Title 22. Social Security

Division 4. Environmental Health

Chapter 15. Domestic Water Quality and Monitoring Regulations

Article 2. General Requirements

(1) Amend Section 64415 to read as follows:

§ 64415. Laboratory and Personnel.

(a) Except as provided in subsection (b), required analyses shall be performed by laboratories certified by the State Board to perform such analyses pursuant to Article 3, commencing with section 100825, of Chapter 4 of Part 1 of Division 101, Health and Safety Code. Unless directed otherwise by the State Board, analyses shall be made in accordance with the following~~U.S. EPA approved methods as prescribed at~~:

(1) U.S. EPA approved methods as prescribed at 40 Code of Federal Regulations sections 141.23 through 141.41, 141.66, and 141.89 (7-1-2019 edition), which are incorporated by reference; ~~and~~

(2) U.S. EPA approved methods as prescribed at 40 Code of Federal Regulations section 141.852 (78 Fed. Reg. 10270 (February 13, 2013), as amended at 79 Fed. Reg. 10665 (February 26, 2014)), which is incorporated by reference~~.~~; and

(3) Methods used for analysis of hexavalent chromium shall be performed using one of the following:

(A) U.S. EPA Method 218.6: Determination of Dissolved Hexavalent Chromium in Drinking Water, Groundwater, and Industrial Wastewater Effluents by Ion Chromatography, Rev. 3.3, (May 1994), which is incorporated by reference in its entirety; and

(B) U.S. EPA Method 218.7: Determination of Hexavalent Chromium in Drinking Water by Ion Chromatography with Post-Column Derivatization and UV-Visible Spectroscopic Detection, Version 1.0, (November 2011), which is incorporated by reference in its entirety.

(b) [No change to text]

Note: Authority cited: Sections 116271, 116350, ~~and~~ 116375~~,~~ and 116385, Health and Safety Code. Reference: Sections 116375, 116385 and 116390, Health and Safety Code; and 40 Code of Federal Regulations 141.

Article 4. Primary Standards—Inorganic Chemicals

(2) Amend Section 64431 to read as follows:

§ 64431. Maximum Contaminant Levels—Inorganic Chemicals.

Public water systems shall comply with the primary MCLs in ~~t~~Table 64431-A as specified in this article.

Table 64431-A

Maximum Contaminant Levels

Inorganic Chemicals

Chemical	*Maximum Contaminant Level, mg/L*
Aluminum	1.
Antimony	0.006
Arsenic	0.010
Asbestos	7 MFL*
Barium	1.
Beryllium	0.004
Cadmium	0.005
Chromium (hexavalent)	0.010
Chromium (total)	0.05
Cyanide	0.15
Fluoride	2.0
Mercury	0.002
Nickel	0.1
Nitrate (as nitrogen)	10.
Nitrate+Nitrite (sum as nitrogen)	10.

Nitrite (as nitrogen)	1.
Perchlorate	0.006
Selenium	0.05
Thallium	0.002

* MFL=million fibers per liter; MCL for fibers exceeding 10 µm in length.

Note: Authority cited: Sections 116270, 116271, 116293(b), 116350, 116365, 116365.5 and 116375, Health and Safety Code. Reference: Sections 116365, 116365.5 and 116470, Health and Safety Code.

(3) Amend Section 64432 to read as follows:

§ 64432. Monitoring and Compliance—Inorganic Chemicals.

(a) All public water systems shall monitor to determine compliance with the nitrate and nitrite MCLs in ŧTable 64431-A, pursuant to subsections (d) through (f) and section 64432.1. All community and nontransient-noncommunity water systems shall monitor to determine compliance with the perchlorate MCL, pursuant to subsections (d), (e), and (l), and section 64432.3. All community and nontransient-noncommunity water systems shall also monitor to determine compliance with the other MCLs in ŧTable 64431-A, pursuant to subsections (b) through (n), and, for asbestos, section 64432.2. Monitoring shall be conducted in the year designated by the State Board of each compliance period beginning with the compliance period starting January 1, 1993.

(b) Unless directed otherwise by the State Board, each community and nontransient-noncommunity water system shall initiate monitoring for an inorganic chemical within six months following the effective date of the regulation establishing the MCL for the chemical and the addition of the chemical to ŧTable 64431-A.

If otherwise performed in accordance with this section, groundwater monitoring for an inorganic chemical performed no more than two years prior to the effective date of the regulation establishing the MCL may be used to satisfy the requirement for initiating monitoring within six months following such effective date.

(c) Unless more frequent monitoring is required pursuant to this Chapter, the frequency of monitoring for the inorganic chemicals listed in tTable 64431-A, except for asbestos, nitrate/nitrite, and perchlorate, shall be as follows:

(1) [No change to text]

(2) [No change to text]

(d) For the purposes of sections 64432, 64432.1, 64432.2, and 64432.3, detection shall be defined by the detection limits for purposes of reporting (DLRs) in tTable 64432-A.

Table 64432-A

Detection Limits for Purposes of Reporting (DLRs) for Regulated Inorganic Chemicals

Chemical	*Detection Limit for Purposes of Reporting (DLR) (mg/L)*
Aluminum	0.05
Antimony	0.006
Arsenic	0.002
Asbestos	0.2 MFL>10µm*
Barium	0.1
Beryllium	0.001
Cadmium	0.001
Chromium (hexavalent)	0.0001
Chromium (total)	0.01
Cyanide	0.1
Fluoride	0.1
Mercury	0.001
Nickel	0.01
Nitrate (as nitrogen)	0.4
Nitrite (as nitrogen)	0.4
Perchlorate	0.002 0.001 (Effective January 1, 2024)

Selenium	0.005
Thallium	0.001

* MFL=million fibers per liter; DLR for fibers exceeding 10 µm in length.

(e) [No change to text]

(f) [No change to text]

(g) [No change to text]

(h) [No change to text]

(i) Compliance with the MCLs shall be determined by a running annual average; if any one sample would cause the annual average to exceed the MCL, the system is immediately in violation. If a system takes more than one sample in a quarter, the average of all the results for that quarter shall be used when calculating the running annual average. If a system fails to complete four consecutive quarters of monitoring, the running annual average shall be based on an average of the available data.

(j) [No change to text]

(k) [No change to text]

(l) [No change to text]

(m) [No change to text]

(n) [No change to text]

(o) Transient-noncommunity water systems shall monitor for the inorganic chemicals in ~~t~~Table 64431-A as follows:

(1) [No change to text]

(2) [No change to text]

(p) A water system shall comply with the chromium (hexavalent) MCL by the applicable compliance date in Table 64432-B.

Table 64432-B

Chromium (Hexavalent) MCL Compliance Date

System Size (Service Connections Served on [INSERT EFFECTIVE DATE])	*Chromium (Hexavalent) MCL Compliance Date*
10,000 or greater	[INSERT DATE TWO YEARS AFTER REGULATION TAKES EFFECT]
1,000 to 9,999	[INSERT DATE THREE YEARS AFTER REGULATION TAKES EFFECT]
Fewer than 1,000	[INSERT DATE FOUR YEARS AFTER REGULATION TAKES EFFECT]

(q) If before the applicable compliance date in Table 64432-B, a water system's monitoring for chromium (hexavalent) conducted pursuant to subsection (b) demonstrates an MCL exceedance as calculated in accordance with subsection (i), then no later than 90 days after the MCL exceedance a water system shall submit to the State Board a Hexavalent Chromium MCL Compliance Plan that is sufficient to demonstrate how the system will comply with the chromium (hexavalent) MCL.

(1) The Hexavalent Chromium MCL Compliance Plan shall state how the water system will comply with the chromium (hexavalent) MCL no later than the applicable compliance date in Table 64432-B and include, at a minimum, the following:

(A) The proposed method for complying with the chromium (hexavalent) MCL; if a new or modified treatment process is proposed, the Hexavalent Chromium MCL Compliance Plan shall include a pilot study adequate to demonstrate that the new or modified treatment process will result in compliance with the chromium (hexavalent) MCL;

(B) If the proposed compliance method requires construction, the date by which the water system will submit to the State Board final plans and specifications for the proposed method of compliance;

(C) If the proposed compliance method requires construction, the anticipated dates for commencing construction and completing 100 percent of construction;

(D) If a new or modified treatment process is proposed, the anticipated date by which a Hexavalent Chromium Operations Plan as specified in subsection (r) will be submitted.

(2) A public water system may make amendments to its Hexavalent Chromium MCL Compliance Plan. Any amendment made shall be submitted to the State Board for review and approval that it meets the requirements of section (1).

(3) A water system shall implement its State Board approved Hexavalent Chromium MCL Compliance Plan by the dates set forth therein.

(r) A water system utilizing a new or modified treatment process to comply with the chromium (hexavalent) MCL shall, prior to serving water treated by the new or modified treatment process to the public, submit to the State Board for review and approval a Hexavalent Chromium Operations Plan sufficient to ensure that water treated by the new or modified treatment process reliably and continuously meets the chromium (hexavalent) MCL. The Hexavalent Chromium Operations Plan shall include, at a minimum, the following:

1. Performance monitoring program that sets out how and when treatment will be monitored to ensure compliance with the chromium (hexavalent) MCL;

2. A program for maintenance of treatment process equipment that describes how and when equipment will be maintained and when equipment replacement is needed to ensure treatment is operating as designed;

3. A description of each treatment unit process and how it is operated;

4. A description of procedures used to determine chemical dose rates sufficient to ensure the treatment process is operating as designed;

5. A description of reliability features incorporated into the treatment process to ensure operation as designed; and

6. Treatment media inspection program sufficient to ensure the media is inspected at intervals and for conditions necessary to ensure compliance with the chromium (hexavalent) MCL.

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Note: Authority cited: Sections 116271, 116275, 116293(b), 116350 and 116375, Health and Safety Code. Reference: Section 116275 and 116385, Health and Safety Code.

Article 12. Best Available Technologies (BAT)

(4) Amend Section 64447.2 to read as follows:

§ 64447.2. Best Available Technologies (BAT)—Inorganic Chemicals.

The technologies listed in tTable 64447.2-A are the best available technology, treatment techniques, or other means available for achieving compliance with the MCLs in tTable 64431-A for inorganic chemicals.

Table 64447.2-A
Best Available Technologies (BATs)
Inorganic Chemicals

Chemical	*Best Available Technologies (BATs)*
Aluminum	10
Antimony	2, 7
Arsenic	1, 2, 5, 6, 7, 9, 13
Asbestos	2, 3, 8
Barium	5, 6, 7, 9
Beryllium	1, 2, 5, 6, 7
Cadmium	2, 5, 6, 7
Chromium (hexavalent)	5, 7, 14
Chromium (total)	2, 5, 6[a], 7
Cyanide	5, 7, 11
Fluoride	1
Mercury	2[b], 4, 6[b], 7[b]
Nickel	5, 6, 7

Nitrate	5, 7, 9
Nitrite	5, 7
Perchlorate	5, 12
Selenium	1, 2[c], 6, 7, 9
Thallium	1, 5

[a]BAT for chromium III (trivalent chromium) only.

[b]BAT only if influent mercury concentrations < 10 µg/L.

[c]BAT for selenium IV only.

Key to BATs in ~~t~~Table 64447.2-A:

1= Activated Alumina

2= Coagulation/Filtration (not BAT for systems <500 service connections)

3= Direct and Diatomite Filtration

4= Granular Activated Carbon

5= Ion Exchange

6= Lime Softening (not BAT for systems <500 service connections)

7= Reverse Osmosis

8= Corrosion Control

9= Electrodialysis

10= Optimizing treatment and reducing aluminum added

11= Chlorine oxidation

12= Biological fluidized bed reactor

13= Oxidation/Filtration

14= Reduction/Coagulation/Filtration

Note: Authority cited: Sections 116271, 116293(b), 116350 and 116375, ~~131052 and 131200,~~ Health and Safety Code. Reference: Section 116370, Health and Safety Code.

Article 18. Notification of Water Consumers and the State Board

(5) Amend Section 64465 to read as follows:

§ 64465. Public Notice Content and Format.

...

(d) [No change to text]

Appendix 64465-A. Health Effects Language
Microbiological Contaminants

Appendix 64465-B. Health Effects Language
Surface Water Treatment

Appendix 64465-C. Health Effects Language
Radioactive Contaminants

Appendix 64465-D. Health Effects Language
Inorganic Contaminants

Contaminant	*Health Effects Language*
Aluminum	[No change to text]
Antimony	[No change to text]
Arsenic	[No change to text]
Asbestos	[No change to text]
Barium	[No change to text]
Beryllium	[No change to text]
Cadmium	[No change to text]
Chromium (hexavalent)	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.
Chromium (total)	[No change to text]
Copper	[No change to text]
Cyanide	[No change to text]

Fluoride	[No change to text]
Lead	[No change to text]
Mercury	[No change to text]
Nickel	[No change to text]
Nitrate	[No change to text]
Nitrite	[No change to text]
Perchlorate	[No change to text]
Selenium	[No change to text]
Thallium	[No change to text]

Appendix 64465-E. Health Effects Language

Volatile Organic Contaminants

Appendix 64465-F. Health Effects Language

Synthetic Organic Contaminants

Appendix 64465-G. Health Effects Language

Disinfection Byproducts, Byproduct Precursors, and Disinfection Residuals

Appendix 64465-H. Health Effects Language

Other Treatment Techniques

No change to Appendices 64465-A through C or 64465-E through H.

Note: Authority cited: Sections 116271, 116350 and 116375, Health and Safety Code. Reference: Sections 116450 and 116470, Health and Safety Code.

Article 20. Consumer Confidence Report

(6) Amend Section 64481 to read as follows:

§ 64481. Content of the Consumer Confidence Report.

…

(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, 64426.6, 64431, 64442, 64443, 64444, 64448, 64449, 64533, 64533.5, 64536, 64536.2, 64653, and 64678;

(2) Contaminants specified in 40 Code of Federal Regulations part 141.40 (7-1-2007 edition) for which monitoring is required (unregulated contaminants);

(3) Microbial contaminants detected as provided under subsection (3); 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.

…

(o) The ~~c~~Consumer ~~c~~Confidence ~~r~~Report prepared and delivered by July 1, 2022 shall, for bacteriological monitoring conducted from January 1, 2021 to June 30, 2021, inclusive, include the following additional information in the report:

(1) The total coliform MCL expressed as shown in ~~t~~Table 64481-C.

Table 64481-C

Total Coliform MCL for Consumer Confidence Report

Contaminant	*MCL*
[No change to text]	[No change to text]
[No change to text]	[No change to text]

(2) [No change to text]

(3) [No change to text]

(4) The likely source(s) of any total coliform, fecal coliform, or *E. coli* detected. If the water system lacks specific information on the likely source, the table shall include the typical source for that contaminant listed in ~~t~~Table 64481-D.

Table 64481-D

Typical Origins of Microbiological Contaminants with Primary MCL

Contaminant	*Major Origins in Drinking Water*
[No change to text]	[No change to text]
[No change to text]	[No change to text]

(5) Information on any data indicating violation of the total coliform MCL, including the length of the violation, potential adverse health effects, and actions taken by the water system to address the violation. To describe the potential health effects, the water system shall use the relevant language in ~~t~~Table 64481-E.

Table 64481-E

Health Effects Language for Microbiological Contaminants

Contaminant	*Health Effects Language*
[No change to text]	[No change to text]
[No change to text]	[No change to text]
[No change to text]	[No change to text]

(6) [No change to text]

(p) A Consumer Confidence Report issued after [INSERT EFFECTIVE DATE OF THE PROPOSED REGULATION] and prior to the applicable compliance date in Table 64432-B shall include the following information for chromium (hexavalent):

(1) If chromium (hexavalent) is detected, the Consumer Confidence Report shall include information pursuant to subsections (c) and (d).

(2) If chromium (hexavalent) exceeds the MCL, the Consumer Confidence Report shall include additional information indicated in Table 64481-F.

Table 64481-F CCR Language
Hexavalent Chromium MCL Exceedance

CCR Language
Chromium (hexavalent) was detected at levels that exceed the chromium (hexavalent) MCL. While a water system of our size is not considered in violation of the chromium (hexavalent) MCL until after [INSERT APPLICABLE TABLE 64432-B COMPLIANCE DATE], we are working to address this exceedance and comply with the MCL. Specifically, we are [INSERT ACTIONS TAKEN AND PLANNED TO COMPLY WITH THE APPLICABLE COMPLIANCE DATE IN TABLE 64432-B].

Appendix 64481-A.
Typical Origins of Contaminants with Primary MCLs, MRDLs, Regulatory Action Levels, and Treatment Techniques

Contaminant	*Major origins in drinking water*
Microbiological	
[No change to text]	[No change to text]
Surface water treatment	
[No change to text]	[No change to text]

Radioactive

[No change to text]	[No change to text]

Inorganic

Aluminum	[No change to text]
Antimony	[No change to text]
Arsenic	[No change to text]
Asbestos	[No change to text]
Barium	[No change to text]
Beryllium	[No change to text]
Cadmium	[No change to text]
Chromium (hexavalent)	Erosion of natural deposits; transformation of naturally occurring trivalent chromium to hexavalent chromium by natural processes and human activities such as discharges from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities.
Chromium (total)	[No change to text]
Copper	[No change to text]
Cyanide	[No change to text]
Fluoride	[No change to text]
Lead	[No change to text]
Mercury	[No change to text]
Nickel	[No change to text]
Nitrate	[No change to text]
Nitrite	[No change to text]
Perchlorate	[No change to text]

Selenium	[No change to text]
Thallium	[No change to text]

Synthetic organic

[No change to text]	[No change to text]

Volatile organic

[No change to text]	[No change to text]

Disinfection Byproducts, Disinfection Byproduct Precursors, and Disinfectant Residuals

[No change to text]	[No change to text]

...

Note: Authority cited: Sections 116271, 116350 and 116375, Health and Safety Code. Reference: Sections 116275 and 116470, Health and Safety Code.