California Code of Regulations Title 22, Chapter 15

ARTICLE 2. GENERAL REQUIREMENTS

Section 64413.1. Classification of Water Treatment Facilities.

(a) Each water treatment facility shall be classified pursuant to Table 64413.1-A based on the calculation of total points for the facility using the factors specified in subsection(b).

Table 64413.1-A. Water Treatment Facility Class Designations

Total Points	Class
Less than 20	T1
20 through 39	T2
40 through 59	Т3
60 through 79	T4
80 or more	T5

- (b) The calculation of total points for each water treatment facility shall be the sum of the points derived in each of paragraphs (1) through (13). except where If a treatment facility treats more than one source, in which case the source with the highest average concentration of each contaminant shall be used to determine the point value in paragraphs (2) through (5).
 - (1) For water source, the points are determined pursuant to Table 64413.1-B.

Table 64413.1-B. Points for Source Water Used by the Facility

Type of source water used by the facility	Points
Groundwater and/or purchased treated water meeting primary and secondary	2
drinking water standards, as defined in section 116275 of the Health and	
Safety Code	
Water that includes any surface water or groundwater under the direct	5
influence of surface water	

(2) For influent microbiological water quality, points shall be determined by using the median of all total coliform analyses completed in the previous 24 months pursuant to Table 64413.1-C:

Table 64413.1-C. Influent Water Microbiological Quality Points

Median Coliform Density	Points
Most Probable Number Index (MPN)	
less than 1 per 100 mL	0
1 through 100 per 100 mL	2
greater than 100 through 1,000 per 100 mL	4
greater than 1,000 through 10,000 per 100 mL	6
greater than 10,000 per 100 mL	8

(3) For facilities treating surface water or groundwater under the direct influence of surface water, points for influent water turbidity shall be determined pursuant to Table 64413.1-D on the basis of the previous 24 months of data, except that if turbidity data is missing for one or more of the months, the points given for turbidity shall be 5. The maximum influent turbidity sustained for at least one hour according to an on-line turbidimeter shall be used unless such data is not available, in which case, the maximum influent turbidity identified by grab sample shall be used. For facilities that have not been in operation for 24 months, the available data shall be used. For facilities whose permit specifies measures to ensure that influent turbidity will not exceed a specified level, the points corresponding to that level shall be assigned.

Table 64413.1-D. Influent Water Turbidity Points

Maximum Influent Turbidity Level	Points
Nephelometric Turbidity Units (NTU)	
Less than 15	0
15 through 100	2
Greater than 100	5

(4) The points for influent water perchlorate, nitrate, or nitrite levels shall be determined by an average of the three most recent sample results, pursuant to Table 64413.1-E.

Table 64413.1-E. Influent Water Perchlorate, Nitrate, and Nitrite Points

Perchlorate, Nitrate, and Nitrite Data Average	Points
Less than or equal to the maximum contaminant level (MCL), as	0
specified in Table 64431-A	
For each contaminant Ggreater than itsthe MCL	5

(5) The points for other influent water contaminants with primary MCLs shall be a sum of the points for each of the inorganic contaminants (Table 64431-A), organic *Arsenic MCL Revision Regulations*

contaminants (Table 64444-A) and radionuclides (Tables 64442 and 64443). The points for each contaminant shall be based on an average of the three most recent sample results, pursuant to Table 64413.1-F. If monitoring for a contaminant has been waived pursuant to sections 64432(km) or (n), 64432.2(c), or 64445(d), the points shall be zero for that contaminant.

Table 64413.1-F.
Influent Water Chemical and Radiological Contaminant Points

Contaminant Data Average	Points
Less than or equal to the MCL	0
Greater than the MCL	2
5 Times the MCL or greater	5

(6) The total points for surface water filtration treatment shall be the sum of the points of those treatment processes utilized by the facility for compliance with section 64652, pursuant to Table 64413.1-G.

Table 64413.1-G. Points for Surface Water Filtration Treatment

Treatment	Points
Conventional, direct, or inline	15
Diatomaceous earth	12
Slow sand, membrane, cartridge, or bag filter	8
Backwash recycled as part of process	5

- (7) The points for each treatment process utilized by the facility and not included in paragraph (6) that is used to reduce the concentration of one or more contaminants for which a primary MCL exists, pursuant to Table 64431-A, Table 64444-A, and Tables 64442 and 64443, shall be 10. Blending shall only be counted as a treatment process if one of the blended sources exceeds a primary MCL.
- (8) The points for each treatment process not included in paragraphs (6), or (7) that is used to reduce the concentration of one or more contaminants for which a secondary MCL exists, pursuant to Tables 64449-A and 64449-B, shall be 3. Blending shall only be counted as a treatment process if one of the blended sources exceeds a secondary MCL.
- (9) The points for each treatment process not included in paragraphs (6), (7), or (8) that is used for corrosion control or fluoridation shall be 3.
- (10) The total points for disinfection treatment shall be the sum of the points for those treatment processes utilized by the facility for compliance with section 64654(a), pursuant to Table 64413.1-H.

Table 64413.1-H. Points for Disinfection Treatment

Treatment Process	Points
Ozone	10
Chlorine and/or chloramine	10
Chlorine dioxide	10
Ultra violet (UV)	7

(11) The points for disinfection/oxidation treatment not included in paragraphs (6), (7), (8), or (10) shall be a sum of the points for all the treatment processes used at the facility pursuant to Table 64413.1-I.

Table 64413.1-I.
Points for Disinfection/Oxidation Treatment without Inactivation Credit

Treatment Process	Points
Ozone	5
Chlorine and/or chloramine	5
Chlorine dioxide	5
Ultra violet (UV)	3
Other oxidants	5

- (12) The points for any other treatment process that alters the physical or chemical characteristics of the drinking water and that was not included in paragraphs (6), (7), (8), (9), (10), or (11) shall be 3.
- (13) The points for facility flow shall be 2 per million gallons per day or fraction thereof of maximum permitted treatment facility capacity, up to a maximum of 50 points; except that for facilities utilizing only blending, the points shall be based on the flow from the contaminated source and the dilution flow required to meet the MCL(s) specified in Tables 64431-A, 64444-A, 64449-A, 64449-B, and Tables 64442 and 64443.

Note: Authority cited: Sections 106910 and 131200, Health and Safety Code. Reference: Sections 106875, 106910, 116555, 131050 and 131051, Health and Safety Code.

Section 64414. Standby Sources.

- (a) A source which has been designated "standby" shall be monitored a minimum of once every compliance cycle for all inorganic, organic, and radiological MCLs, unless a waiver has been granted by the Department pursuant to Section 64432(km) or (ln) for inorganics, Section 64432.2(c) for asbestos, or Section 64445(d) for organics.
- (b) A standby source which has previous monitoring results indicating nitrate or nitrite levels equal to or greater than 50 percent of the MCL shall collect and analyze a sample for nitrate and nitrite annually. In addition, upon activation of such a source, a sample shall be collected, analyzed for these chemicals and the analytical results reported to the Department within 24 hours of activation.
- (c) A standby source shall be used only for short-term emergencies of five consecutive days or less, and for less than a total of fifteen calendar days a year.
- (d) Within 3 days after the short-term emergency use of a standby source, the water supplier shall notify the Department. The notification shall include information on the reason for and duration of the use.
- (e) The status of a designated standby source shall not be changed to that of a regular source of drinking water supply, unless the source meets all existing drinking water standards and approval is obtained from the Department in advance.
- (f) A standby source for which perchlorate has been previously detected shall have a sample collected and analyzed for perchlorate annually. Additionally, upon activation of such a source, a sample shall be collected and analyzed for perchlorate, and the analytical result shall be reported to the Department within 48 hours of activation.

Note: Authority cited: Sections 208116375 and 4023.3131200, Health and Safety Code. Reference: Sections 4024116385, 131050 and 131051, Health and Safety Code.

ARTICLE 4. PRIMARY STANDARDS – INORGANIC CHEMICALS

Section 64431. Maximum Contaminant Levels - Inorganic Chemicals.

(a) Public water systems shall comply with the primary MCLs in 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	0.05 <u>0.010</u>
Asbestos	7 MFL*
Barium	1.
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.15
Fluoride	2.0
Mercury	0.002
Nickel	0.1
Nitrate (as NO3)	45.
Nitrate + Nitrite	10.
(sum as nitrogen)	
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 116293(b), 116350, 116365, 116375 and 131200, Health and Safety Code. Reference: Sections 116365, 116470, 131050 and 131051, Health and Safety Code.

Section 64432. Monitoring and Compliance--Inorganic Chemicals.

- (a) All public water systems shall monitor to determine compliance with the nitrate and nitrite MCLs in Table 64431-A, pursuant to subsections (c) through (e) and Section 64432.1. All community and nontransient-noncommunity water systems shall monitor to determine compliance with the perchlorate MCL, pursuant to subsections (c), (d), (j), and Section 64432.3. All community and nontransient-noncommunity water systems shall also monitor to determine compliance with the other MCLs in Table 64431-A, pursuant to subsections (b) through (ln), and, for asbestos, Section 64432.2. Monitoring shall be conducted in the year designated by the Department of each compliance period beginning with the compliance period starting January 1, 1993.
- (b) Unless directed otherwise by the Department, 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 Table 64431-A.
- (bc) <u>Unless more frequent monitoring is required pursuant to this Chapter, Tthe</u> frequency of monitoring conducted to determine compliance with the MCLs for the inorganic chemicals listed in Table 64431-A, except for asbestos, nitrate/nitrite and perchlorate, shall be as follows:
- (1) Each compliance period, all community and nontransient-noncommunity systems using groundwater shall monitor once during the year designated by the Department. The Department will designate the year based on historical monitoring frequency and laboratory capacity. All community and nontransient-noncommunity systems using approved surface water shall monitor annually. All systems monitoring at distribution entry points which have combined surface and groundwater sources shall monitor annually.
- (2) Quarterly samples shall be collected and analyzed for any chemical if analyses of such samples indicate a continuous or persistent trend toward higher levels of that chemical, based on an evaluation of previous data.
- (ed) For the purposes of Sections 64432, 64432.1, 64432.2, and 64432.3, detection shall be defined by the detections limits for purposes of reporting (DLRs) in Table 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	0.01
Cyanide	0.1
Fluoride	0.1
Mercury	0.001
Nickel	0.01
Nitrate (as NO3)	2.
Nitrite (as nitrogen)	0.4
Perchlorate	0.004
Selenium	0.005
Thallium	0.001

- * MFL=million fibers per liter; DLR for fibers exceeding 10 µm in length.
- (de) Samples shall be collected from each water source or a supplier may collect a minimum of one sample at every entry point to the distribution system which is representative of each source after treatment. The system shall collect each sample at the same sampling site, unless a change is approved by the Department.
- (ef) A water system may request approval from the Department to composite samples from up to five sampling sites, provided that the number of sites to be composited is less than the ratio of the MCL to the DLR. Approval will be based on a review of three years of historical data, well construction and aquifer information for groundwater, and intake location, similarity of sources, and watershed characteristics for surface water. Compositing shall be done in the laboratory.
- (1) Systems serving more than 3,300 persons shall composite only from sampling sites within a single system. Systems serving 3,300 persons or less may composite among different systems up to the 5-sample limit.
- (2) If any inorganic chemical is detected in the composite sample at a level equal to or greater than one fifth of the MCL, a follow-up sample shall be analyzed within 14 days from each sampling site included in the composite for the contaminants which exceeded the one-fifth-MCL level. If available, duplicates of the original sample taken from each sampling site used in the composite may be used instead of resampling; the

analytical results shall be reported within 14 days. The water supplier may collect up to two additional samples each from one or more of the sources to confirm the result(s).

- (3) Compliance for each site shall be determined on the basis of the individual follow-up samples, or on the average of the follow-up and confirmation sample(s) if the supplier collects confirmation sample(s) for each detection.
- (fg) If the level of any inorganic chemical, except for nitrate, nitrate plus nitrite, or perchlorate, exceeds the MCL, the water supplier shall do one of the following:
- (1) Inform the Department within 48 hours and monitor quarterly beginning in the next quarter after the <u>violation exceedance</u> occurred; or
- (2) Inform the Department within seven days from the receipt of the analysis and, as confirmation, collect one additional sample within 14 days from receipt of the analysis to confirm the result. If the average of the two samples collected exceeds the MCL, this information shall be reported to the Department within 48 hours and the water supplier shall monitor quarterly beginning in the next quarter after the violation exceedance occurred.
- (h) If the concentration of an inorganic chemical exceeds ten times the MCL, within 48 hours of receipt of the result the water supplier shall notify the Department and resample as confirmation. The water supplier shall notify the Department of the result(s) of the confirmation sample(s) within 24 hours of receipt of the confirmation result(s).
- (1) If the average concentration of the original and confirmation sample(s) is less than or equal to ten times the MCL, the water supplier shall monitor quarterly beginning in the quarter following the quarter in which the exceedance occurred.
- (2) If the average concentration of the original and confirmation sample(s) exceeds ten times the MCL, the water supplier shall, if directed by the Department;
 - (A) immediately discontinue use of the contaminated water source and (B) not return the source to service without written approval from the
- Department.
- (gi) For systems monitoring quarterly, eCompliance 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 out of compliance-immediately in violation. For systems monitoring annually or less frequently, compliance shall be determined based on the initial sample or the average of the initial and confirmation samples, if a confirmation sample is collected. 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.
- (hj) If a system using groundwater has collected a minimum of two quarterly samples or a system using approved surface water has collected a minimum of four quarterly samples and the sample results have been below the MCL, the system may apply to the Department for a reduction in monitoring frequency.

- $(i\underline{k})$ Water quality data collected prior to January 1, 1990, and/or data collected in a manner inconsistent with this section shall not be used in the determination of compliance with the monitoring requirements for inorganic chemicals.
- (jl) Water quality data collected in compliance with the monitoring requirements of this section by a wholesaler agency providing water to a public water system shall be acceptable for use by that system for compliance with the monitoring requirements of this section.
- (km) A water system may apply to the Department for a waiver from the monitoring frequencies specified in paragraph (bc)(1) of this section, if the system has conducted at least three rounds of monitoring (three periods for groundwater sources or three years for approved surface water sources) and all previous analytical results are less than the MCL. The water system shall specify the basis for its request. If granted a waiver, a system shall collect a minimum of one sample per source while the waiver is in effect and the term of the waiver shall not exceed one compliance cycle (i.e., nine years).
- (\underline{ln}) A water system may be eligible for a waiver from the monitoring frequencies for cyanide specified in paragraph $(\underline{bc})(1)$ of this section without any prior monitoring if it is able to document that it is not vulnerable to cyanide contamination pursuant to the requirements in section 64445(d)(1) or (d)(2).
- (mo) Transient-noncommunity water systems shall monitor for the inorganic chemicals in Table 64431-A as follows:
 - (1) All sources shall be monitored at least once for fluoride;
- (2) Surface water sources for parks and other facilities with an average daily population use of more than 1000 people and/or which are determined to be subject to potential contamination based on a sanitary survey shall be monitored at the same frequency as community water systems.

NOTE: Authority cited: Sections 116293(b), 116375 and 131200, Health and Safety Code. Reference: Sections 116385, 131050 and 131051, Health and Safety Code.

Section 64432.2. Monitoring and Compliance - Asbestos.

- (a) All community and nontransient-noncommunity water systems are required to monitor to determine compliance with the MCL for asbestos in Table 64431-A during the year designated by the Department of the first compliance period of each nine-year compliance cycle, beginning in the compliance period starting January 1, 1993. The Department will designate the year based on historical monitoring frequency and laboratory capacity.
- (1) If a groundwater system is vulnerable to asbestos contamination solely in its source water, it shall collect one sample at every entry point to the distribution system which is representative of each water source after treatment and proceed in accordance with Subsections $64432(\frac{1}{2})(2)$ through $(\frac{1}{2})$.
- (2) All approved surface water systems shall be designated vulnerable to asbestos contamination in their source waters. If a surface water system is vulnerable solely in its source water, it shall proceed as in paragraph (1) above.
- (3) If a system is vulnerable to asbestos contamination due to leaching of asbestos-cement pipe, with or without vulnerability to asbestos contamination in its source water, it shall take one sample at a tap served by asbestos-cement pipe under conditions where asbestos contamination is most likely to occur.
- (b) If the level of asbestos exceeds the MCL in Table 64431-A, the supplier shall report to the Department within 48 hours and monitor quarterly beginning in the next quarter after the violation occurred. A system may request that the Department reduce monitoring frequency to one sample every compliance cycle, pursuant to Section 64432(hj).
- (c) If a system is not vulnerable either to asbestos contamination in its source water or due to leaching of asbestos-cement pipe, it may apply to the Department for a waiver of the monitoring requirements in paragraphs (a)(1) through (3) of this section. The Department will determine the vulnerability of groundwater sources on the basis of historical monitoring data and possible influence of serpentine formations. Vulnerability due to leaching of asbestos-cement pipe will be determined by the Department on the basis of the presence of such pipe in the distribution system and evaluation of the corrosivity of the water. The period of the waiver shall be three years.

NOTE: Authority cited: Sections <u>208</u> <u>116293(b)</u>, <u>116375</u> and <u>4023.3</u> <u>131200</u>, Health and Safety Code. Reference: Sections <u>4024116385</u>, <u>131050</u> and <u>131051</u>, Health and Safety Code.

Section 64432.8. Sampling of Treated Water Sources.

- (a) Each water supplier utilizing treatment to comply with one or more MCL(s) in Table 64431-A shall collect monthly samples of the treated water at a site prior to the distribution system and analyze for the chemical(s) for which treatment is being applied. If the treated water exceeds an MCL, other than a nitrate, nitrite, nitrate plus nitrite, or perchlorate MCL, within 48 hours of receipt of the result the water supplier shall resample the treated water to confirm the result and report the initial result to the Department. The result of the analysis of the confirmation sample shall be reported to the Department within 24 hours of receipt of the confirmation result. For nitrate, nitrite, nitrate plus nitrite, or perchlorate treated water monitoring, the water supplier shall comply with the requirements of 64432.1(a)(1) for nitrate, 64432.1(b)(1) for nitrite, 64432.1(c) for nitrate plus nitrite, and 64432.3(d) for perchlorate.
- (b) The Department may require more frequent monitoring based on an evaluation of the treatment process used, the treatment effectiveness and efficiency, and the concentration of the inorganic chemical in the water source.

NOTE: Authority cited: Sections 100275, 116375 and 131200, Health and Safety Code. Reference: Sections 116275, 116361, 116385, 131050 and 131051, Health and Safety Code.

ARTICLE 4.1. FLUORIDATION

Section 64433.3. Monitoring and Compliance--Fluoride Levels.

- (a) If a water system has a single fluoridation system which treats all the water distributed to consumers, the supplier shall collect a daily sample for fluoride analysis, pursuant to Section 64415(b), either in the distribution system or at the entry point. If a water system does not fluoridate all its water and/or has more than one fluoridation system, the supplier shall collect one sample daily in the distribution system and rotate the sample sites in order to be representative of the water throughout the distribution system according to a monitoring plan the Department has determined to be representative. For water systems fluoridating as of January 1, 1997, the plan shall be submitted by July 1, 1998. For all others, the plan shall be submitted prior to initiating fluoridation treatment. A water system shall monitor only when it is operating its fluoridation system.
- (b) If more than 20 percent of the daily fluoride samples collected in a month by a water system pursuant to subsection (a) fall outside the control range of optimal levels as determined by temperature for that system pursuant to Section 64433.2, the system shall be out of compliance with Section 64433.2.
- (c) At least once a month, any water supplier with an operating fluoridation system shall divide one sample and have one portion analyzed for fluoride by water system personnel and the other portion analyzed pursuant to Section 64415(a).
- (d) Any water system with an operating fluoridation system shall sample the raw source waters annually and analyze for fluoride pursuant to Section 64415(a); samples collected pursuant to Section 64432(bc)(1) may be used toward satisfying this requirement. All raw source water samples collected under this subsection are subject to compliance with the fluoride MCL in Table 64431-A.
- (e) If any sample result obtained pursuant to subsection (a) does not fall within the temperature-appropriate fluoride level control range in Table 64433.2-A, the water supplier shall take action as detailed in the water system's approved fluoridation system operations contingency plan as specified in Section 64433.8.

NOTE: Authority cited: Sections 100275, 116385, 116410, and 116415 and 131200, Health and Safety Code. Reference: Sections 116365, 116410, and 116415, 131050 and 131051, Health and Safety Code.

ARTICLE 5.5. PRIMARY STANDARDS -ORGANIC CHEMICALS

Section 64445.1. Repeat Monitoring and Compliance -Organic Chemicals.

(a) For the purposes of this article, detection shall be defined by the detection limits for purposes of reporting (DLRs) in Table 64445.1-A:

Table 64445.1-A
Detection Limits for Purposes of Reporting (DLRs) for Regulated
Organic Chemicals

Chemical (a) All VOCs, except as listed	Detection Limit for Purposes of Reporting (DLR) (mg/L) 0.0005
Methyl-tert-butyl ether	0.0003
Trichlorofluoromethane	
The moroituo one than e	0.005
1,1,2-Trichloro-1,2,2-	0.01
Trifluoroethane	
(b) SOCs	0.001
Alachlor	0.001
Atrazine	
Bentazon	0.002
Benzo(a)pyrene	0.0001
. Carbofuran	0.005
Chlordane	0.0001
2,4-	0.01
D	0.01
Dalapon	0.01
Dibromochloropropane (DBCP)	0.00001
Di(2-	0.005
ethylhexyl)adipate	
Di(2- ethylhexyl)phthalate	0.003
Dinoseb	0.002
Diquat	0.004
Endothall	0.045
Endrin	0.0001
Ethylene dibromide	0.00002
(EDB)	
Glyphosate	0.025

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Heptachlor	0.00001
Heptachlor	0.00001
epoxide	0.00001
Hexachlorobenzene	0.0005
Hexachlorocyclopentadiene	0.001
Lindane	0.0002
Methoxychlor	0.01
Molinate	
Monate	0.002
Oxamyl	0.02
Pentachlorophenol	0.0002
Picloram	0.0002
1 iciorani	0.001
Polychlorinated biphenyls (PCBs) (as	
decachlorobiphenyl)	0.0005
Simazine	0.0003
Thiobencarb	0.001
Tillobelicarb	0.001
Toxaphene	0.001
2,3,7,8-TCDD (Dioxin)	$5x10^{-9}$
2,4,5-TP (Silvex)	0.001
2, T, J 11 (SHYCA)	0.001

- (b) When organic chemicals are not detected pursuant to Table 64445.1-A.
- (1) A water system, which has not detected any of the VOCs on Table 64444-A during the initial four quarters of monitoring, shall collect and analyze one sample annually. After a minimum of three years of annual sampling with no detection of a VOC in Table 64444-A, a system using groundwater may reduce the monitoring frequency to one sample during each compliance period. A system using surface water shall continue monitoring annually.
- (2) A system serving more than 3,300 persons which has not detected an SOC on Table 64444-A during the initial four quarters of monitoring shall collect a minimum of two quarterly samples for that SOC in one year during the year designated by the Department of each subsequent compliance period. The year will be designated on the basis of historical monitoring frequency and laboratory capacity.
- (3) A system serving 3,300 persons or less which has not detected an SOC on Table 64444-A during the initial four quarters of monitoring shall collect a minimum of one sample for that SOC during the year designated by the Department of each subsequent compliance period. The year will be designated on the basis of historical monitoring frequency and laboratory capacity.
 - (c) When organic chemicals are detected pursuant to Table 64445.1-A.
- (1) Prior to proceeding with the requirements of paragraphs (c)(2) through (7), the water supplier may first confirm the analytical result, as follows: Within seven days from the notification of an initial finding from a laboratory reporting the presence of one or more organic chemicals in a water sample, the water supplier shall collect one or two

additional sample(s) to confirm the initial finding. Confirmation of the initial finding shall be shown by the presence of the organic chemical in either the first or second additional sample, and the detected level of the contaminant for compliance purposes shall be the average of the initial and confirmation sample(s). The initial finding shall be disregarded if two additional samples do not show the presence of the organic chemical.

- (2) If one or both of the related organic chemicals heptachlor and heptachlor epoxide are detected, subsequent monitoring shall analyze for both chemicals until there has been no detection of either chemical for one compliance period.
- (3) A groundwater sampling site at which one or more of the following chemicals has been detected shall be monitored quarterly for vinyl chloride: trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, 1,1,1- trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, or 1,1- dichloroethylene. If vinyl chloride is not detected in the first quarterly sample,the sampling site shall be monitored once for vinyl chloride during each compliance period.
- (4) If the detected level of organic chemicals for any sampling site does not exceed any shown in Table 64444-A, the water source shall be resampled every three months and the samples analyzed for the detected chemicals. After one year of sampling an approved surface water system or two quarters of sampling a groundwater system, the Department will consider allowing the water supplier to reduce the sampling to once per year upon request, based on a review of previous sampling data. Systems shall monitor during the quarter(s) which previously yielded the highest analytical results.
- (5) If the detected level of an organic chemical for any sampling site exceeds that listed in Table 64444-A, the water supplier shall report this information to the Department within 48 hours of receipt of the result. Unless use of the contaminated source is discontinued, the water supplier shall resample the contaminated source and compliance shall be determined as follows:
- (A) Water systems serving more than 3,300 persons shall sample monthly for six months and shall submit the results to the Department as specified in Section 64451(a)64469. A water source shall be deemed to be in compliance with Section 64444 in the average concentration of the initial finding, confirmation sample(s), and six subsequent monthly samples does not exceed the MCL shown in Table 64444-A. In such eases, the water supplier may reduce the sampling frequency to once every three months. If the running annual average or the average concentration of the initial finding, confirmation sample(s), and six subsequent monthly samples exceeds the MCL shown in Table 64444-A, If the average annual concentration of four quarterly samples exceeds the MCL the water sourcesystem shall be deemed to be in violation of Section 64444. If any sample would cause the annual average to exceed the MCL, then the system is out of compliance immediately.
- (B)Water systems serving 3,300 persons or less shall sample quarterly for a minimum of one year-and shall submit the results to the Department as specified in Section 64451(a)64469. Compliance with Section 64444 shall be based on the average concentration of the initial finding, confirmation sample(s) if collected, and three subsequent quarterly samples. If any sample would cause the annual average to exceed the MCL, then the system is out of compliance immediately. If the running annual average concentration does not exceed the MCL in Table 64444-A, the water supplier may reduce the sampling frequency to once every year during the quarter that previously

yielded the highest analytical result. Quarterly monitoring shall resume if any reduced frequency sample result exceeds the MCL. If the running annual average concentration exceeds the MCL in Table 64444-A, the water system shall be deemed to be in violation of Section 64444. Subsequently, compliance shall be determined on the basis of a running annual average of the most recent four quarters of sample results.

- (C) If any sample would cause the running annual average to exceed the MCL, the water 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.
- (6) If any resample, other than those taken in accordance with (c)(5) of this section, of a water sampling site shows that the concentration of any organic chemical exceeds a MCL shown in Table 64444-A, the water supplier shall proceed in accordance with (c)(1) and (c)(4), or (c)(5).
- (7) If an organic chemical is detected and the concentration exceeds ten times the MCL, the water supplier shall notify the Department within 48 hours of the receipt of the results and the contaminated site shall be resampled within 48 hours to confirm the result. The water supplier shall notify the Department of the result of the confirmation sample(s) within 24 hours of the receipt of the confirmation result(s).
- (A) If the average concentration of the original and confirmation sample(s) is less than <u>or equal to</u> ten times the MCL, the water supplier shall proceed in accordance with subsection (c)(5).
- (B) If the average concentration of the original and confirmation samples exceeds ten times the MCL, use of the contaminated water source shall immediately be discontinued, if directed by the Department. Such a water source shall not be returned to service without written approval from the Department.

Note: Authority cited: Sections 100275, 116350, and 116375 and 131200, Health and Safety Code. Reference: Sections 116385, 116450, 116460, and 116555, 131050 and 131051, Health and Safety Code.

ARTICLE 12. BEST AVAILABLE TECHNOLOGIES (BATs)

Section 64447.2. Best available technologies (BATs) - Inorganic Chemicals

The technologies listed in Table 64447.2-A are the best available technology, treatment techniques, or other means available for achieving compliance with the MCLs in Table 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 <u>, 9, 13</u>
Asbestos	2, 3, 8
Barium	5, 6, 7, 9
Beryllium	1, 2, 5, 6, 7
Cadmium	2, 5, 6, 7
Chromium	$2, 5, 6^a, 7$
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

^aBAT for Chromium III only.

Key to BATs in 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

^bBAT only if influent mercury concentrations <10 µg/L.

^cBAT for Selenium IV only.

- 11 = Chlorine oxidation
- 12 = Biological fluidized bed reactor
- 13 = Oxidation/Filtration

NOTE: Authority cited: Sections 116293(b), 116370 and 131200, Health and Safety Code. Reference: Sections 116350, 131050 and 131051, Health and Safety Code

ARTICLE 20. CONSUMER CONFIDENCE REPORT

Section 64482. Required Additional Health Information.

- (a) A system that detects arsenic at levels above <u>0.005 mg/L25 ug/L</u>, but below <u>or equal to</u> the MCL, shall include the following in its Consumer Confidence Report: "While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems The U.S. Environmental Protection Agency is reviewing the drinking water standard for arsenic because of special concerns that the standard may not be stringent enough. Arsenic is a naturally-occurring mineral known to cause cancer in humans at high concentrations."
- (b) A system that detects nitrate at levels above 23 mg/L (as nitrate), but below the MCL, shall include the following in its Consumer Confidence Report: "Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider." If a system cannot demonstrate to the Department with at least five years of the most current monitoring data that its nitrate levels are stable, it shall also add the following language to the preceding statement on nitrate: "Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity."
- (c) A system that detects lead above the action level in more than 5%, and up to and including 10%, of sites sampled, shall include the following in its Consumer Confidence Report: "Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791)."
- (d) A community water system serving 10,000 or more people that has a running annual average for total trihalomethanes compliance determined pursuant to section 64439 that exceeds 0.080 mg/L, but does not exceed the total trihalomethanes MCL, shall include the health effects language in Appendix 64465 G in its Consumer Confidence Report.

Note: Authority cited: Sections 116350, and 116375 and 131200, Health and Safety Code. Reference: Sections 116275, and 116470, 131050 and 131051, Health and Safety Code.