chlorine dioxide violations reported today include exceedances of the DHS standard within the distribution system serving water users. Violations of the chlorine dioxide standard within the distribution system may harm human health based on short-term exposures. Certain groups, including pregnant women, infants, and young children, may be especially susceptible to adverse effects of excessive exposure to chlorine dioxide-treated water. The purpose of this notice is to advise that such persons should consider reducing their risk of adverse effects from these chlorine dioxide violations by seeking alternate sources of water for human consumption until such exceedances are rectified. The Local Health Department and DHS are the best sources for information concerning alternate sources of drinking water.”

(d) Disinfection Byproducts and Treatment Technique for DBPs: “The California Department of Health Services (DHS) sets drinking water standards and requires the disinfection of drinking water. However, when used in the treatment of drinking water, disinfectants react with naturally occurring organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). DHS has determined that a number of DBPs are a health concern at certain levels of exposure. Certain DBPs, including some trihalomethanes (THMs) and some haloacetic acids (HAAs), have been shown to cause cancer in laboratory animals. Other DBPs have been shown to affect the liver and the nervous system, and cause reproductive or developmental effects in laboratory animals. Exposure to certain DBPs may produce similar effects in people. DHS has set standards to limit exposure to THMs, HAAs, and other DBPs.”
(e) Bromate: “The California Department of Health Services (DHS) sets drinking water standards and has determined that bromate is a health concern at certain levels of exposure. Bromate is formed as a byproduct of ozone disinfection of drinking water. Ozone reacts with naturally occurring bromide in the water to form bromate. Bromate has been shown to produce cancer in rats. DHS has set a drinking water standard to limit exposure to bromate.”

(f) Chlorite: “The California Department of Health Services (DHS) sets drinking water standards and has determined that chlorite is a health concern at certain levels of exposure. Chlorite is formed from the breakdown of chlorine dioxide, a drinking water disinfectant. Chlorite in drinking water has been shown to affect blood and the developing nervous system. DHS has set a drinking water standard for chlorite to protect against these effects. Drinking water which meets this standard is associated with little to none of these risks and should be considered safe with respect to chlorite.”

ARTICLE 19. RECORDS, REPORTING AND RECORDKEEPING

(33) Amend Section 64470 as follows:

Section 64470. Recordkeeping.

(a) Each water supplier shall maintain records on all water quality and system water outage complaints received, both verbal and written, received and corrective action taken. These records shall be retained for a period of five years for Department review.

(b) Each water supplier shall retain, on or at a convenient location near the water utility premises, records as indicated below:

(1) Records of bacteriological microbiological analyses and turbidity analyses performed at least the 5 most recent five years and chemical analyses performed at least the most recent 10 years. Actual laboratory reports may be kept, or data may be transferred to tabular summaries, provided that the following information is included:

(A) The date, place, and time of sampling; and identification of the person who collected the sample;

(B) Identification of the sample as a routine sample, check sample, raw or finished water or other special sample;

(C) Date of report;

(D) Name of the laboratory and either the person responsible for performing the analysis or the laboratory director;

(E) The analytical technique or method used; and

(F) The results of the analysis.

(2) Records and resultant corrective actions shall be kept not less than three years following the final action taken to correct a particular violation;
(3) Copies of any written reports, summaries, or communications relating to sanitary surveys of the system conducted by the water supplier, a private consultant or any local, state or federal agency, for not less than 10 years following completion of the sanitary survey involved.

(4) Variances or exemptions granted to the system, for not less than five years following the expiration of such variance or exemption.

(5) Copies of any Tier 1, Tier 2, and Tier 3 public notices, for not less than three years.

(6) Copies of monitoring plans developed pursuant to sections 64416, 64422, and 64534.8 for the same period of time as the records of analyses taken under the plan are required to be kept pursuant to paragraph (1).

ARTICLE 20. CONSUMER CONFIDENCE REPORT

(34) Amend Section 64481 as follows:

Section 64481. Content of the Consumer Confidence Report.

(a) Each Consumer Confidence Report shall contain information on the source of the water delivered, including:

(1) The type of water delivered by the water system, (e.g., surface water, ground water); and the commonly used name (if any) and location of the body (or bodies) of water.; and

(2) If a source water assessment has been completed, notification that the assessment is available, how to obtain it, the date it was completed or last updated, and a brief summary of the system's vulnerability to potential sources of contamination, using language provided by the Department if the Department conducted the assessment.

(b) For any of the following terms used in the Consumer Confidence Report, the water system shall provide the specified language below:

(1) Regulatory Action Level: “The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.”

(2) Maximum Contaminant Level or MCL: “The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.”

(3) Maximum Contaminant Level Goal or MCLG: “The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.”
(4) Public Health Goal or PHG: “The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.”

(5) Primary Drinking Water Standard or PDWS: “MCLs, MRDLs, and treatment techniques for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.”

(6) Treatment technique: “A required process intended to reduce the level of a contaminant in drinking water.”

(7) Variances and exemptions: “Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.”

(8) Maximum residual disinfectant level or MRDL: “The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.”

(9) Maximum residual disinfectant level goal or MRDLG: “The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.”

(c) If any of the following are detected, information for each pursuant to subsection (d) shall be included in the Consumer Confidence Report:

(1) Contaminants subject to an MCL, regulatory action level, MRDL or treatment technique (regulated contaminants), as specified in sections 64426.1, 64431, 64439, 64441, 64442, 64443, 64444, 64448, 64449, 64533, 64533.5, 64536, 64536.2, 64653 and 64672.364678.
(2) Contaminants specified in section 6445040 Code of Federal Regulations part 141.40 (7-1-2007 edition) for which monitoring is required (unregulated contaminants) or in 40 CFR Parts 9, 141 and 142 (Federal Register 64(180), p. 50556-50620, September 17, 1999); and

(3) Disinfection by-products or microbial contaminants detected in the finished water for which monitoring is required by 40 CFR §§141.142 and 141.143 (Information Collection Rule, Federal Register 61, p 24354, May 14, 1996;), except as provided under subsection (e); and

(4) Sodium and hardness.

(d) For contaminants identified in subsection (c), the water system shall include in the Consumer Confidence Report one table or several adjacent tables that have been developed pursuant to this subsection. Any additional monitoring results that a water system chooses to include in its Consumer Confidence Report shall be displayed separately.

(1) The data in the table(s) shall be derived from data collected to comply with U.S. Environmental Protection Agency (USEPA) and Department monitoring and analytical requirements during calendar year 2000 for the first Consumer Confidence Report and subsequent calendar years thereafter except that:

(A) Where a system is allowed to monitor for regulated contaminants less often than once a year, the table(s) shall include the date and results of the most recent sampling and the Consumer Confidence Report shall include a brief statement indicating that the data presented in the table(s) are from the most recent testing done in accordance with the regulations. No data older than 9 years need be included.
(B) Results of monitoring in compliance with 40 CFR §§141.142 and 141.143 (Information Collection Rule, Federal Register 61, p 24354, May 14, 1996), need only be included in the table(s) for 5 years from the date of the last sampling or until any of the detected contaminants becomes regulated and subject to routine monitoring requirements, whichever comes first. Both the average and range sample results for the most recent year of sampling shall be included for any detected contaminant.

(2) For detected regulated contaminants (listed referenced in subsection (c)(1)), the table(s) shall include:

(A) The MCL expressed as a number equal to or greater than 1.0;

(B) For a primary MCL, the public health goal (PHG) in the same units as the MCL; or if no PHG has been set for the contaminant, the table shall include the USEPA maximum contaminant level goal in the same units as the MCL;

(C) For a detected contaminant that does not have an MCL, the table(s) shall indicate whether there is a treatment technique or specify the regulatory action level or MRDL (and MRDLG) applicable to that contaminant, and the Consumer Confidence Report shall include the appropriate language specified in subsection (b);

(D) For detected contaminants subject to an MCL, except turbidity and total coliforms, the sample result(s) collected at compliance monitoring sampling points shall be reported in the same units as the MCL as follows:

1. When compliance is determined by the results of a single sample, an initial sample averaged with one or two confirmation sample(s), or an average of four quarterly or six monthly samples, results shall be reported as follows:
A. For a single sampling point, or multiple sampling points for which data is being individually listed on the Consumer Confidence Report: the sample result and, if more than one sample was collected, the average and range of the sample results.

B. For more than one multiple sampling points, each of which has been sampled only once and for which data is being summarized together on the Consumer Confidence Report: the average and range of the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported.

C. For multiple sampling points, one or more of which has been sampled more than once and for which data is being summarized together on the Consumer Confidence Report: the average of the individual sampling point averages and range of all the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported.

2. When compliance with the MCL is determined by calculating a running annual average of all samples taken at a sampling point monitoring location:

A. The highest running annual average of the sampling point monitoring location and the range of sample results or, if sampling point monitoring locations are summarized together for the Consumer Confidence Report, the highest running annual average of any of the sampling point monitoring locations and the range of sample results from all the sampling point monitoring locations.

B. For TTHM and HAA5 monitored pursuant to section 64534.2(d): the highest locational running annual average (LRAA) for TTHM and HAA5 and the range of
individual sample results for all monitoring locations. If more than one location exceeds the TTHM or HAA5 MCL, include the LRAA for all locations that exceed the MCL.

3. When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all sampling point averages: the highest running annual average and the range of sample results from all the sampling points. The water system shall include individual sample results for the Individual Distribution System Evaluation (IDSE) conducted pursuant to chapter 15.5, section 64530(c), when determining the range of TTHM and HAA5 results to be reported for the calendar year that the IDSE samples were taken;

4. When compliance with the MCL is determined on the basis of monitoring after treatment installed to remove a contaminant: the average level detected in the water entering the distribution system and the range of sample results;

5. If an MCL compliance determination was made in the year for which sample results are being reported and that determination was based on an average of results from both the previous and reporting years, then the compliance determination average shall be reported, but the range shall be based only on results from the year for which data is being reported.

(E) For turbidity:

1. When it is reported pursuant to the requirements of section 64652.5 (filtration avoidance): the highest value;

2. When it is reported pursuant to section 64653 (filtration): the highest single measurement based on compliance reporting and the lowest monthly percentage of
samples meeting the turbidity limits specified in section 64653 for the filtration technology being used.

(F) For lead and copper: the 90th percentile value of the most recent round of sampling, the number of sites sampled, and the number of sampling sites exceeding the action level.

(G) For total coliform:
1. The highest monthly number of positive samples for systems collecting fewer than 40 samples per month; or
2. The highest monthly percentage of positive samples for systems collecting at least 40 samples per month.

(H) For fecal coliform or E. coli: the total number of positive samples during the year; and

(I) The likely source(s) of detected contaminants for any detected contaminant with an MCL. If the water system lacks specific information on the likely source, the table(s) shall include one or more of the typical sources for that contaminant listed in appendices 64481-A or 64481-B that are most applicable to the system.

(3) The table(s) shall clearly identify any data indicating violations of MCLs, regulatory action levels, MRDLs, or treatment techniques and the Consumer Confidence Report shall give information on each violation including the length of the violation, potential adverse health effects (primary MCLs, PDWS only), and actions taken by the system to address the violation. To describe the potential health effects, the system shall use the relevant language pursuant to appendices 64465-A through H; and
(4) For detected unregulated contaminants for which monitoring is required (except *Cryptosporidium*), the table(s) shall contain the average and range at which the contaminant was detected.

(e) If the system has performed any monitoring for *Cryptosporidium*, including monitoring performed to satisfy the requirements of 40 CFR §141.143 (Information Collection Rule, Federal Register 61, p 24354, May 14, 1996), that indicates that *Cryptosporidium* may be present in the source water or the finished water, the Consumer Confidence Report shall include a summary of the monitoring results and an explanation of their significance.

(f) If the system has performed any monitoring for radon that indicates that radon is present in the finished water, the Consumer Confidence Report shall include the monitoring results and an explanation of their significance.

(g) For the year covered by the report, the Consumer Confidence Report shall note any violations of paragraphs (1) through (7) and give related information, including any potential adverse health effects, and the steps the system has taken to correct the violation.

(1) Monitoring and reporting of compliance data.

(2) Filtration, and disinfection, and recycled provisions prescribed by sections 64652, 64652.5, 64653, 64653.5(b), or 64654. For systems that have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes that constitutes a violation, the Consumer Confidence Report shall include the following language as part of the explanation of potential adverse health effects: “Inadequately treated water may contain organisms that can cause...”
illness when consumed. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches."

(3) One or more actions prescribed by the lead and copper requirements in sections 64673 through 64679, 64674, 64683 through 64686, and 64688. To address potential adverse health effects, the Consumer Confidence Report shall include the applicable language pursuant to appendix 64465-D for lead, copper, or both.

(4) Treatment technique requirements for Acrylamide and Epichlorohydrin in section 64448; to address potential adverse health effects, the Consumer Confidence Report shall include the relevant language from appendix 64465-H.

(5) Recordkeeping of compliance data.

(6) Special monitoring requirements prescribed by sections 64450, and 64449(cb)(2) and (ig).

(7) Terms of a variance, an exemption, or an administrative or judicial order.

(h) If a system is operating under the terms of a variance or an exemption issued under section 116430 or 116425 of the Health and Safety Code, the Consumer Confidence Report shall contain:

(1) An explanation of the reasons for the variance or exemption;

(2) The date on which the variance or exemption was issued;

(3) A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and

(4) A notice of any opportunity for public input in the review, or renewal, of the variance or exemption.
(i) The Consumer Confidence Report shall contain the language in paragraphs (1) through (4).

(1) “The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.”

(2) “Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

(E) Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.”

(3) “In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health
Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health."

(4) "Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA’s Safe Drinking Water Hotline (1-800-426-4791)."

(j) All Consumer Confidence Reports shall prominently display the following language: “Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)."

(k) The Consumer Confidence Report shall include the telephone number of the owner, operator, or designee of the water system as a source of additional information concerning the report.
(l) All Consumer Confidence Reports shall contain information in Spanish regarding the importance of the report or contain a telephone number or address where Spanish-speaking residents may contact the system to obtain a translated copy of the report or assistance in Spanish. For each non-English speaking group other than Spanish-speaking that exceeds 1,000 residents or 10% of the residents in a community, whichever is less, the Consumer Confidence Report shall contain information in the appropriate language(s) regarding the importance of the report or contain a telephone number or address where such residents may contact the system to obtain a translated copy of the report or assistance in the appropriate language.

(m) The Consumer Confidence Report shall include information (e.g., time and place of regularly scheduled board meetings) about opportunities for public participation in decisions that may affect the quality of the water.

Appendix 64481-A.

Typical Origins of Contaminants with Primary MCLs, MRDLs

Regulatory Action Levels, and Treatment Techniques

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Major origins in drinking water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microbiological</td>
<td></td>
</tr>
<tr>
<td>Total coliform bacteria</td>
<td>Naturally present in the environment</td>
</tr>
<tr>
<td>Fecal coliform and <em>E. coli</em></td>
<td>Human and animal fecal waste</td>
</tr>
<tr>
<td>Turbidity</td>
<td>Soil runoff</td>
</tr>
<tr>
<td><em>Surface water treatment</em></td>
<td></td>
</tr>
<tr>
<td><strong>Giardia lamblia</strong></td>
<td>Naturally present in the environment</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td><strong>Viruses</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Heterotrophic plate count bacteria</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Legionella</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cryptosporidium</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Radioactive</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Beta particle activity</td>
<td>Decay of natural and man-made deposits</td>
</tr>
<tr>
<td>Strontium-90</td>
<td>Decay of natural and man-made deposits</td>
</tr>
<tr>
<td>Tritium</td>
<td>Decay of natural and man-made deposits</td>
</tr>
<tr>
<td>Gross Alpha particle activity</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Combined radium 226/228</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Uranium</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Inorganic</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>Erosion of natural deposits; residue from some surface water treatment processes</td>
</tr>
<tr>
<td>Antimony</td>
<td>Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder</td>
</tr>
<tr>
<td>Arsenic</td>
<td>Erosion of natural deposits; runoff from orchards; glass and electronics production wastes</td>
</tr>
<tr>
<td>Asbestos</td>
<td>Internal corrosion of asbestos cement water mains;</td>
</tr>
<tr>
<td>Element</td>
<td>Sources &amp; Impacts</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Barium</td>
<td>Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits</td>
</tr>
<tr>
<td>Beryllium</td>
<td>Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries</td>
</tr>
<tr>
<td>Cadmium</td>
<td>Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints</td>
</tr>
<tr>
<td>Chromium</td>
<td>Discharge from steel and pulp mills and chrome plating; erosion of natural deposits</td>
</tr>
<tr>
<td>Copper</td>
<td>Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</td>
</tr>
<tr>
<td>Cyanide</td>
<td>Discharge from steel/metal, plastic and fertilizer factories</td>
</tr>
<tr>
<td>Fluoride</td>
<td>Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories</td>
</tr>
<tr>
<td>Lead</td>
<td>Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits</td>
</tr>
<tr>
<td>Element</td>
<td>Source of Contamination</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mercury</td>
<td>Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland</td>
</tr>
<tr>
<td>Nickel</td>
<td>Erosion of natural deposits; discharge from metal factories</td>
</tr>
<tr>
<td>Nitrate</td>
<td>Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits</td>
</tr>
<tr>
<td>Nitrite</td>
<td>Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits</td>
</tr>
<tr>
<td>Perchlorate</td>
<td>Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.</td>
</tr>
<tr>
<td>Selenium</td>
<td>Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)</td>
</tr>
<tr>
<td>Thallium</td>
<td>Leaching from ore-processing sites; discharge from electronics, glass, and drug factories</td>
</tr>
</tbody>
</table>

*Synthetic organic*
<table>
<thead>
<tr>
<th>Chemical</th>
<th>Source Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4-D</td>
<td>Runoff from herbicide used on row crops, range land, lawns, and aquatic weeds</td>
</tr>
<tr>
<td>2,4,5-TP (Silvex)</td>
<td>Residue of banned herbicide</td>
</tr>
<tr>
<td>Acrylamide</td>
<td>Added to water during sewage/wastewater treatment</td>
</tr>
<tr>
<td>Alachlor</td>
<td>Runoff from herbicide used on row crops</td>
</tr>
<tr>
<td>Atrazine</td>
<td>Runoff from herbicide used on row crops and along railroad and highway right-of-ways</td>
</tr>
<tr>
<td>Bentazon</td>
<td>Runoff/leaching from herbicide used on beans, peppers, corn, peanuts, rice, and ornamental grasses</td>
</tr>
<tr>
<td>Benzo(a)pyrene [PAH]</td>
<td>Leaching from linings of water storage tanks and distribution mains</td>
</tr>
<tr>
<td>Carbofuran</td>
<td>Leaching of soil fumigant used on rice and alfalfa, and grape vineyards</td>
</tr>
<tr>
<td>Chlordane</td>
<td>Residue of banned insecticide</td>
</tr>
<tr>
<td>Dalapon</td>
<td>Runoff from herbicide used on right-of-ways, and crops and landscape maintenance</td>
</tr>
<tr>
<td>Dibromochloropropane (DBCP)</td>
<td>Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit</td>
</tr>
<tr>
<td>Di(2-ethylhexyl) adipate</td>
<td>Discharge from chemical factories</td>
</tr>
<tr>
<td>Di(2-ethylhexyl) phthalate</td>
<td>Discharge from rubber and chemical factories; inert ingredient in pesticides</td>
</tr>
<tr>
<td>Dinoseb</td>
<td>Runoff from herbicide used on soybeans, vegetables,</td>
</tr>
<tr>
<td>Chemical</td>
<td>Source Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Dioxin [2,3,7,8-TCDD]</td>
<td>Emissions from waste incineration and other combustion; discharge from chemical factories</td>
</tr>
<tr>
<td>Diquat</td>
<td>Runoff from herbicide use for terrestrial and aquatic weeds</td>
</tr>
<tr>
<td>Endothall</td>
<td>Runoff from herbicide use for terrestrial and aquatic weeds; defoliant</td>
</tr>
<tr>
<td>Endrin</td>
<td>Residue of banned insecticide and rodenticide</td>
</tr>
<tr>
<td>Epichlorohydrin</td>
<td>Discharge from industrial chemical factories; impurity of some water treatment chemicals</td>
</tr>
<tr>
<td>Ethylene dibromide (EDB)</td>
<td>Discharge from petroleum refineries; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching from grain and fruit crops</td>
</tr>
<tr>
<td>Glyphosate</td>
<td>Runoff from herbicide use</td>
</tr>
<tr>
<td>Heptachlor</td>
<td>Residue of banned insecticide</td>
</tr>
<tr>
<td>Heptachlor epoxide</td>
<td>Breakdown of heptachlor</td>
</tr>
<tr>
<td>Hexachlorobenzene</td>
<td>Discharge from metal refineries and agricultural chemical factories; byproduct of chlorination reactions in wastewater</td>
</tr>
<tr>
<td>Hexachlorocyclo-pentadiene</td>
<td>Discharge from chemical factories</td>
</tr>
<tr>
<td>Lindane</td>
<td>Runoff/leaching from insecticide used on cattle, lumber, and gardens</td>
</tr>
<tr>
<td>Chemical</td>
<td>Discharge/Use</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Methoxychlor</td>
<td>Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock</td>
</tr>
<tr>
<td>Molinate [Ordram]</td>
<td>Runoff/leaching from herbicide used on rice</td>
</tr>
<tr>
<td>Oxamyl [Vydate]</td>
<td>Runoff/leaching from insecticide used on field crops, fruits and ornamentals, especially apples, potatoes, and tomatoes</td>
</tr>
<tr>
<td>Pentachlorophenol</td>
<td>Discharge from wood preserving factories, cotton and other insecticidal/herbicidal uses</td>
</tr>
<tr>
<td>Picloram</td>
<td>Herbicide runoff</td>
</tr>
<tr>
<td>Polychlorinated biphenyls [PCBs]</td>
<td>Runoff from landfills; discharge of waste chemicals</td>
</tr>
<tr>
<td>Simazine</td>
<td>Herbicide runoff</td>
</tr>
<tr>
<td>Thiobencarb</td>
<td>Runoff/leaching from herbicide used on rice</td>
</tr>
<tr>
<td>Toxaphene</td>
<td>Runoff/leaching from insecticide used on cotton and cattle</td>
</tr>
<tr>
<td><strong>Volatile organic</strong></td>
<td></td>
</tr>
<tr>
<td>Benzene</td>
<td>Discharge from plastics, dyes and nylon factories; leaching from gas storage tanks and landfills</td>
</tr>
<tr>
<td>Carbon tetrachloride</td>
<td>Discharge from chemical plants and other industrial activities</td>
</tr>
<tr>
<td>1,2-Dichlorobenzene</td>
<td>Discharge from industrial chemical factories</td>
</tr>
<tr>
<td>1,4-Dichlorobenzene</td>
<td>Discharge from industrial chemical factories</td>
</tr>
<tr>
<td>Compound</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1,1-Dichloroethane</td>
<td>Extraction and degreasing solvent; used in manufacture of pharmaceuticals, stone, clay and glass products; fumigant</td>
</tr>
<tr>
<td>1,2-Dichloroethane</td>
<td>Discharge from industrial chemical factories</td>
</tr>
<tr>
<td>1,1-Dichloroethylene</td>
<td>Discharge from industrial chemical factories</td>
</tr>
<tr>
<td>cis-1,2-Dichloroethylene</td>
<td>Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination</td>
</tr>
<tr>
<td>trans-1,2-Dichloroethylene</td>
<td>Discharge from industrial chemical factories; minor biodegradation byproduct of TCE and PCE groundwater contamination</td>
</tr>
<tr>
<td>Dichloromethane</td>
<td>Discharge from pharmaceutical and chemical factories; insecticide</td>
</tr>
<tr>
<td>1,2-Dichloropropane</td>
<td>Discharge from industrial chemical factories; primary component of some fumigants</td>
</tr>
<tr>
<td>1,3-Dichloropropene</td>
<td>Runoff/leaching from nematocide used on croplands</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>Discharge from petroleum refineries; industrial chemical factories</td>
</tr>
<tr>
<td>Methyl-tert-butyl ether (MTBE)</td>
<td>Leaking underground storage tanks; discharge from petroleum and chemical factories.</td>
</tr>
<tr>
<td>Monochlorobenzene</td>
<td>Discharge from industrial and agricultural chemical factories and drycleaning facilities</td>
</tr>
<tr>
<td>Styrene</td>
<td>Discharge from rubber and plastic factories; leaching</td>
</tr>
<tr>
<td>Substance</td>
<td>Source Description</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane</td>
<td>Discharge from industrial and agricultural chemical factories; solvent used in production of TCE, pesticides, varnish and lacquers</td>
</tr>
<tr>
<td>Tetrachloroethylene (PCE)</td>
<td>Discharge from factories, dry cleaners, and auto shops (metal degreaser)</td>
</tr>
<tr>
<td>1,2,4-Trichlorobenzene</td>
<td>Discharge from textile-finishing factories</td>
</tr>
<tr>
<td>1,1,1-Trichloroethane</td>
<td>Discharge from metal degreasing sites and other factories; manufacture of food wrappings</td>
</tr>
<tr>
<td>1,1,2-Trichloroethane</td>
<td>Discharge from industrial chemical factories</td>
</tr>
<tr>
<td>Trichloroethylene (TCE)</td>
<td>Discharge from metal degreasing sites and other factories</td>
</tr>
<tr>
<td>TTHMs [total trihalomethanes]</td>
<td>By-product of drinking water chlorination</td>
</tr>
<tr>
<td>Toluene</td>
<td>Discharge from petroleum and chemical factories; underground gas tank leaks</td>
</tr>
<tr>
<td>Trichlorofluoromethane</td>
<td>Discharge from industrial factories; degreasing solvent; propellant and refrigerant</td>
</tr>
<tr>
<td>1,1,2-Trichloro-1,2,2-Trifluoroethane</td>
<td>Discharge from metal degreasing sites and other factories; drycleaning solvent; refrigerant</td>
</tr>
<tr>
<td>Vinyl chloride</td>
<td>Leaching from PVC piping; discharge from plastics factories; biodegradation byproduct of TCE and PCE groundwater contamination</td>
</tr>
<tr>
<td>Xylenes</td>
<td>Discharge from petroleum and chemical factories; fuel solvent</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------------------------------------------</td>
</tr>
</tbody>
</table>

**Disinfection Byproducts, Disinfection Byproduct Precursors, and Disinfectant Residuals**

<table>
<thead>
<tr>
<th>Total trihalomethanes (TTHM)</th>
<th>Byproduct of drinking water disinfection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloacetic acids (five) (HAA5)</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>Bromate</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>Chloramines</td>
<td>Drinking water disinfectant added for treatment</td>
</tr>
<tr>
<td>Chlorine</td>
<td>Drinking water disinfectant added for treatment</td>
</tr>
<tr>
<td>Chlorite</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>Chlorine dioxide</td>
<td>Drinking water disinfectant added for treatment</td>
</tr>
<tr>
<td>Control of disinfection byproduct precursors (Total Organic Carbon)</td>
<td>Various natural and manmade sources</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Color</td>
<td>Naturally-occurring organic materials</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Natural or industrially-influenced balance of hydrogen, carbon, and oxygen in the water; affected by temperature and other factors.</td>
</tr>
<tr>
<td>Copper</td>
<td>Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</td>
</tr>
<tr>
<td>Foaming Agents (MBAS)</td>
<td>Municipal and industrial waste discharges</td>
</tr>
<tr>
<td>Iron</td>
<td>Leaching from natural deposits; industrial wastes</td>
</tr>
<tr>
<td>Manganese</td>
<td>Leaching from natural deposits</td>
</tr>
<tr>
<td>Methly-tert-butyl ether (MTBE)</td>
<td>Leaking underground storage tanks; discharge from petroleum and chemical factories;</td>
</tr>
<tr>
<td>Odor---Threshold</td>
<td>Naturally-occurring organic materials</td>
</tr>
<tr>
<td>Silver</td>
<td>Industrial discharges</td>
</tr>
<tr>
<td>Thiobencarb</td>
<td>Runoff/leaching from rice herbicide</td>
</tr>
<tr>
<td>Turbidity</td>
<td>Soil runoff</td>
</tr>
<tr>
<td>Zinc</td>
<td>Runoff/leaching from natural deposits; industrial wastes</td>
</tr>
<tr>
<td>Total dissolved solids</td>
<td>Runoff/leaching from natural deposits</td>
</tr>
<tr>
<td>Specific conductance</td>
<td>Substances that form ions when in water; seawater influence</td>
</tr>
<tr>
<td>Chloride</td>
<td>Runoff/leaching from natural deposits; seawater influence</td>
</tr>
<tr>
<td>Sulfate</td>
<td>Runoff/leaching from natural deposits; industrial wastes</td>
</tr>
</tbody>
</table>

Chapter 15.5. Disinfectant Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors

ARTICLE 1. GENERAL REQUIREMENTS AND DEFINITIONS

(35) Amend Section 64530 as follows:

Section 64530. Applicability of this Chapter.

(a) Community water systems and nontransient, noncommunity water systems that treat their water with a chemical disinfectant in any part of the treatment process or which provide water that contains a chemical disinfectant shall comply with the requirements of this chapter beginning on the dates specified in paragraphs (1) or (2), except as provided for in subsections (c) and (d).

(1) Systems using approved surface water and serving 10,000 or more persons shall comply beginning January 1, 2002.

(2) Systems using approved surface water and serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water shall comply beginning January 1, 2004.

(b) Transient noncommunity water systems using chlorine dioxide shall comply with the requirements for chlorine dioxide in this chapter beginning on the dates specified in paragraphs (1) or (2).

(1) Systems using approved surface water and serving 10,000 or more persons shall comply beginning January 1, 2002.

(2) Systems using approved surface water and serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water shall comply beginning January 1, 2004.
(c) Community water systems, and nontransient noncommunity water systems serving at least 10,000 persons, using a primary or residual disinfectant other than ultraviolet light or delivering water that has been treated with a primary or residual disinfectant other than ultraviolet light shall comply with the Individual Distribution System Evaluation (IDSE) requirements of 40 Code of Federal Regulations, parts 141.600 and either 141.601 and 141.605, 141.602 and 141.605, 141.603, or 141.604 (71 Fed. Reg. 483 (January 4, 2006); as amended at 74 Fed. Reg. 30958 (June 29, 2009)), which are incorporated by reference.

(d) Community water systems and nontransient noncommunity water systems using a primary or residual disinfectant other than ultraviolet light or delivering water that has been treated with a primary or residual disinfectant other than ultraviolet light shall:

1. Comply with the applicable TTHM and HAA5 compliance date in table 64530-A;

   **Table 64530-A**

<table>
<thead>
<tr>
<th>TTHM and HAA5 Compliance Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shall comply with TTHM and HAA5 monitoring pursuant to section 64534.2(d)</td>
</tr>
<tr>
<td>Systems of this type...</td>
</tr>
<tr>
<td>(a) Systems that are not part of a combined distribution system</td>
</tr>
<tr>
<td>(1) ≥100,000</td>
</tr>
<tr>
<td>(2) 50,000 – 99,999</td>
</tr>
</tbody>
</table>
serve the largest population in the combined distribution system and serving a population of...

(3) 10,000 – 49,999

October 1, 2013

(4) <10,000

October 1, 2013, if no Cryptosporidium monitoring is required pursuant to 40 Code of Federal Regulations part 141.701(a)(4) (71 Fed. Reg. 770 (January 5, 2006)), which is incorporated by reference; or

October 1, 2014, if Cryptosporidium monitoring is required pursuant to 40 Code of Federal Regulations part 141.701(a)(4) or (a)(6) (71 Fed. Reg. 770 (January 5, 2006)), which are incorporated by reference.

(b) Other consecutive or wholesale systems that are part of a combined distribution system

At the same time as the system with the earliest compliance date in the combined distribution system.

(2) Systems required to conduct quarterly monitoring for TTHM and HAA5 pursuant to section 64534.2(d) shall:
(A) Begin monitoring in the first full calendar quarter that includes the compliance date in table 64530-A; and

(B) Make compliance calculations at the end of the fourth calendar quarter that follows the compliance date in table 64530-A and at the end of each subsequent quarter (or earlier if the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters).

(3) Systems required to conduct monitoring at a frequency that is less than quarterly shall:

(A) No later than 12 months after the compliance date in table 64530-A, begin monitoring in the calendar month recommended in the IDSE report prepared pursuant to section 64530(c) or the calendar month identified in the monitoring plan developed pursuant to section 64534.8; and

(B) Make compliance calculations beginning with the first compliance sample taken after the compliance date in table 64530-A.

(36) **Amend Section 64531 as follows:**

**Section 64531. Definitions Governing Terms Used in this Chapter.**

The definitions in sections 64400 through 64402.2030 of chapter 15 and sections 64651.10 through 64651.93 of chapter 17 shall govern the interpretation of terms used in this chapter.

ARTICLE 2. MAXIMUM CONTAMINANT LEVELS FOR DISINFECTION BYPRODUCTS AND MAXIMUM RESIDUAL DISINFECTANT LEVELS

(37) Amend Section 64533 as follows:

Section 64533. Maximum Contaminant Levels for Disinfection Byproducts.

(a) Using the monitoring and calculation methods specified in sections 64534, 64534.2, 64535, and 64535.2, the primary MCLs for the disinfection byproducts shown in table 64533-A shall not be exceeded in drinking water supplied to the public.

Table 64533-A

<table>
<thead>
<tr>
<th>Disinfection Byproduct</th>
<th>Maximum Contaminant Level (mg/L)</th>
<th>Detection Limit for Purposes of Reporting (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total trihalomethanes (TTHM)</td>
<td>0.080</td>
<td></td>
</tr>
<tr>
<td>Bromodichloromethane</td>
<td>0.0005</td>
<td></td>
</tr>
<tr>
<td>Bromoform</td>
<td>0.0005</td>
<td></td>
</tr>
<tr>
<td>Chloroform</td>
<td>0.0005</td>
<td></td>
</tr>
<tr>
<td>Dibromochloromethane</td>
<td>0.0005</td>
<td></td>
</tr>
<tr>
<td>Haloacetic acids (five) (HAA5)</td>
<td>0.060</td>
<td></td>
</tr>
<tr>
<td>Monochloroacetic Acid</td>
<td>0.0020</td>
<td></td>
</tr>
<tr>
<td>Dichloroacetic Acid</td>
<td>0.0010</td>
<td></td>
</tr>
</tbody>
</table>
Trichloroacetic Acid 0.0010
Monobromoacetic Acid 0.0010
Dibromoacetic Acid 0.0010
Bromate 0.010 0.0050
Chlorite 1.0 0.020

1 For analysis performed using EPA Method 317.0 Revision 2.0, 321.8, or 326.0

(b) A system installing GAC, membranes, or other technology to limit disinfectant byproducts to comply with this section may apply to the Department for an extension up to December 31, 2003. Applications for extensions shall include the results of disinfection byproduct monitoring, a description of the technology being installed and how it is expected to affect future disinfection byproduct levels, and a proposed schedule for compliance. If granted an extension, a system shall meet the schedule and interim treatment and monitoring requirements established by the Department.

(c) The best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for disinfection byproducts are identified in table 64533-B.
Table 64533-B

Best Available Technology

Disinfection Byproducts

<table>
<thead>
<tr>
<th>Disinfection Byproduct</th>
<th>Best Available Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTHM and HAA5</td>
<td>Enhanced coagulation or enhanced softening or GAC10, with chlorine as the primary and residual disinfectant¹</td>
</tr>
</tbody>
</table>

For all systems that disinfect their source water:

(1) Enhanced coagulation or enhanced softening, plus GAC10;

(2) Nanofiltration with a molecular weight cutoff ≤1000 Daltons; or

(3) GAC²

For consecutive systems and applies only to the disinfected water that consecutive systems buy or otherwise receive: ²

(1) Systems serving >10,000 persons:

improved distribution system and storage tank management to reduce residence time, plus...
the use of chloramines for disinfectant residual maintenance; and

(2) Systems serving <10,000 persons:

improved distribution system and storage tank management to reduce residence time

Bromate

Control of ozone treatment process to reduce production of bromate

Chlorite

Control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels

1 When using the monitoring and calculation methods specified in sections 64534, 64534.2(a), 64535, and 64535.2(a) and (b).

2 When using the monitoring and calculation methods specified in sections 64534, 64534.2(d), 64535, and 64535.2(a) and (e).

ARTICLE 3. MONITORING REQUIREMENTS

(38) Amend Section 64534 as follows:

Section 64534. General Monitoring Requirements.


(b) Sample collection, and field tests including pH, alkalinity, and chlorine, chloramines, and chlorine dioxide residual disinfectants, shall be performed by a water treatment or distribution operator certified by the Department pursuant to section 106875 of the Health and Safety Code or by personnel trained to collect samples and/or perform these tests by the Department, a certified laboratory, or a certified operator:

(1) The Department;

(2) A laboratory certified pursuant to subsection (a); or
(3) An operator, certified by the Department pursuant to section 106875(a) or (b) of the Health and Safety Code and trained by an entity in paragraph (1) or (2) to perform such sample collections and/or tests.

(c) Systems shall take all samples during normal operating conditions, which exclude those circumstances covered under section 64533.5(b).

(d) A system may apply to the Department for approval to consider multiple wells drawing water from a single aquifer as one treatment plant for determining the minimum number of TTHM and HAA5 samples required under section 64534.2(a). In order to qualify for this reduction in monitoring requirements a system shall demonstrate to the Department that the multiple wells produce water from the same aquifer. To make this demonstration, a system shall submit information to the Department regarding the location, depth, construction, and geologic features of each well, and water quality information for each well. The Department will use this information to determine whether the wells produce water from a single aquifer.

(e) Systems shall use only data collected under the provisions of this chapter or 40 CFR Part 141 Subpart M (Information Collection Rule), as published in the May 14, 1996 Federal Register (Vol. 61, No. 94), to qualify for reduced monitoring pursuant to this article.

(f) Systems that fail to monitor shall be in violation of the monitoring requirements for the entire monitoring period that a monitoring result would be used in calculating compliance with MCLs or MRDLs, and shall notify the public pursuant to sections 64463, 64463.7, and 64465, in addition to reporting to the Department pursuant to sections 64537 through 64537.6.
(g) Systems that fail to monitor in accordance with the monitoring plan required by section 64534.8 shall be in violation of the monitoring requirements, and shall notify the public pursuant to sections 64463, 64463.7, and 64465, in addition to reporting to the Department pursuant to sections 64537 through 64537.6.

(39) Amend Section 64534.2 as follows:

Section 64534.2. Disinfection Byproducts Monitoring.

(a) Community and nontransient noncommunity water systems shall monitor for TTHM and HAA5 at the frequencies and locations indicated in table 64534.2-A.

Table 64534.2-A

Routine and Increased Monitoring Frequency for TTHM and HAA5

<table>
<thead>
<tr>
<th>COLUMN A</th>
<th>COLUMN B</th>
<th>COLUMN C</th>
<th>COLUMN D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of System</td>
<td>Persons served</td>
<td>Minimum monitoring frequency</td>
<td>Sample location in the distribution system &amp; increased monitoring frequencies</td>
</tr>
</tbody>
</table>
| Systems using approved surface water | ≥10,000 | Four samples per quarter per treatment plant | At least 25 percent of all samples collected each quarter at locations representing maximum residence time. Remaining samples taken at locations representative of at least average residence time in the distribution system and representing the entire distribution system, taking into account number of persons served, different sources of water, and different treatment methods¹.
500 - 9,999

One sample per quarter per treatment plant

Locations representing maximum residence time\(^1\).

< 500

One sample per year per treatment plant during month of warmest water temperature

Locations representing maximum residence time\(^1\). If the sample (or average of annual samples, if more than one sample is taken) exceeds MCL, system shall increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until system meets reduced monitoring criteria in paragraph (3) of this subsection.

Systems using only ground water not under direct influence of

≥10,000

One sample per quarter per treatment plant

Locations representing maximum residence time\(^1\).
surface water and
using chemical
disinfectant

<10,000 One sample per year per treatment plant during month of warmest water temperature Locations representing maximum residence time\(^1\). If the sample (or average of annual samples, if more than one sample is taken) exceeds MCL, system shall increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until system meets reduced monitoring criteria in paragraph (3) of this subsection.

\(^1\) If a system elects to sample more frequently than the minimum required, at least 25 percent of all samples collected each quarter (including those taken in excess of the required frequency) shall be taken at locations that represent the maximum residence time of the water in the distribution system. The remaining samples shall be taken at locations representative of at least average residence time in the distribution system.
(1) Systems may apply to the Department to monitor at a reduced frequency in accordance with table 64534.2-B. The application shall include the results of all TOC, TTHM, and HAA5 monitoring conducted in the previous 12 months and the proposed revised monitoring plan as required by section 64534.8. The Department will evaluate data submitted with the application to determine whether or not the system is eligible for the reduced monitoring specified in table 64534.2-B:

| Approved surface water system which has a source water TOC\(^1\) level, before any treatment, \(\leq -4.0\) | \(\geq 10,000\) | TTHM\(^1\) \(\leq 0.040\) mg/L and HAA5\(^1\) \(\leq 0.030\) mg/L | One sample per treatment plant per quarter at distribution system location reflecting maximum residence time. |

Table 64534.2-B

Reduced Monitoring Frequency for TTHM and HAA5

- If the system is serving... year and...
- the system may reduce monitoring if it has monitored at least one
mg/L

500-9,999 TTHM\(^i\) ≤ 0.040 mg/L and HAA5\(^i\) ≤ 0.030 mg/L

One sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature.

System using only ground water not under direct influence of surface water and using chemical disinfectant

≥10,000 TTHM\(^i\) ≤ 0.040 mg/L and HAA5\(^i\) ≤ 0.030 mg/L

One sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature.

<10,000 TTHM\(^i\) ≤ 0.040 mg/L and HAA5\(^i\) ≤ 0.030 mg/L for two consecutive years

OR

TTHM\(^i\) ≤ 0.020 mg/L and

One sample per treatment plant per three-year monitoring cycle at distribution system location reflecting maximum...
HAA5\(^1\) \(\leq 0.015\) mg/L for residence time during one year month of warmest water temperature, with the three-year cycle beginning on January 1 following the quarter in which system qualifies for reduced monitoring.

\(^1\) TOC, TTHM, and HAA5 values based on annual averages.

(2) Systems on reduced monitoring shall resume monitoring at the frequency specified in column C of table 64534.2-A in the quarter immediately following the quarter in which the system exceeds 0.060 mg/L for the TTHM annual average, 0.045 mg/L for the HAA5 annual average, or 4 mg/L for the source water TOC annual average. For systems using only ground water not under the direct influence of surface water and serving fewer than 10,000 persons or systems using approved surface water and serving fewer than 500 persons, if either the TTHM annual average is >0.080 mg/L or the HAA5 annual average is >0.060 mg/L, the system shall go to increased monitoring identified in column D of table 64534.2-A in the quarter immediately following the quarter in which the system exceeds 0.080 mg/L or 0.060 mg/L for the TTHM and HAA5 annual averages, respectively; and
(3) Systems on increased monitoring pursuant to column D of table 64534.2-A may return to routine monitoring specified in column C of table 64534.2-A if, after at least one year of monitoring, TTHM annual average is \( \leq 0.060 \) mg/L and HAA5 annual average is \( \leq 0.045 \) mg/L.

(b) Community and nontransient noncommunity water systems using chlorine dioxide shall conduct monitoring for chlorite as follows:

(1) Systems shall take daily samples at the entrance to the distribution system and analyze the samples the same day the samples are taken. For any daily sample that exceeds the chlorite MCL, the system shall take three additional chlorite distribution system samples the following day (in addition to the daily sample required at the entrance to the distribution system) at these locations: as close to the first customer as possible, at a location representative of average residence time, and at a location reflecting maximum residence time in the distribution system. The system shall analyze the additional samples within 48 hours of being notified pursuant to section 64537(b) of the exceedance;

(2) Systems shall take a three-sample set each month in the distribution system. The system shall take one sample at each of the following locations: as close to the first customer as possible, at a location representative of average residence time, and at a location reflecting maximum residence time in the distribution system. Any additional routine sampling shall be conducted in the same manner (as three-sample sets, at the specified locations). The system may use the results of additional monitoring conducted under paragraph (1) to meet the monitoring requirement in this paragraph;
(3) Systems may apply to the Department to reduce monthly chlorite monitoring in the distribution system pursuant to paragraph (2) to one three-sample set per quarter after one year of monitoring during which no individual chlorite sample taken in the distribution system has exceeded the chlorite MCL and the system has not been required to conduct additional monitoring under paragraph (1). The application shall include the results of all chlorite monitoring conducted in the previous 12 months and the proposed revised monitoring plan as required by section 64534.8. The Department will evaluate data submitted with the application and determine whether or not the system is eligible to reduce monitoring to one three-sample set per quarter. The system may remain on the reduced monitoring schedule until either any of the three individual chlorite samples taken quarterly in the distribution system under paragraph (2) exceeds the chlorite MCL or the system is required to conduct additional monitoring under paragraph (1), at which time the system shall revert to routine monitoring.; and

(4) If a distribution system sample taken pursuant to paragraph (2) exceeds the chlorite MCL, the system shall take and analyze a confirmation sample within 48 hours of being notified pursuant to section 64537(c) of the exceedance. If the system fails to take a confirmation sample pursuant to this paragraph, it shall take and analyze a confirmation sample within two weeks of notification of the results of the first sample.

(c) Community and nontransient noncommunity systems using ozone shall monitor for bromate as follows:

(1) Systems shall take one sample per month for each treatment plant in the system using ozone. Samples shall be taken at the entrance to the distribution system while the ozonation system is operating under normal conditions.
(2) Systems may reduce bromate monitoring from monthly to once per quarter, if the average source water bromide concentration is less than 0.05 mg/L based upon representative monthly bromide measurements for one year. System's running annual average bromate concentration is ≤0.0025 mg/L based on monthly bromate measurements under paragraph (1) for the most recent four quarters, with samples analyzed using Method 317.0 Revision 2.0, 321.8, or 326.0. The system shall notify the Department in writing within 30 days of the change in monitoring frequency. The system shall continue monthly bromide monitoring of the source water to remain on reduced bromate monitoring. If the running annual average source water bromide concentration, computed quarterly, is equal to or greater than 0.05 mg/L based upon representative monthly measurements, the system shall resume routine bromate monitoring pursuant to paragraph (1); and

(3) Systems shall resume routine bromate monitoring pursuant to paragraph (1) and notify the Department in writing within 30 days of the change in monitoring frequency if:

(A) The running annual average bromate concentration, computed quarterly, is greater than 0.0025 mg/L; or

(B) The running annual average source water bromide concentration, computed quarterly, is equal to or greater than 0.05 mg/L based upon representative monthly measurements.

(d) By the applicable date specified in section 64530(d), and in lieu of TTHM and HAA5 monitoring in subsection (a):
(1) Community and nontransient noncommunity water systems shall monitor for TTHM and HAA5 at the frequencies and location totals indicated in table 64534.2-C and in accordance with the monitoring plan developed pursuant to section 64534.8:

**Table 64534.2-C**

Routine Monitoring Frequency for TTHM and HAA5

<table>
<thead>
<tr>
<th>Source water type</th>
<th>Persons served</th>
<th>Number of distribution system monitoring locations</th>
<th>Monitoring period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems using approved surface water</td>
<td>&gt;5,000,000</td>
<td>20 dual sample sets</td>
<td>per quarter</td>
</tr>
<tr>
<td>1,000,000 – 4,999,999</td>
<td>16 dual sample sets</td>
<td>per quarter</td>
<td></td>
</tr>
<tr>
<td>250,000 – 999,999</td>
<td>12 dual sample sets</td>
<td>per quarter</td>
<td></td>
</tr>
<tr>
<td>50,000 – 249,999</td>
<td>8 dual sample sets</td>
<td>per quarter</td>
<td></td>
</tr>
<tr>
<td>10,000 – 49,999</td>
<td>4 dual sample sets</td>
<td>per quarter</td>
<td></td>
</tr>
<tr>
<td>3,301 – 9,999</td>
<td>2 dual sample sets</td>
<td>per quarter</td>
<td></td>
</tr>
<tr>
<td>Systems using</td>
<td>Sample Frequency</td>
<td>Sample Description</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>&gt;500,000</td>
<td>8 dual sample sets per quarter</td>
<td>1 TTHM and 1 HAA5 sample: one at the location with the highest TTHM measurement, one at the location with the highest HAA5 measurement</td>
<td></td>
</tr>
<tr>
<td>100,000 – 499,999</td>
<td>6 dual sample sets per quarter</td>
<td>1 TTHM and 1 HAA5 sample: one at the location with the highest TTHM measurement, one at the location with the highest HAA5 measurement</td>
<td></td>
</tr>
<tr>
<td>10,000 – 99,999</td>
<td>4 dual sample sets per quarter</td>
<td>1 TTHM and 1 HAA5 sample: one at the location with the highest TTHM measurement, one at the location with the highest HAA5 measurement</td>
<td></td>
</tr>
<tr>
<td>500 – 9,999</td>
<td>2 dual sample sets per year</td>
<td>1 TTHM and 1 HAA5 sample: one at the location with the highest TTHM measurement, one at the location with the highest HAA5 measurement</td>
<td></td>
</tr>
<tr>
<td>500 – 3,300</td>
<td>1 TTHM and 1 HAA5 per quarter</td>
<td>1 TTHM and 1 HAA5 sample: one at the location with the highest TTHM measurement, one at the location with the highest HAA5 measurement</td>
<td></td>
</tr>
<tr>
<td>&lt;500</td>
<td>1 TTHM and 1 HAA5 per year</td>
<td>1 TTHM and 1 HAA5 sample: one at the location with the highest TTHM measurement, one at the location with the highest HAA5 measurement</td>
<td></td>
</tr>
</tbody>
</table>

1 TTHM: Trihalomethane

HAA5: Halocarbons and Haloacetonitrile
1. All systems shall monitor during the month of highest disinfection byproduct concentrations.

2. Systems on quarterly monitoring shall take dual sample sets every 90 days at each monitoring location, except for systems using approved surface water and serving 500 – 3,300 persons.

3. Only one location with a dual sample set per monitoring period is needed if highest TTHM and HAA5 concentrations occur at the same location and month.

(2) Undisinfected systems that begin using a disinfectant other than UV light after the applicable dates in 40 Code of Federal Regulations, part 141.600 (71 Fed. Reg. 483, January 4, 2006), which is incorporated by reference, shall consult with the Department to identify compliance monitoring locations for this subsection. Systems shall then develop a monitoring plan in accordance with section 64534.8 that includes those monitoring locations:

(3) Systems may apply to the Department to monitor at a reduced frequency in accordance with table 64534.2-D, any time the LRAA is <0.040 mg/L for TTHM and
<0.030 mg/L for HAA5 at all monitoring locations. In addition, the source water annual average TOC level, before any treatment shall be <4.0 mg/L at each treatment plant treating approved surface water, based on source water TOC monitoring conducted pursuant to section 64534.6. The application shall include the results of all TOC, TTHM, and HAA5 monitoring conducted in the previous 12 months and the proposed revised monitoring plan as required by section 64534.8. The Department will evaluate data submitted with the application to determine whether or not the system is eligible for the reduced monitoring specified in table 64534.2-D;

**Table 64534.2-D**

Reduced Monitoring Frequency for TTHM and HAA5

<table>
<thead>
<tr>
<th>Source water type</th>
<th>Persons served</th>
<th>Number of distribution system monitoring locations</th>
<th>Monitoring period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems using approved surface water</td>
<td>&gt;5,000,000</td>
<td>10 dual sample sets: at the locations with the five highest TTHM and five highest HAA5 LRAAs</td>
<td>per quarter</td>
</tr>
<tr>
<td>1,000,000 – 4,999,999</td>
<td>8 dual sample sets: per quarter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
250,000 – 999,999  6 dual sample sets: per quarter
at the locations with the
four highest TTHM and
four highest HAA5 LRAAs

50,000 – 249,999  4 dual sample sets: per quarter
at the locations with the
two highest TTHM and two
highest HAA5 LRAAs

10,000 – 49,999  2 dual sample sets: per quarter
at the locations with the
highest TTHM and highest
HAA5 LRAAs

3,301 – 9,999  2 dual sample sets: per year
one at the location and
during the quarter with the
highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement

500 – 3,300 1 TTHM and 1 HAA5 per year sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter

Systems using >500,000 4 dual sample sets: per quarter
only ground water
not under direct influence of surface water

at the locations with the two highest TTHM and two highest HAA5 LRAAs

100,000 – 499,999 2 dual sample sets: per quarter at the locations with the highest TTHM and highest HAA5 LRAAs

10,000 – 99,999 2 dual sample sets: per year one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement

500 – 9,999 1 TTHM and 1 HAA5 per year sample: one at the location and during the quarter with the highest TTHM single

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measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter

<500

1 TTHM and 1 HAA5 sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set every third year if the highest TTHM
and HAA5 measurements occurred at the same location and quarter

1 Systems on quarterly monitoring shall take dual sample sets every 90 days.

(4) Systems on reduced monitoring shall resume routine monitoring pursuant to table 64534.2-C or conduct increased monitoring pursuant to paragraph (5) (if applicable), if the TTHM LRAA is >0.040 mg/L or the HAA5 LRAA is >0.030 mg/L at any monitoring location (for systems with quarterly reduced monitoring); a TTHM sample is >0.060 mg/L or a HAA5 sample is >0.045 mg/L (for systems with annual or less frequent monitoring); or the source water annual average TOC level, before any treatment, is >4.0 mg/L at any treatment plant treating an approved surface water;

(5) Systems that are required to monitor at a particular location annually or less frequently than annually pursuant to table 64534.2-C or 64534.2-D shall increase monitoring to dual sample sets once per quarter (taken every 90 days) at all locations if a TTHM sample is >0.080 mg/L or a HAA5 sample is >0.060 mg/L at any location. Systems on increased monitoring may return to routine monitoring specified in table 64534.2-C if, after at least four consecutive quarters of monitoring, the LRAA for every monitoring location is <0.060 mg/L for TTHM and <0.045 mg/L for HAA5;

(6) If the operational evaluation level (OEL) exceeds 0.080 mg/L for TTHM or 0.060 mg/L for HAA5 at any monitoring location, systems shall conduct an operational evaluation. The operational evaluation shall include the examination of system
treatment and distribution operational practices, including storage tank operations, excess storage capacity, distribution system flushing, changes in sources or source water quality, and treatment changes or problems that may contribute to TTHM and HAA5 formation and what steps could be considered to minimize future exceedances. Systems that are able to identify the cause of the OEL exceedance may submit a written request to the Department to limit the scope of the evaluation. The request to limit the scope of the evaluation shall not extend the schedule in section 64537(c) for submitting the written report to the Department;

(7) Systems on reduced monitoring pursuant to table 64534.2-B may remain on reduced monitoring after the applicable date in table 64530-A for compliance with this subsection provided the system meets IDSE requirements under section 64530(c) by qualifying for a 40/30 certification (40 CFR part 141.603) or receiving a very small system waiver (40 CFR part 141.604), meets the reduced monitoring criteria in paragraphs (3) and (4), and does not change or add monitoring locations from those used for compliance monitoring under subsection (a); and

(8) Systems on increased monitoring pursuant to table 64534.2-A shall remain on increased monitoring and conduct increased monitoring pursuant to paragraph (5) at the locations in the monitoring plan developed under section 64534.8 beginning at the applicable date in table 64530-A for compliance with this subsection. Systems on increased monitoring may return to routine monitoring specified in table 64534.2-C pursuant to paragraph (5).

(40) Amend Section 64534.4 as follows:

Section 64534.4. Disinfectant Residuals Monitoring.

(a) Community and nontransient noncommunity water systems that use chlorine or chloramines shall measure the residual disinfectant levels at the same points in the distribution system and at the same time as total coliforms are sampled, as specified in section 64421. Systems using approved surface water may use the results of residual disinfectant concentration sampling conducted under section 64656, in lieu of taking separate samples.

(b) Public water systems that use chlorine dioxide shall monitor for chlorine dioxide daily at the entrance to the distribution system. For any daily sample that exceeds the MRDL, the system shall take three chlorine dioxide distribution system samples the following day, as follows:

(1) If chlorine dioxide or chloramines are used to maintain a disinfectant residual in the distribution system, or if chlorine is used to maintain a disinfectant residual in the distribution system and there are no disinfection addition points after the entrance to the distribution system (i.e., no booster chlorination), the system shall take three samples as close to the first customer as possible, at intervals of at least six hours; and

(2) If chlorine is used to maintain a disinfectant residual in the distribution system and there are one or more disinfection addition points after the entrance to the distribution system (i.e., booster chlorination), the system shall take one sample at each of the following locations: as close to the first customer as possible, in a location representative of average residence time, and as close to the furthest customer as possible (reflecting maximum residence time in the distribution system).
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(41) Amend Section 64534.6 as follows:

Section 64534.6. Disinfection Byproduct Precursors (DBPP) Monitoring.

(a) Systems that use approved surface water and conventional filtration treatment (as defined in section 64651.23) shall take one paired TOC sample (source water and treated water) and one source water alkalinity sample per month per treatment plant at a time representative of normal operating conditions and influent water quality. TOC and alkalinity in the source water shall be monitored prior to any treatment and at the same time as TOC monitoring in the treated water. TOC in the treated water shall be monitored no later than the point of combined filter effluent turbidity monitoring and shall be representative of the treated water.

(b) Systems using approved surface water with an annual average treated water TOC of less than 2.0 mg/L for two consecutive years, or less than 1.0 mg/L for one year, may reduce monitoring for both TOC and alkalinity to one paired sample and one source water alkalinity sample per plant per quarter. The system shall revert to monitoring pursuant to subsection (a) in the first month following the quarter that the annual average treated water TOC is equal to or greater than 2.0 mg/L.

(c) Systems using approved surface water and not monitoring pursuant to subsection (a) or (b):

(1) To qualify for reduced TTHM and HAA5 monitoring pursuant to table 64534.2-B or 64534.2-D, shall take monthly TOC samples every 30 days at a location prior to any treatment; and

(2) Once qualified for reduced TTHM and HAA5 monitoring pursuant to table 64534.2-B or 64534.2-D, may reduce source water TOC monitoring to quarterly TOC samples taken every 90 days at a location prior to any treatment. The system shall
revert to source water TOC monitoring pursuant to paragraph (1) in the first month following the quarter that the annual average source water TOC is greater than 4.0 mg/L.

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(42) Amend Section 64534.8 as follows:

Section 64534.8. Monitoring Plans.

(a) Each system shall develop and submit to the Department a monitoring plan. The system shall implement the plan after Department review and approval. The system shall maintain the plan and make it available for inspection by the general public no later than 30 days following the applicable compliance date in sections 64530(a) or (b), and (d).

(b) The Department will evaluate the plan based on the following required elements:

   (a1) Specific locations and schedules for collecting samples for any parameters included in this chapter, including seasonal variations if applicable;

   (b2) How the system will calculate compliance with MCLs, MRDLs, and treatment techniques; and

   (3) For compliance monitoring pursuant to section 64534.2(d), monitoring dates and the elements specified in subparagraphs (1) and (2).

(c) Systems that submitted an IDSE report pursuant to section 64530(c) shall monitor for TTHM and HAA5 under section 64534.2(d) at the locations and months recommended in the IDSE report, unless the Department requires other locations or additional locations after its review of the IDSE report.

(d) Systems not required to submit an IDSE report pursuant to section 64530(c) and that:

   (1) Do not have sufficient TTHM and HAA5 compliance monitoring locations under section 64534.2(a) to identify the required number of TTHM and HAA5 compliance monitoring locations indicated in 40 Code of Federal Regulations part 141.605(b) (71 Fed. Reg. 487 (January 4, 2006)), shall:
A) Identify additional locations by alternating selection of locations representing high TTHM levels and high HAA5 levels until the required number of compliance monitoring locations have been identified; and

B) Provide the rationale in the plan for identifying the locations as having high levels of TTHM or HAA5.

(2) Have more TTHM and HAA5 compliance monitoring locations under section 64534.2(a) than required for TTHM and HAA5 compliance monitoring indicated in 40 Code of Federal Regulations part 141.605(b) (71 Fed. Reg. 487 (January 4, 2006)), shall identify the locations to use by alternating selection of locations representing high TTHM levels and high HAA5 levels until the required number of compliance monitoring locations have been identified.

(e) The plan developed for compliance monitoring pursuant to section 64534.2(d) may be revised to reflect changes in treatment, distribution system operations and layout (including new service areas), or other factors that may affect TTHM or HAA5 formation, or for Department-approved reasons, after consultation with the Department regarding the need for changes and the appropriateness of changes. Systems shall comply with the requirements of subsection (a) for the revised plan. If monitoring locations are changed, systems shall replace existing compliance monitoring locations having the lowest LRAA with new locations that reflect the current distribution system locations having expected high TTHM or HAA5 levels.

ARTICLE 4. COMPLIANCE REQUIREMENTS

(43) Amend Section 64535 as follows:

Section 64535. General Requirements for Determining Compliance.

(a) All samples taken and analyzed in accordance with section 64534.8 shall be included in determining compliance, pursuant to sections 64535.2, 64535.4, and 64536.4.

(b) For violations of the MCLs in section 64533 or MRDLs in section 64533.5 that may pose an acute risk to human health, notification shall be pursuant to sections 64463, 64463.1, and 64465.

(44) Amend Section 64535.2 as follows:

Section 64535.2. Determining Disinfection Byproducts Compliance.

(a) During the first year of monitoring for disinfection byproducts under sections 64534.2(a), (b), and (c), the system shall comply with the following paragraphs (1) through (3). During the first year of monitoring for TTHM and HAA5 under section 64534.2(d), the system shall comply with paragraphs (1) through (3) at each monitoring location.

(1) The average of the first quarter’s results shall not exceed four times the MCLs specified in section 64533.

(2) The average of the first and second quarter’s results shall not exceed two times the MCLs specified in section 64533.

(3) The average of the first, second, and third quarter’s results shall not exceed 1.33 times the MCLs specified in section 64533.

(b) TTHM and HAA5 MCL compliance, as monitored pursuant to section 64534.2(a), is shall be determined as follows:

(1) For systems monitoring quarterly, the running annual arithmetic average, computed quarterly, of quarterly arithmetic averages of all samples collected pursuant to section 64534.2(a) shall not exceed the MCLs specified in section 64533.

(2) For systems monitoring less frequently than quarterly, the average of samples collected that calendar year pursuant to section 64534.2(a) shall not exceed the MCLs specified in section 64533. If the average of the samples collected under section 64534.2(a) exceeds the MCL, the system shall increase monitoring to once per quarter per treatment plant. Compliance with the MCL shall then be determined by the average of the sample that triggered the quarterly monitoring and the following three quarters of
monitoring, unless the result of fewer than four quarters of monitoring will cause the running annual average to exceed the MCL, in which case the system is in violation at the end of that quarter immediately. After monitoring quarterly for four consecutive quarters (including the quarter that triggered the quarterly monitoring), and until such time as monitoring returns to routine monitoring pursuant to section 64534.2(a)(3), compliance shall be determined pursuant to paragraph (1);

(3) If the running annual arithmetic average of quarterly averages covering any consecutive four-quarter period exceeds the MCL, the system is in violation of the MCL and shall notify the public pursuant to sections 64464.3 and 64467, 64463.4, and 64465, including language in section 64468.5 appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6.; and

(4) If a public water system fails to complete four consecutive quarters of monitoring, compliance with the MCL for the last four-quarter compliance period shall be based on an average of the available data.

(c) Compliance for bromate shall be based on a running annual arithmetic average, computed quarterly, of monthly samples (or, for months in which the system takes more than one sample, the average of all samples taken during the month) collected by the system as prescribed by section 64534.2(c). If the average of samples covering any consecutive four-quarter period exceeds the MCL, the system is in violation of the MCL and shall notify the public pursuant to sections 64464.3 and 64467, 64463.4, and 64465, including language in section 64468.5 appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6. If a public water system fails to complete 12 consecutive months of monitoring, compliance with the MCL
for the last four-quarter compliance period shall be based on an average of the available data.

(d) Compliance for chlorite shall be based on an arithmetic average of each three-sample set taken in the distribution system as prescribed by sections 64534.2(b)(1), (2) and (3). If the arithmetic average of any three-sample set exceeds the MCL, the system is in violation of the MCL and shall notify the public pursuant to sections 64464.3 and 64467, including language in section 64468.5, in addition to reporting to the Department pursuant to sections 64537 through 64537.6. Compliance for chlorite shall be based on the results of samples collected by the system pursuant to sections 64534.2(b).

(1) If any daily sample taken at the entrance to the distribution system exceeds the chlorite MCL and one (or more) of the three samples taken in the distribution system pursuant to section 64534.2(b)(1) exceeds the chlorite MCL, the system is in violation of the MCL and shall take immediate corrective action to reduce the concentration of chlorite to a level below the MCL. The system shall notify the Department within 48 hours of the determination and notify the public pursuant to the procedures for acute health risks in sections 64463, 64463.1, and 64465, including language in appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6. Failure to take samples in the distribution system the day following an exceedance of the chlorite MCL at the entrance to the distribution system is also an MCL violation and the system shall notify and report as described in this paragraph.

(2) If the average of an individual sample from the three-sample set taken pursuant to 64534.2(b)(2) and its confirmation sample taken pursuant to section 64634.2(b)(4) exceeds the chlorite MCL, the system is in violation of the MCL and shall take the
corrective action and notify and report as described in paragraph (1). If the average of
the individual sample and its confirmation does not exceed the MCL, the system shall
inform the Department of the results within seven days from receipt of the original
analysis. Failure to take a confirmation sample pursuant to section 64534.2(b)(4) is
also an MCL violation and the system shall notify and report as described in paragraph
(1); and

(3) If any two consecutive daily samples taken at the entrance to the distribution
system exceed the chlorite MCL and all distribution system samples taken pursuant to
64534.2(b)(1) are less than or equal to the chlorite MCL, the system is in violation of the
MCL and shall take corrective action to reduce the concentration of chlorite to a level
below the MCL at the point of sampling. The system shall notify the public pursuant to
the procedures for nonacute health risks in sections 64463, 64463.4, and 64465,
including the language in appendix 64465-G, in addition to reporting to the Department
pursuant to sections 64537 through 64537.6. Failure to monitor at the entrance to the
distribution system the day following an exceedance of the chlorite MCL at the entrance
to the distribution system is also an MCL violation and the system shall notify and report
as described in this paragraph.

(e) TTHM and HAA5 MCL compliance, as monitored pursuant to section
64534.2(d), shall be determined as follows:

(1) For systems monitoring quarterly, each locational running annual average
(LRAA), computed quarterly, shall not exceed the MCLs specified in section 64533;

(2) For systems monitoring annually or less frequently, each sample collected shall
not exceed the MCLs specified in section 64533. If no sample exceeds the MCL, the
sample result for each monitoring location shall be considered the LRAA for the monitoring location. If any sample exceeds the MCL, systems shall increase monitoring pursuant to section 64534.2(d)(5). Compliance with the MCL shall then be determined by the average of the sample that triggered the quarterly monitoring and the following three quarters of monitoring, unless the result of fewer than four quarters of monitoring will cause the LRAA to exceed the MCL, in which case the system is in violation immediately. After monitoring quarterly for four consecutive quarters (including the quarter that triggered the quarterly monitoring), and until such time as monitoring returns to routine monitoring pursuant to section 64534.2(d)(5), compliance shall be determined pursuant to paragraph (1):

(3) If a system fails to complete four consecutive quarters of monitoring, compliance with the MCL for the last four-quarter compliance period shall be based on an average of the available data. If more than one sample per quarter is taken at a monitoring location, all the samples taken in the quarter at that monitoring location shall be averaged to determine a quarterly average to be used in the LRAA calculation; and

(4) If the LRAA exceeds the MCL, calculated based on four consecutive quarters of monitoring (or the LRAA calculated based on fewer than four quarters of data if the MCL would be exceeded regardless of the monitoring results of subsequent quarters), the system is in violation of the MCL and shall notify the public pursuant to sections 64463, 64463.4, and 64465, including the language in appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6.

(45) Amend Section 64535.4 as follows:

Section 64535.4. Determining Disinfectant Residuals Compliance.

(a) During the first year of monitoring for disinfection residuals under section 64534.4 the system shall comply with the following:

(1) The average of the first quarter’s results shall not exceed four times the MRDLs specified in section 64533.5;

(2) The average of the first and second quarter’s results shall not exceed two times the MRDLs specified in section 64533.5; and

(3) The average of the first, second, and third quarter’s results shall not exceed 1.33 times the MRDLs specified in section 64533.5.

(b) Chlorine and chloramines MRDL compliance is determined as follows:

(1) Compliance shall be based on a running annual arithmetic average, computed quarterly, of monthly averages of all samples collected by the system under section 64534.4(a). If the average covering any consecutive four-quarter period exceeds the MRDL, the system is in violation of the MRDL and shall notify the public pursuant to sections 64464.3 and 64464.3, 64463.4, and 64465, including language in section 64468.5 appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6; and

(2) In cases where systems switch between the use of chlorine and chloramines for residual disinfection during the year, compliance shall be determined by including together all monitoring results of both chlorine and chloramines. Reports submitted pursuant to sections 64537 through 64537.6 shall clearly indicate which residual disinfectant was analyzed for each sample.
(c) Compliance for chlorine dioxide shall be based on consecutive daily samples collected by the system under section 64534.4(b).

(1) If any daily sample taken at the entrance to the distribution system exceeds the MRDL, and one (or more) of the three samples taken in the distribution system exceed the MRDL, the system is in violation of the MRDL and shall take immediate corrective action to lower the concentration of chlorine dioxide to a level below the MRDL. The system shall notify the Department within 48 hours of the determination, notify the public pursuant to the procedures for acute health risks in sections 64463, 64463.1, and 64465, including language in section 64468.5(c) appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6. Failure to take samples in the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system is also an MRDL violation and the system shall notify the public pursuant to the procedures for acute health risks in section 64465, including language in section 64468.5(c), in addition to reporting to the Department pursuant to sections 64537 through 64537.6 and report as described in this paragraph:

(2) If any two consecutive daily samples taken at the entrance to the distribution system exceed the MRDL and all distribution system samples taken are below or equal to the MRDL, the system is in violation of the MRDL and shall take corrective action to lower the concentration of chlorine dioxide to a level below the MRDL at the point of sampling. The system shall notify the public pursuant to the procedures for nonacute health risks in sections 64464.3, 64463.4, and 64465, including language in section 64468.5(c) appendix 64465-G, in addition to reporting to
the Department pursuant to sections 64537 through 64537.6. Failure to monitor at the entrance to the distribution system the day following an exceedance of the chlorine dioxide MRDL at this site is also an MRDL violation and the system shall notify the public pursuant to the procedures for nonacute health risks in sections 64464.3; including language in section 64468.5(c), in addition to reporting to the Department pursuant to sections 64537 through 64537.6 and report as described in this paragraph.

Amend Section 64536.6 as follows:

Section 64536.6. Disinfection Byproduct Precursors (DBPP)-Public Notification Requirements.

For systems using conventional treatment, enhanced coagulation or enhanced softening are identified as treatment techniques to control the level of disinfection byproduct precursors in drinking water treatment and distribution systems. If a system fails to comply with the enhanced coagulation or enhanced softening requirements established in this article, the system shall notify the public pursuant to sections 64464.3 and 64467, 64463.4, and 64465, including language in section 64468.5 appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6.

ARTICLE 6. REPORTING AND RECORDKEEPING REQUIREMENTS

(47) Amend Section 64537 as follows:

Section 64537. General Reporting and Recordkeeping Requirements.

(a) Systems required to sample quarterly or more frequently, pursuant to section 64534.2, 64534.4, or 64534.6, shall report to the Department within 10 days after the end of each quarter in which samples were collected according to section 64451(c) and 64469(c), notwithstanding the provisions of sections 64537.2, 64537.4, and 64537.6. Systems required to sample less frequently than quarterly shall report to the Department within 10 days after the end of each monitoring period in which samples were collected. Systems shall report information to the Department in conformance with the requirements of sections 64537.2, 64537.4, and 64537.6.

(b) Systems shall require the laboratory to notify the system the same day samples are taken and analyzed whenever the level of chlorite in an entrance to the distribution system sample taken pursuant to section 64534.2(b)(1) exceeds the chlorite MCL or the level of chlorine dioxide in an entrance to the distribution system sample taken pursuant to section 64534.4(b) exceeds the chlorine dioxide MRDL, and shall ensure that a contact person is available to receive the analytical results 24-hours a day.

(c) Systems shall require the laboratory to notify the supplier within 48 hours whenever the level of chlorite in a single distribution system sample taken pursuant to section 64534.2(b)(1) or (b)(2) exceeds the chlorite MCL or the level of chlorine dioxide in a single distribution system sample taken pursuant to section 64534.4(b) exceeds the chlorine dioxide MRDL, and shall ensure that a contact person is available to receive such analytical results 24-hours a day. The system shall also require the laboratory to immediately notify the Department of any chlorite MCL or chlorine dioxide MRDL.
exceedance if the laboratory cannot make direct contact with the designated contact person within 48 hours.

(d) Systems required to conduct an operational evaluation pursuant to section 64534.2(d)(6) shall submit a written report of the evaluation to the Department no later than 90 days after being notified of the analytical result that caused the OEL exceedance. Systems shall make the written report available to the public upon request. If the Department approves the system’s written request to limit the scope of the evaluation under section 64534.2(d)(6), the system shall keep the written approval with the completed report.

(e) Systems shall retain monitoring plans and records of chemical analyses in accordance with section 64470.

(48) Amend Section 64537.2 as follows:

Section 64537.2. Disinfection Byproducts Reporting.

Systems shall report to the Department the information specified in tables 64537.2-A and 64537.2-B.

Table 64537.2-A

Disinfection Byproducts Reporting

*If the system is monitoring under the requirements of section 64534.2(a), (b), or (c)*  
The system shall report...

- TTHM and HAA5 (a) on a quarterly or more frequent basis
- (1) The number of samples taken during the last quarter;
- (2) The location, date, and result of each sample taken during the last quarter;
- (3) The arithmetic average of all samples taken in the last quarter;
- (4) The annual arithmetic average of the quarterly arithmetic averages of the samples for the last four quarters; and
- (5) Whether, based on section 64535.2(b), the MCL was violated.
(b) less frequently than quarterly (but at least annually) (1) The number of samples taken during the last year.
(2) The location, date, and result of each sample taken during the last monitoring period.
(3) The arithmetic average of all samples taken over the last year; and
(4) Whether, based on section 64535.2(b), the MCL was violated.

(c) less frequently than annually (1) The location, date, and result of the last sample taken; and
(2) Whether, based on section 64535.2(b), the MCL was violated.

Chlorite (1) The number of entry point samples taken each month for the last 3 months.
(2) The location, date, and result of each sample (both entry point and distribution system) taken during the last quarter.
(3) For each month in the reporting period, the arithmetic average of all samples taken in each three sample set taken in the distribution system. If a confirmation sample is taken pursuant to section
64634.2(b)(4), the average of an individual sample and its confirmation sample; and
(4) Whether, based on section 64535.2(d), the MCL was violated, in which month it was violated, and how many times it was violated in each month.

Bromate

(1) The number of samples taken during the last quarter;
(2) The location, date, and result of each sample taken during the last quarter;
(3) The arithmetic average of the monthly arithmetic averages of all samples taken in the last year; and
(4) Whether, based on section 64535.2(c), the MCL was violated.

**Table 64537.2-B**

TTHM and HAA5 Reporting

*If the system is monitoring under the requirements of section 64534.2(d) for*... *The system shall report...*
(a) For each monitoring location:

(1) The number of samples taken during the last quarter;

(2) The date and results of each sample taken during the last quarter;

(3) The arithmetic average of quarterly results for the last four quarters (LRAA);

(4) Whether the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters;

(5) Whether, based on section 64535.2(e), the MCL was violated at any monitoring location; and

(6) Any operational evaluation levels that were exceeded during the quarter and, if so, the location and date, and the calculated TTHM and HAA5 levels.

(b) For a supplier using approved surface water and seeking to qualify for or remain on reduced TTHM/HAA5 monitoring, source water TOC information for each treatment plant that treats approved surface water:

(1) The number of source water TOC samples taken
each month during the last quarter;

(2) The date and result of each sample taken during the last quarter;

(3) The quarterly average of monthly samples taken during the last quarter or the result of the quarterly sample; and

(4) The running annual average (RAA) of quarterly averages from the past four quarters; and

(5) Whether the RAA exceeded 4.0 mg/L.