Title 22. Social Security Division

4. Environmental Health Chapter

15. Domestic Water Quality and Monitoring Regulations

Article 1. Definitions

(1) Adopt Section 64400.02 to read as follows:

§ 64400.02. Approved Surface Water.

"Approved surface water" has the same meaning as defined in Section 64651.10.

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

(2) Adopt Section 64400.03 to read as follows:

§ 64400.03. Clean Compliance History.

<u>"Clean compliance history" means a record of no bacteriological monitoring</u>
<u>violations under sections 64423, 64424, and 64425, no MCL violations under section</u>
<u>64426.1, no coliform treatment technique violations under section 64426.6, and no</u>
coliform treatment technique trigger exceedances under section 64426.7.

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

(3) Re-Number Section 64400.47 to 64400.49:

§ 64400.479. Haloacetic Acids (Five) or HAA5.

No change to text.

Note: Authority cited: Sections <u>116271</u><u>116325</u> and 116375, Health and Safety Code. Reference: Sections 116275 and <u>116350</u><u>116375</u>, Health and Safety Code.

(4) Adopt Section 64400.47 to read as follows:

§ 64400.47. Groundwater Under the Direct Influence of Surface Water or GWUDI.

"Groundwater under the direct influence of surface water" or "GWUDI" has the same meaning as defined in Section 64651.50.

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

(5) Adopt Section 64400.63 to read as follows:

§ 64400.63. Level 1 Assessment.

<u>"Level 1 assessment" means an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment.</u>

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

(6) Adopt Section 64400.64 to read as follows:

§ 64400.64. Level 2 Assessment.

<u>"Level 2 assessment" means an evaluation, that provides a more detailed</u>
<u>examination of the system (including the system's monitoring and operational practices)</u>
<u>than does a Level 1 assessment through the use of more comprehensive investigation</u>
<u>and review of available information, additional internal and external resources, and</u>
<u>other relevant practices, to identify the possible presence of sanitary defects, defects in</u>
<u>distribution system coliform monitoring practices, and (when possible) the likely reason</u>
that the system triggered the assessment.

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

(7) Re-Number Section 64400.65 to 64400.62:

§ 64400.6562. IOC.

No change to text.

Note: Authority cited: Sections 208, 4023.3116271 and 4028116375, Health and Safety Code. Reference: Sections 4010 through 4039.6116275 and 116375, Health and Safety Code.

(8) Adopt Section 64400.95 to read as follows:

§ 64400.95. Protected Water Source.

<u>"Protected water source" means an aquifer that provides physical exclusion of microbial contamination.</u>

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

(9) Adopt Section 64401.35 to read as follows:

§ 64401.35. Sanitary Defect.

"Sanitary defect" means a defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place.

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

(10) Adopt Section 64401.45 to read as follows:

§ 64401.45. Seasonal System.

"Seasonal system" means a nontransient-noncommunity water system or transient-noncommunity water system that is not operated as a public water system on a year-

round basis and starts up and shuts down at the beginning and end of each operating season.

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

Article 2. General Requirements

(11) 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 U. S. EPA approved methods as prescribed at:
- (1) 40 Code of Federal Regulations parts sections 141.2123 through 141.4241, 141.66, and 141.89 (7-1-2019 edition), which are incorporated by reference; and
- (2) 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.
 - (b) through (b)(3) No change to text.

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

Article 3. Primary Standards – Bacteriological Quality

(12) Amend Section 64421 to read as follows:

§ 64421. General Requirements.

- (a) Each water supplier shall:
- (1) Develop a routine sample siting plan as required in Section 64422; Regulation Text 4 of 54

- (2) Collect routine, repeat and replacement samples as required in Sections 64423, 64424, and 64425;
- (3) Have all samples analyzed by laboratories approved to perform those analyses by the State Board and report results as required in Section 64423.1;
- (4) Notify the State Board when there is an increase in coliform bacteria in bacteriological samples as required in Section 64426; and
 - (5) Comply with the Maximum Contaminant Level as required in Section 64426.1
 - (a) The requirements of this Article apply to public water systems.
- (b) <u>In addition to the bacteriological monitoring requirements in Sections 64423, 64424, 64425, and 64426.9, Water suppliers a public water system shall perform additional special purpose bacteriological monitoring as follows:</u>
 - (1) After construction or repair of wells;
 - (2) After main installation or repair;
 - (3) After construction, repair, or maintenance of storage facilities; and
- (4)(1) After any system pressure loss to less than five psi. Samples collected shall represent the water quality in the affected portions of the system-; and
- (2) For a groundwater (not GWUDI) source that is treated with a primary or residual disinfectant on a continuous basis and is not monitored pursuant to Section 64654.8(b)(1)(B):
- (A) A raw water sample shall be collected each calendar quarter, with samples collected during the same month (first, second, or third) of each calendar quarter; and
- (B) If the raw water sample is total coliform-positive, a raw water sample shall be collected each month. If no coliforms are detected for a minimum of three consecutive months, a public water system may submit a request to the State Board to monitor in accordance with subparagraph (A).
- (c) A public water system shall maintain documentation that the personnel performing sample collection and/or field tests under this Article have been trained pursuant to Section 64415(b). As a minimum, the documentation shall include the

name and qualifications of the personnel who will be performing the sample collection and/or field tests.

(d) Plans, procedures, and requests to be submitted by a public water system to the State Board under this Article shall be in writing. For a request, the system shall state what is being requested, the basis for the request, and include any documentation to support the request.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code.

Reference: Section 116375, Health and Safety Code.

(13) Amend Section 64422 to read as follows:

§ 64422. Routine Bacteriological Sample Siting Plan.

- (a) By September 1, 1992October 1, 2021, each water supplieran existing public water system shall develop and submit to the State Board a bacteriological sample siting plan that identifies sampling sites and a sample collection schedule for the routine collection of bacteriological samples for total coliform analysis, subject to the following:
- (1) The sample sites chosen shall be representative of water throughout the distribution system including alleach pressure zones, and areas supplied by each water source and distribution reservoir.
- (2) The water supplier may rotate Routine sampling may be rotated among the routine sample sites if the total number of sites needed to comply with (a)(1) above paragraph (1) exceeds the number of samples required according to Table 64423-A. The rotation plan of sampling sites shall be described in the sample siting plan;
- (3) Routine and repeat sampling may take place at a customer's premises, dedicated sampling station, or other designated compliance sample location;
- (4) The physical location of routine and repeat sample sites and sampling points required by the Ground Water Rule (triggered source monitoring and assessment source monitoring) in Section 64430 shall be specified in the plan; and

- (5) If applicable, the alternative sampling locations, dual purpose sampling locations, and special purpose sampling locations required in Table 64424-A, Table 64424-B, and Section 64421(b)(2), respectively, shall be specified in the plan.
- (b) If personnel other than certified operators will be performing field tests and/or collecting samples, the sample siting plan shall include a declaration that such personnel have been trained, pursuant to Section 64415 (b).
- (b) A public water system shall collect bacteriological samples for total coliform analysis in accordance with the State Board-approved bacteriological sample siting plan.
- (c) The supplierA public water system shall submit an updated plan to the State Board at least once every ten years and at any time the plan no longer ensures representative monitoring of the systemwithin 30 days of the system's or State Board's determination that the plan no longer complies with subsection (a), the alternative monitoring location for repeat samples collected under Table 64424-A is no longer representative of a pathway for contamination of the distribution system, or dual purpose sampling specified in Table 64424-B is no longer representative of water quality in the distribution system.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code. Reference: Section 116385, Health and Safety Code.

(14) Amend Section 64423 to read as follows:

§ 64423. Routine Sampling.

- (a) Each water supplier A public water system shall collect routine bacteriological water samples as follows:
- (1) The minimum number of samples for community water systems shall be based on the known population served or the total number of service connections, whichever results in the greater number of samples, as shown in Table 64423-A. A community water system using groundwater which serves 25-1000 persons may request from the

State Board a reduction in monitoring frequency. The minimum reduced frequency shall not be less than one sample per quarter.;

- (2) The minimum number of samples for nontransient-noncommunity water systems shall be based on the known population served as shown in Table 64423-A during those months when the system is operating. A nontransient-noncommunity water system using groundwater which serves 25-1000 persons may request from the State Board a reduction in monitoring frequency if it has not violated the requirements in this article during the past twelve months. The minimum reduced frequency shall not be less than one sample per quarter.;
- (3) The minimum number of samples for transient-noncommunity water systems using <u>only groundwater (not GWUDI)</u> and serving 1000 or fewer persons a month shall be one in each calendar quarter during which the system provides water to the public.
- (4) The minimum number of samples for transient-noncommunity water systems using groundwater (not GWUDI) and serving more than 1000 persons during any month shall be based on the known population served as shown in Table 64423-A, except that the water supplier may request from the State Board a reduction in monitoring for any month the system serves 1000 persons or fewer. The minimum reduced frequency shall not be less than one sample in each calendar quarter during which the water system provides water to the public. For any quarter the system serves 1000 or fewer persons in each month and uses only groundwater (not GWUDI), and if the criteria in subsections (c)(2)(A) and (B) are met, the system may submit a request to the State Board to monitor in accordance with paragraph (3). The request shall include:
- (A) Historical data that demonstrates the system has served 1000 or fewer persons in each month of the calendar quarter for which the request is being made; and
 - (B) A revised bacteriological sample siting plan with an updated sampling schedule;
- (5) The minimum number of samples for transient-noncommunity water systems using approved surface water shall be based on the population served as shown in Table 64423-A. A system using groundwater under the direct influence of surface water

shall begin monitoring at this frequency by the end of the sixth month after the State Board has designated the source to be approved surface water-;

- (6) The minimum number of samples for seasonal systems, and in lieu of paragraphs (2) through (5), shall be based on the population served as shown in Table 64423-A during those months when the system is operating:
- (67) A public water system shall collect samples Samples shall be collected at regular time intervals throughout the month, except that a system using only groundwater (not GWUDI) which serves 4,900 persons or fewer may collect all required samples on a single day if they are taken from different sites.
- (8) At least the minimum number of samples shall be taken even if the system has had an *E. coli* MCL violation or has exceeded the coliform treatment technique triggers in Section 64426.7; and
- (9) More than the minimum number of samples may be taken provided the samples are included in the bacteriological sample siting plan developed pursuant to Section 64422.
- (b) In addition to the minimum sampling requirements, all water supplierspublic water systems using approved surface water which do not practice treatment filtration in compliance with Sections 64650 through 64666, shall collect a minimum of one sample before or at the first service connection each day during which the turbidity level of the water delivered to the system source water exceeds 1 NTU. The sample shall be collected within 24 hours of the first exceedance and shall be analyzed for total coliforms. If the water supplier system is unable to collect and/or analyze the sample within the 24-hour time period because of extenuating circumstances beyond its control, the supplier system shall notify the State Board within the 24-hour time period, and may submit a request to the State Board for an extension, and comply with an alternative sample collection schedule specified by the State Board. Sample results shall be included in determining compliance with the MCL for total coliforms in Section 64426.1 fit the coliform treatment technique trigger in Section 64426.7 has been exceeded.

- (c) If any routine, repeat, or replacement sample is total coliform-positive, then the water supplier shall collect repeat samples in accordance with Section 64424 and comply with the reporting requirements specified in Sections 64426 and 64426.1.
- (c) A transient-noncommunity water system monitoring pursuant to subsection (a)(3):
- (1) Shall, in the month following the occurrence of any of the following events, increase monitoring to one sample each month:
- (A) The system triggers a Level 2 assessment or two Level 1 assessments in a rolling 12-month period;
 - (B) The system has an E. coli MCL violation;
 - (C) The system has a coliform treatment technique violation; or
- (D) The system has two bacteriological monitoring violations or one bacteriological monitoring violation and one Level 1 assessment in a rolling 12-month period. For purposes of this subparagraph, failure to conduct bacteriological monitoring under Section 64423, 64423.1, 64424, or 64425 is a bacteriological monitoring violation;
- (2) If monitoring pursuant to paragraph (1) and if all the following criteria are met, may submit a request to the State Board to return to routine monitoring pursuant to subsection (a)(3):
- (A) Within the last 12 consecutive months, the system shall have a completed sanitary survey, site visit, or voluntary Level 2 assessment by the State Board and be determined by the State Board to be free of sanitary defects and have a protected water source; and
- (B) Immediately prior to the request, the system shall have a clean compliance history for a minimum of 12 consecutive months; and
- (3) Shall, in the month following one or more total coliform-positive samples (with or without a Level 1 treatment technique trigger exceedance), collect at least three routine samples. The system may either collect samples at regular time intervals throughout the month or may collect all required routine samples on a single day if samples are taken from different sites. If the system stops supplying water during the month

following the total coliform-positive(s), at least three routine samples shall be collected during the first month the system resumes operation.

- (d) A public water system in violation of the routine sample monitoring requirements of this section shall notify the State Board within 10 days after it learns of the violation and notify the public pursuant to Sections 64463, 64463.7, and 64465.
- (e) A public water system in violation of the reporting requirement in subsection (d) to notify the State Board shall notify the public pursuant to Sections 64463, 64463.7, and 64465.

Table 64423-A

Minimum Number of Routine Total Coliform Samples

Monthly Population	Service Connections	Minimum Number of
Served ¹		Samples <u>Per Month</u>
25 to 1000	15 to 400	1 per month
1,001 to 2,500	401 to 890	2-"
2,501 to 3,300	891 to 1,180	3 <u>"</u>
3,301 to 4,100	1,181 to 1,460	4."
4,101 to 4,900	1,461 to 1,750	5 ."
4,901 to 5,800	1,751 to 2,100	6-"
5,801 to 6,700	2,101 to 2,400	7 <u>."</u>
6,701 to 7,600	2,401 to 2,700	2 per week<u>8</u>
7,601 to 12,900 <u>8,500</u>	2,701 to 4,600 <u>3,000</u>	<u>3 "9</u>

Monthly Population	Service Connections	Minimum Number of
Served¹		Samples <u>Per Month</u>
8,501 to 12,900	3,001 to 4,600	10
0,001 10 12,000	0,001104,000	<u>10</u>
12,901 to 17,200	4,601 to 6,100	<u>4 "15</u>
17,201 to 21,500	6,101 to 7,700	5 " <u>20</u>
21,501 to 25,000	7,701 to 8,900	6 " <u>25</u>
25,001 to 33,000	8,901 to 11,800	<u>8 "30</u>
33,001 to 41,000	11,801 to 14,600	10 " <u>40</u>
41,001 to 50,000	14,601 to 17,900	12 " <u>50</u>
50,001 to 59,000	17,901 to 21,100	15 " <u>60</u>
59,001 to 70,000	21,101 to 25,000	18 " <u>70</u>
70,001 to 83,000	25,001 to 29,600	20 " <u>80</u>
83,001 to 96,000	29,601 to 34,300	23 " <u>90</u>
96,001 to 130,000	34,301 to 46,400	25 " <u>100</u>
130,001 to 220,000	46,401 to 78,600	30 " <u>120</u>
220,001 to 320,000	78,601 to 114,300	38 " <u>150</u>
320,001 to 450,000	114,301 to 160,700	50 " <u>180</u>
450,001 to 600,000	160,701 to 214,300	55 " <u>210</u>
600,001 to 780,000	214,301 to 278,600	60 " <u>240</u>
780,001 to 970,000	278,601 to 346,400	70 " <u>270</u>

Monthly Population	Service Connections	Minimum Number of
Served ¹		Samples <u>Per Month</u>
970,001 to 1,230,000	346,401 to 439,300	75 " <u>300</u>
1,230,001 to 1,520,000	439,301 to 542,900	85 " <u>330</u>
1,520,001 to 1,850,000	542,901 to 660,700	90 " <u>360</u>
1,850,001 to 2,270,000	660,701 to 810,700	98 " <u>390</u>
2,270,001 to 3,020,000	810,701 to 1,078,600	105 " <u>420</u>
3,020,001 to 3,960,000	1,078,601 to 1,414,300	110 " <u>450</u>
3,960,001 or more	1,414,301 or more	120 " <u>480</u>

For a transient-noncommunity water system, monthly population served shall be based on the average number of persons served per day in a month.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code. Reference: Sections 116375, 116385, and 116400 and 116450, Health and Safety Code.

(15) Amend Section 64423.1 to read as follows:

§ 64423.1. Sample Analysis and Reporting of Results.

(a) The water supplier A public water system shall designate (label) each sample as routine, repeat, replacement, or "other" pursuant to Section 64421(b), and have each sample analyzed for total coliforms. The supplier system also shall require the laboratory to analyze the same sample for fecal coliforms or Escherichia coli (E. coli) whenever the presence of total coliforms is indicated. As a minimum, the analytical results shall be reported in terms of the presence or absence of total or fecal coliforms.

- er and E. coli, in the sample, whichever is appropriate. If directed by the State Board, based on an identified sanitary defect, exceedance of a Level 1 or Level 2 coliform treatment technique trigger, history of total coliform-positive samples within the past 12 consecutive months, or determination of a possible significant rise in bacterial count in accordance with Section 64426, the analytical results shall be reported in terms of coliform density of total coliforms and E. coli, in the sample, whichever is appropriate.
- (b) The water supplier A public water system shall require the laboratory to notify the supplier system within 24 hours, whenever the presence of total coliform, fecal coliforms or *E. coli* is demonstrated in a sample or a sample is invalidated due to interference problems, pursuant to Section 64425(b), and shall ensure that a contact person is available to receive these analytical results 24-hours a day, and provide the name(s) and contact information of the contact person(s) to the laboratory. The water supplier system shall also require the laboratory to immediately notify the State Board of any positive bacteriological results if the laboratory cannot make direct contact with the designated contact person within 24 hours.
- (c) Analytical results of all required samples collected for a <u>public water</u> system in a calendar month shall be reported to the State Board not later than the tenth day of the following month, as follows:
- (1) The water supplier Systems serving more than 400 service connections or 1000 persons, or a wholesaler as defined in section 64402.20(a), shall submit a monthly summary of the bacteriological monitoring results to the State Board-, which shall contain the following:
 - (A) Total number of samples collected;
- (B) Number, sample collection date, and sample location of all total coliform and *E. coli*-positive samples;
- (C) Number, sample collection date, sample location, and result of triggered groundwater source samples collected; and
- (D) Sample collection date, sample location, and result for all repeat samples collected.

- (2) For sSystems serving fewer than 10,000 service connections or 33,000 persons, the water supplier shall require the laboratory to submit copies of all required bacteriological monitoring results directly to the State Board-; and
- (3) For sSystems serving more than 10,000 or more service connections, or 33,000 persons, the water supplier shall require the laboratory to submit copies of bacteriological monitoring results for all positive routine samples and all repeat samples directly to the State Board.
- (d) Laboratory reports shall be retained by the water supplier for a period of at least five years and shall be made available to the State Board upon request.
- (d) A public water system in violation of the monitoring requirement of subsection (a) to test the same sample for *E. coli* following a total coliform-positive routine sample shall notify the State Board within 10 days after it learns of the violation and shall notify the public pursuant to Sections 64463, 64463.7, and 64465.
- (e) A public water system in violation of the reporting requirement of subsection (c) to report monitoring results to the State Board or subsection (d) to notify the State Board shall notify the public pursuant to Sections 64463, 64463.7, and 64465.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code. Reference: Sections 116375, 116385 and 116450, Health and Safety Code.

(16) Amend Section 64424 to read as follows:

§ 64424. Repeat Sampling.

(a) If a routine sample is total coliform-positive, the water supplier a public water system shall collect a repeat sample set as described in paragraph (a)(1) within 24 hours of being notified of the positive result. The repeat samples shall all be collected within the same 24-hour time period. A single service connection system may request that submit a request to the State Board to allow the collection of the repeat sample set over a fourthree-day period.

- (1) For a water supplier that normally collects more than one routine sample a month, aA repeat sample set shall be at least three samples for each total coliform-positive sample. For a water supplier that normally collects one or fewer samples per month, a repeat sample set shall be at least four samples for each total coliform-positive sample.
- (2) If the <u>water suppliersystem</u> is unable to collect the samples within the 24-hour time period specified in subsection (a) or deliver the samples to the laboratory within 24 hours after collection because of circumstances beyond its control, the <u>water suppliersystem</u> shall notify the State Board within 24 hours. The State Board will then determine how much time the <u>suppliersystem</u> will have to collect the repeat samples.
- (b) <u>Unless the condition for using alternative sampling locations or dual purpose</u> sampling locations in Table 64424-A or B, respectively, is met, \(\psi\) when collecting the repeat sample set, the water suppliera public water system shall collect at least one repeat sample from the sampling tap where the original total coliform-positive sample was taken. Other repeat samples shall be collected within five service connections upstream or downstream of the original site. At least one sample shall be from upstream and one from downstream unless there is no upstream and/or downstream service connection. If a total coliform-positive sample is at the end of the distribution system, or one service connection away from the end of the distribution system, the system shall still take all required repeat samples. The system may submit a request to the State Board to use an alternative sampling location in lieu of the requirement to collect at least one repeat sample upstream or downstream of the original sampling site. Except as provided in Table 64424-B, a system required to conduct triggered source water monitoring under 40 CFR 141.402(a), which is incorporated by reference under Section 64430, shall take groundwater (not GWUDI) source sample(s) in addition to repeat samples required under this section. If monitoring pursuant to Table 64424-B and in violation of the E. coli MCL, the system shall comply with the additional Ground Water Rule requirements in Table 64424-C.

Table 64424-A

Alternative Sampling Locations

Type of Water System	Sampling Requirement
Public water system	The system may propose repeat monitoring locations
	to the State Board that the system believes to be
	representative of a pathway for contamination of the
	distribution system. The system may elect to specify
	either alternative fixed locations or criteria for
	selecting repeat sampling sites on a situational basis
	in a standard operating procedure (SOP) in its
	bacteriological sample siting plan. The system shall
	design its SOP to focus the repeat samples at
	locations that best verify and determine the extent of
	potential contamination of the distribution system
	area based on specific situations.

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<u>Table 64424-B</u>

Dual Purpose Sampling Locations

T (14/ (0 /	0 " 0 ' (
Type of Water System	<u>Sampling Requirement</u>
Public water system	The system may propose repeat sampling locations
using only a single	to the State Board that differentiate potential source
groundwater (not	water and distribution system contamination (e.g., by
GWUDI) well, serving	sampling at entry points to the distribution system).
1,000 or fewer	The system may submit a request to the State Board
persons, and required	to take one of its repeat samples at the monitoring
to conduct triggered	location required for triggered source water
source water	monitoring (dual purpose sampling) under 40 CFR
monitoring under 40	141.402(a), which is incorporated by reference under
CFR 141.402(a), which	Section 64430, if the system demonstrates to the
is incorporated by	State Board that the bacteriological sample siting
reference under	plan remains representative of water quality in the
Section 64430	distribution system. If approved by the State Board,
	the system may use that sample result to meet the
	monitoring requirements in both 40 CFR 141.402(a),
	which is incorporated by reference under Section
	64430, and this section.

[remainder of page is blank]

<u>Table 64424-C</u>

<u>Additional Ground Water Rule Requirements</u>

Results of Dual Purpose Sampling that	<u>Public Water System</u>
Constitutes an E. coli MCL Violation	Action Required
A repeat sample taken at the monitoring	The system shall comply with 40
location required for triggered source	CFR 141.402(a)(3), which is
water monitoring is E. coli-positive	incorporated by reference under
	Section 64430. If the system takes
	more than one repeat sample at the
	monitoring location required for
	triggered source water monitoring,
	the system may reduce the number
	of additional source water samples
	required under 40 CFR
	141.402(a)(3), which is
	incorporated by reference under
	Section 64430, by the number of
	repeat samples taken at that
	location that were not E. coli-
	positive.
A system takes more than one report	The evetem shall comply with 40
A system takes more than one repeat	The system shall comply with 40
sample at the monitoring location	CFR 141.403(a)(1), which is
required for triggered source water	incorporated by reference under
monitoring and more than one repeat	Section 64430.
sample is E. coli-positive	
All repeat samples taken at the	The system is not required to
monitoring location required for	comply with 40 CFR 141.402(a)(3),

Results of Dual Purpose Sampling that	Public Water System
Constitutes an E. coli MCL Violation	Action Required
triggered source water monitoring are E.	which is incorporated by reference
coli-negative and a repeat sample taken	under Section 64430.
at a monitoring location other than the	
one required for triggered source water	
monitoring is E. coli-positive	

- (c) If one or more samples in the repeat sample set is total coliform-positive, the water suppliera public water system shall collect and have analyzed an additional set of repeat samples as specified in subsections (a) and (b). The suppliersystem shall repeat this process until either no total coliforms are detected in one complete repeat sample set or the suppliersystem determines that the MCL for total coliforms specified in Section 64426.1a coliform treatment technique trigger specified in Section 64426.7 has been exceeded as a result of a repeat sample being total coliform-positive and notifies the State Board by the end of the day on which this is determined. If a treatment technique trigger identified in Section 64426.7 is exceeded as a result of a routine sample being total coliform-positive, the system is required to conduct only one round of repeat monitoring for each total coliform-positive routine sample.
- (d) If a public water system for which fewer than five routine samples/month are collected has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month. If the supplier stops supplying water during the month after the total coliform-positive(s), at least five samples shall be collected during the first month the system resumes operation. A water supplier may request the State Board waive the requirement to collect at least five routine samples the following month, but a waiver will not be granted solely on the basis that all repeat samples are total coliform-negative. To request a waiver, one of the following conditions shall be met:

- (1) The State Board conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect public health.
- (2) The State Board determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with Section 64426.1.
- (d) A public water system in violation of the repeat sample monitoring requirements of this section shall notify the State Board within 10 days after it learns of the violation and notify the public pursuant to Sections 64463, 64463.7, and 64465.
- (e) A public water system in violation of the reporting requirement in subsection (d) to notify the State Board shall notify the public pursuant to Sections 64463, 64463.7, and 64465.

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

(17) Amend Section 64425 to read as follows:

§ 64425. Sample Invalidation.

- (a) A <u>water supplier public water system</u> may request the State Board to invalidate a <u>routine or repeat</u> sample for which a total coliform-positive result has been reported if the <u>supplier system</u> demonstrates:
 - (1) No change to text.
- (2) The laboratory did not follow the prescribed analytical methods pursuant to Section 64415(a), based on a review of laboratory documentation by the State Board. The <u>suppliersystem</u> shall submit to the State Board a written request for invalidation along with the laboratory documentation, the <u>supplier'ssystem's</u> sample collection records and any observations noted during sample collection and delivery. The water

suppliersystem shall require the laboratory to provide the suppliersystem with documentation which shall include, but not be limited to:

- (A) through (E) No change to text.
- (b) Whenever any total coliform <u>routine or repeat</u> sample result indicative of the absence of total coliforms has been declared invalid by the laboratory due to interference problems as specified at 40 Code Federal Regulations, Section 141.21(c)(2)141.853(c)(2) (78 Fed. Reg. 10270 (February 13, 2013)), which is incorporated by reference, the <u>supplierpublic water system</u> shall collect a replacement sample from the same location as the original sample within 24 hours of being notified of the interference problem, and have it analyzed for the presence of total coliforms. The <u>suppliersystem</u> shall continue to re-sample at the original site within 24 hours and have the samples analyzed until a valid result is obtained. If the <u>system is unable to collect the sample within the 24-hour time period or deliver the sample to the laboratory within 24 hours after collection because of circumstances beyond its control, the <u>system shall notify the State Board within 24 hours</u>. The State Board will then determine how much time the system will have to collect the replacement sample.</u>
- (c) A total coliform-positive sample invalidated under this section does not count towards meeting the minimum routine and repeat sample monitoring requirements of Sections 64423 and 64424, respectively.
- (d) A public water system in violation of the replacement sample monitoring requirements of subsection (b) shall notify the State Board within 10 days after it learns of the violation and notify the public pursuant to Sections 64463, 64463.7, and 64465.
- (e) A public water system in violation of the reporting requirement in subsection (d) to notify the State Board shall notify the public pursuant to Sections 64463, 64463.7, and 64465.

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

(18) Amend Section 64426 to read as follows:

§ 64426. Significant Rise in Bacterial Count.

- (a) A public water system shall determine whether a possible significant rise in bacterial count has occurred for each month in which it is required to monitor for total coliforms. Results of all samples collected in a calendar month pursuant to Sections 64423, 64424, and 64425 that are not invalidated by the State Board or the laboratory shall be included in determining a possible significant rise in bacterial count. Special purpose samples such as those listed in Section 64421(b) and special purpose samples collected by a public water system during special investigations shall also be included to determine a possible significant rise in bacterial count.
- (ab) Any of the following criteria shall indicate a possible significant rise in bacterial count:
- (1) A <u>public water</u> system collecting at least 40 samples per month has a total coliform-positive routine sample followed by two total coliform-positive repeat samples in the repeat sample set;
- (2) A <u>public water</u> system has a sample which is positive for fecal coliform or E. coli. coli; or
- (3) A system fails the total coliform *E. coli* Maximum Contaminant Level (MCL) as defined in Section 64426.1.
- (<u>bc</u>) When the coliform <u>levelscriteria</u> specified in subsection (<u>ab</u>) are reached or exceeded, the <u>public</u> water <u>suppliersystem</u> shall:
- (1) Contact the State Board by the end of the day on which the system is notified of the test result(s) or the system determines that it has exceeded the MCL, unless the notification or determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board within 24 hours; and
- (2) Within 24 hours on which the system is notified of the test result(s), conduct an investigation and Ssubmit to the State Board information on the current status of physical works and operating procedures which may have caused the elevated bacteriological findings, or any information on community illness suspected of being waterborne. This shall include, but not be limited to:

Regulation Text

- (A) through (D) No change to text.
- (E) Physical eEvidence indicating bacteriological contamination of facilities;
- (F) through (H) No change to text.
- (ed) UponAs soon as possible within 24 hours of receiving notification from the State Board of adetermining there is a significant rise in bacterial count, based on the information submitted under subsection (c)(2), the public water supplier system shall implement the emergency notification plan required by Section 116460, Health and Safety Code.
- (e) Within 30 days on which the system is notified of the test result(s) indicating a possible significant rise in bacterial count, submit to the State Board a report on the investigation, sanitary defects detected (and if applicable, may note no sanitary defects were detected), corrective actions completed, and a proposed timetable for any corrective actions not already completed. The system shall notify the State Board within five business days when each scheduled corrective action is completed.
- (f) A public water system in violation of the reporting requirement in subsection (c)(1) to notify the State Board when a routine or repeat sample is *E. coli*-positive shall notify the public pursuant to Sections 64463, 64463.7, and 64465.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code. Reference: Sections 116275(m), 116450 and 116460, Health and Safety Code.

(19) Amend Section 64426.1 to read as follows:

§ 64426.1. Total ColiformE. coli Maximum Contaminant Level (MCL).

(a) A public water system shall determine compliance with the *E. coli* MCL for each month in which it is required to monitor for total coliforms. Results of all samples collected in a calendar month pursuant to Sections 64423, 64424, and 64425 that are not invalidated by the State Board or the laboratory shall be included in determining compliance with the total coliform *E. coli* MCL. Special purpose samples such as those listed in Section 64421(b) and special purpose samples collected by the water suppliera

<u>public water system</u> during special investigations shall not be used to determine compliance with the <u>total coliform</u> <u>E. coli</u> MCL.

- (b) A public water system is in violation of the total coliform *E. coli* MCL when any of the following occurs:
- (1) For a public water system which collects at least 40 samples per month, more than 5.0 percent of the samples collected during any month are total coliform-positive; or
- (2) For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive; or
 - (3) Any repeat sample is fecal coliform-positive or E. coli-positive; or
- (4) Any repeat sample following a fecal coliform-positive or E. coli-positive routine sample is total coliform-positive.
- (1) The system has an *E. coli*-positive repeat sample following a total coliform-positive routine sample;
- (2) The system has a total coliform-positive repeat sample following an *E. coli*-positive routine sample;
- (3) The system fails to take all required repeat samples following an *E. coli*-positive routine sample; or
- (4) The system fails to test for *E. coli* when any repeat sample tests positive for total coliform.
- (c) If a public water system is not in compliance with <u>paragraphs subsections</u> (b)(1) through (4), during any month in which it supplies water to the public, the <u>water supplier system</u> shall notify the State Board by the end of the <u>business</u>-day on which this is determined <u>unless</u> the determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board within 24 hours of the determination. The <u>water supplier system</u> shall also notify the consumers served by the water system. A Tier 2 Public Notice shall be given for violations of paragraphs (b)(1) or (2), pursuant to section 64463.4. A Tier 1 Public Notice shall be given for violations of

paragraphs (b)(3) or (4), pursuant to section 64463.1 public pursuant to Sections 64463, 64463.1, and 64465.

- (d) A public water system in violation of the reporting requirement in subsection (c) to notify the State Board shall notify the public pursuant to Sections 64463, 64463.7, and 64465.
- (e) A public water system shall not be eligible for a variance or exemption from the *E. coli* MCL.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code.

Reference: Sections 116375 and 116450, Health and Safety Code.

(20) Repeal Section 64426.5:

§ 64426.5. Variance from Total Coliform Maximum Contaminant Level.

A water system may apply to the State Board for a variance from the total coliform MCL in section 64426.1(b)(1) or (2). To be eligible for a variance, the water system shall demonstrate that it meets the following criteria:

- (a) During the thirty days prior to application for a variance, water entering the distribution system has:
- (1) Been free from fecal coliform or E. coli occurrence based on at least daily sampling;
- (2) Contained less than one total coliform per hundred milliliters of water in at least ninety-five percent of all samples based on at least daily sampling;
- (3) Complied with the turbidity requirements of section 64653, if approved surface water; and
- (4) Maintained a continuous disinfection residual of at least 0.2 mg/L at the entry point(s) to the distribution system;
- (b) The system has had no waterborne microbial disease outbreak, pursuant to section 64651.91, while operated in its present configuration;

- (c) The system maintains contact at least twice a week with the State Board and local health departments to assess illness possibly attributable to microbial occurrence in the public drinking water system;
- (d) The system has analyzed, on a monthly basis, at least the number of samples required pursuant to the approved sample siting plan and has not had an E. coli-positive compliance sample within the last six months, unless the system demonstrates to the State Board that the occurrence is not due to contamination entering the distribution system;
- (e) The system has undergone a sanitary survey conducted by the State Board within the past twelve months;
- (f) The system maintains a cross-connection control program in accordance with sections 7583 through 7605, title 17 of the California Code of Regulations;
- (g) The system agrees to submit a biofilm control plan to the State Board within twelve months of the granting of the first request for a variance;
- (h) The system monitors general distribution system bacterial quality by conducting heterotrophic bacteria plate counts on at least a weekly basis at a minimum of ten percent of the number of total coliform sites specified in the approved sample siting plan (preferably using the methods in section 9215(a), 18th edition of Standard Methods for the Examination of Water and Wastewater, 1992, American Public Health Association, et. al); and
- (i) The system conducts daily monitoring at distribution system total coliform monitoring sites approved by the State Board and maintains a detectable disinfectant residual at a minimum of ninety-five percent of those points and a heterotrophic plate count of less than 500 colonies per ml at sites without a disinfectant residual.
- (j) No water system shall be eligible for a variance or exemption from the MCL for total coliforms unless it demonstrates that the violation of the total coliform MCL is due to a persistent growth of total coliforms in the distribution system pursuant to section 64426.5, rather than to fecal or pathogenic contamination, a treatment lapse or deficiency, or a problem in the operation or maintenance of the distribution system.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code.

Reference: Section 116430(a), Health and Safety Code.

(21) Adopt Section 64426.6 to read as follows:

§ 64426.6. Coliform Treatment Technique.

- (a) A public water system is in violation of the coliform treatment technique when either of the following occurs:
- (1) The system exceeds a treatment technique trigger specified in Section 64426.7 and then fails to conduct the required assessment or corrective actions within the timeframe specified in Section 64426.8; or
- (2) A seasonal system fails to complete a State Board-approved start-up procedure prior to serving water to the public.
- (b) A public water system in violation of the coliform treatment technique shall notify the State Board by the end of the next business day on which this is determined. The system shall also notify the public pursuant to Sections 64463, 64463.4, and 64465.
- (c) A public water system in violation of the reporting requirement in subsection (b) to notify the State Board shall notify the public pursuant to Sections 64463, 64463.7, and 64465.

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

(22) Adopt Section 64426.7 to read as follows:

§ 64426.7. Coliform Treatment Technique Triggers.

(a) A public water system shall determine whether a coliform treatment technique trigger has been exceeded for each month in which it is required to monitor for total coliforms. Results of all samples collected in a calendar month pursuant to Sections 64423, 64424, and 64425 that are not invalidated by the State Board or the laboratory shall be included in determining if a coliform treatment technique trigger has been

exceeded. Special purpose samples such as those listed in Section 64421(b) and special purpose samples collected by a public water system during special investigations shall not be used to determine if a coliform treatment technique trigger has been exceeded.

- (b) A public water system exceeds a Level 1 treatment technique trigger if any of the following occurs:
- (1) For a system taking 40 or more samples per month, the system exceeds 5.0% total coliform-positive samples for the month;
- (2) For a system taking fewer than 40 samples per month, the system has two or more total coliform-positive samples in the same month; or
- (3) The system fails to take every required repeat samples after any single total coliform-positive sample.
- (c) A public water system exceeds a Level 2 treatment technique trigger if either of the following occurs:
 - (1) The system has an E. coli MCL violation; or
- (2) The system has a second Level 1 treatment technique trigger, within a rolling 12-month period, unless the State Board has determined a likely reason that the samples that caused the first Level 1 treatment technique trigger were total coliform-positive and has established that the system has corrected the problem.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code. Reference: Section 116375, Health and Safety Code.

(23) Adopt Section 64426.8 to read as follows:

§ 64426.8. Level 1 and Level 2 Assessments and Corrective Actions.

- (a) If a public water system exceeds a Level 1 treatment technique trigger in Section 64426.7(b), the system shall:
- (1) Direct the system operator or owner to conduct and complete a Level 1 assessment as soon as practical after exceeding any trigger;

- (2) Ensure that the assessment is conducted to identify the possible presence of sanitary defects and defects in distribution system coliform monitoring practices. The assessment shall include a review and identification of the minimum elements in subparagraphs (A) through (E) and shall describe sanitary defects detected (and if applicable, may note no sanitary defects were detected), corrective actions completed, and a proposed timetable for any corrective actions not already completed:
 - (A) Inadequacies in sample sites, sampling protocol, and sample processing:
- (B) Atypical events that could affect distributed water quality or indicate that distributed water quality was impaired;
- (C) Changes in distribution system maintenance and operation that could affect distributed water quality (including water storage);
- (D) Source and treatment considerations that bear on distributed water quality, where appropriate (e.g., small groundwater systems or whether a groundwater system is disinfected); and
 - (E) Existing water quality monitoring data;
- (3) Conduct the assessment consistent with any State Board directives that tailor specific assessment elements with respect to the size and type of the water system and the size, type, and characteristics of the distribution system;
- (4) Within 30 days after the system learns that it has exceeded a trigger, submit to the State Board the completed assessment; and
- (5) If directed by the State Board, based on its determination that the completed assessment is not sufficient (including any proposed timetable for any corrective actions not already completed), submit a revised completed assessment to the State Board within 30 days.
- (b) If a public water system exceeds a Level 2 treatment technique trigger in Section 64426.7(c), the system shall:
- (1) Arrange with the State Board to conduct and complete a Level 2 assessment, that includes a review and identification of the minimum elements in subsections (a)(2)(A) through (E) to identify the possible presence of sanitary defects and defects in

<u>distribution system coliform monitoring practices, as soon as practical after exceeding</u> <u>any trigger;</u>

- (2) Comply with any expedited actions or additional actions required by the State Board in the case of an *E. coli* MCL violation;
- (3) Within 30 days after the system learns that it has exceeded a trigger, submit to the State Board a completed assessment that includes the State Board assessment and describes sanitary defects detected (and if applicable, may note no sanitary defects were detected), corrective actions completed, and a proposed timetable for any corrective actions not already completed; and
- (4) If directed by the State Board, based on its determination that the completed assessment is not sufficient (including any proposed timetable for any corrective actions not already completed), submit a revised description of corrective actions completed and a proposed timetable for any corrective actions not already completed to the State Board within 30 days.
- (c) A public water system shall correct sanitary defects found through either a Level 1 or Level 2 assessment conducted under subsection (a) or (b), respectively. For corrections not completed by the time of submission of the completed assessment, the system shall complete the corrective action(s) in compliance with a State Board-approved timetable. The system shall notify the State Board within five business days when each scheduled corrective action is completed.
- (d) A public water system in violation of the reporting requirement of subsection (a)(4) or (b)(3) to submit a completed assessment to the State Board or subsection (c) to notify the State Board shall notify the public pursuant to Sections 64463, 64464.7, and 64465.

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

(24) Adopt Section 64426.9 to read as follows:

§ 64426.9. Seasonal System Start-Up Procedure.

- (a) By October 1, 2021, an existing seasonal system shall develop and submit to the State Board a start-up procedure. The procedure shall include, but not be limited to, the following:
- (1) Inspection of water system components, including each source, treatment facility, distribution main, and distribution reservoir;
 - (2) Disinfection and flushing of water system components;
- (3) Bacteriological monitoring, at each source (prior to treatment), each distribution reservoir, and, whichever results in the greater number of samples, each pressure zone or a minimum of three samples from the distribution system. The location of the distribution system samples shall be specified in the procedure;
- (4) Disinfectant residual monitoring, at the same points and at the same time as total coliforms are sampled in paragraph (3);
- (5) Use of certified distribution operator(s) to supervise or perform activities in paragraphs (1) through (4); and
- (6) Notification of the State Board of system shutdown and prior to serving water to the public.
 - (b) Prior to serving water to the public, a seasonal system shall:
 - (1) Complete a State Board-approved start-up procedure;
- (2) Certify to the State Board it has complied with the State Board-approved start-up procedure;
- (3) Submit to the State Board results of bacteriological and disinfectant residual monitoring performed under subsections (a)(3) and (4), respectively; and
 - (4) Obtain written State Board approval to serve water to the public.
- (c) If the entire distribution system remains pressurized during the period a seasonal system is not operating, the seasonal system may submit a request to the State Board to be exempt from some or all of the requirements in subsections (a)(1) through (5).
- (d) A seasonal system that proposes to use an alternative to a start-up procedure requirement in subsections (a)(1) through (5) shall:

- (1) Demonstrate to the State Board that the proposed alternative would provide at least the same level of protection to public health; and
- (2) Obtain written approval from the State Board prior to implementation of the alternative.
- (e) A public water system in violation of the reporting requirement in subsections (b) and (b)(2) to certify completion of a State Board-approved start-up procedure prior to serving water to the public shall notify the public pursuant to Sections 64463, 64463.7, and 64465.

Note: Authority cited: Sections 116271 and 116375, Health and Safety Code. Reference: Sections 116375, 116385 and 116450, Health and Safety Code.

Article 3.5. Ground Water Rule

(25) Amend Section 64430 to read as follows:

§ 64430. Requirements.

A public water system that uses ground water shall comply with the following provisions of 40 Code of Federal Regulations as they appear in the Ground Water Rule published in 71 Federal Register 65574 (November 8, 2006) and amended in 71 Federal Register 67427 (November 21, 2006), and 74 Federal Register 30953 (June 29, 2009), and 78 Federal Register 10270 (February 13, 2013), which are hereby incorporated by reference: Sections 141.21(d)(3), 141.28(a), 141.153(h)(6), Appendix A to Subpart O (Consumer Confidence Reports), 141.202(a)(8), 141.203(a)(4), Appendices A and B to Subpart Q (Public Notification), and 141.400 through 141.405, except that in:

- (a) sections 141.402(a)(1)(ii), (a)(2), (a)(2)(ii), (a)(4), (a)(4)(ii)(A), (a)(5)(i), and (a)(5)(ii), the phrase "§141.21(a)" is replaced by "22 California Code of Regulations sections 64422 and 64423".
- (b) sections 141.402(a)(1)(ii) and 141.405(b)(4), the phrase "§141.21(c)" is replaced by "22 California Code of Regulations section 64425", and

- (c) section 141.402(a)(2)(iii), the phrase "§141.21(b)" is replaced by "22 California Code of Regulations section 64424".
- (a) Sections 141.402(a)(1)(iii), (a)(2), (a)(4)(i), (a)(4)(ii)(A), (a)(5)(i), and (a)(5)(ii), the phrase "§§ 141.854 through 141.857" is replaced by "22 California Code of Regulation Section 64423";
- (b) Section 141.402(a)(1)(iii), the phrase "§ 141.853(c)" is replaced by "22 California Code of Regulation Section 64425";
- (c) Section 141.402(a)(2)(ii), the phrase "§ 141.853" is replaced by "22 California Code of Regulation Section 64422";
- (d) Section 141.402(a)(2)(iv), the phrases "subpart Y" and "§ 141.858" are replaced by "22 California Code of Regulation Section 64424"; and
- (e) Section 141.405(b)(4), the phrase "§ 141.853" is replaced by "22 California Code of Regulation Section 64425".

Note: Authority cited: Sections <u>116271</u>, 116350, <u>and</u> 116375, <u>131052</u> and <u>131200</u>, Health and Safety Code. Reference: Sections 116325 and 116350, Health and Safety Code.

Article 12. Best Available Technologies (BAT)

(26) Amend Section 64447 to read as follows:

§ 64447. Best Available Technology (BAT) – Microbiological Contaminants.

The technologies identified by the State Board as the best available technology (for a public water system serving more than 10,000 persons), affordable technology (for a public water system serving 10,000 or fewer persons), treatment techniques, or other means available for achieving compliance with the total coliform *E. coli* MCL are as follows:

- (a) Protection of wells from <u>fecal</u> coliform contamination by appropriate placement and construction;
 - (b) No change to text.

- (c) Proper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, cross connection control, and continual maintenance of positive water pressure in all parts of the distribution system; and
- (d) Filtration and/or disinfection of approved surface water, in compliance with Section 64650, or disinfection of groundwater-, in compliance with Section 64430, using strong oxidants such as chlorine, chlorine dioxide, or ozone; and
- (e) For a system using groundwater, compliance with the groundwater portion of a Drinking Water Source Assessment and Protection Program, conducted according to the Drinking Water Source Assessment Protection Program, California Department of Health Services, January 2000, which is incorporated by reference.

Note: Authority cited: Sections 116271 and 1163705, Health and Safety Code. Reference: Sections 116350 and 116370, Health and Safety Code.

Article 18. Notification of Water Consumers and the Department (27) Amend Article 18 heading to read as follows:

Article 18. Notification of Water Consumers and the Department State Board

(28) Amend Section 64463.1 to read as follows:

§ 64463.1. Tier 1 Public Notice.

- (a) No change to text.
- (1) Violation of the total coliform *E. coli* MCL when: (as specified in section 64426.1(b))
 - (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) through (8) No change to text.
 - (b) through (c)(4) No change to text.

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

(29) Amend Section 64463.4 to read as follows:

§ 64463.4. Tier 2 Public Notice.

- (a) through (a)(1)(B) No change to text.
- (2) All violations of the monitoring and testing procedure requirements in sections 64421 through 64426, article 3 (Primary Standards Bacteriological Quality), for which the State Board 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 State Board 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)(3) Failure to comply with the terms and conditions of any variance or exemption in place.
 - (b) No change to text.
 - (1) No change to text.
- (2) Repeat the notice every three months as long as the violation or occurrence continues. Subject to the State Board 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 an total coliform E. coli MCL violation or violation of a coliform treatment technique or Chapter 17 treatment technique requirement; and
 - (3) No change to text.
 - (c) through (c)(2)(B)4. No change to text.

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

(30) Amend Section 64463.7 to read as follows:

§ 64463.7. Tier 3 Public Notice.

- (a) No change to text.
- (1) No change to text.
- (2) Failure to comply with a testing procedure, except where a Tier 1 public notice is required pursuant to section 64463.1 or the State Board determines that a Tier 2 public notice is required pursuant to section 64463.4; or
 - (3) Operation under a variance or exemption:
 - (4) Failure to comply with a reporting requirement pursuant to article 3; or
- (5) Failure to comply with a recordkeeping requirement pursuant to section 64470(b)(7).
 - (b) through (d)(3) No change to text.

Note: Authority cited: Sections 116271, 116325, 116350 and 116375, Health and Safety Code. Reference: Section 116450, Health and Safety Code.

(31) Amended Section 64465 to read as follows:

§ 64465. Public Notice and Content and Format.

- (a) No change to text.
- (1) and (2) No change to text.
- (3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through GH;
 - (4) through (11) No change to text.
 - (b) through (d)(3) No change to text.

Appendix 64465-A. Health Effects Language

Microbiological Contaminants.

Contaminant	Health Effects Language
Total Coliform	Coliforms are bacteria that are naturally present in the
	environment and are used as an indicator that other,
	potentially-harmful, bacteria may be present. Coliforms
	were found in more samples than allowed and this was a
	warning of potential problems.
Fecal	Fecal coliforms and E. coli are bacteria whose presence
coliform/E. coli	indicates that the water may be contaminated with human
	or animal wastes. Microbes in these wastes can cause
	short-term effects, such as diarrhea, cramps, nausea,
	headaches, or other symptoms. They may pose a special
	health risk for infants, young children, some of the elderly,
	and people with severely compromised immune systems.
E. coli	E. coli are bacteria whose presence indicates that the water
	may be contaminated with human or animal wastes.
	Human pathogens in these wastes can cause short-term
	effects, such as diarrhea, cramps, nausea, headaches, or
	other symptoms. They may pose a greater health risk for
	infants, young children, the elderly, and people with
	severely-compromised immune systems.
Coliform	Coliforms are bacteria that are naturally present in the
Assessment	environment and are used as an indicator that other,
and/or	potentially harmful, waterborne pathogens may be present

Contaminant	Health Effects Language	
Corrective	or that a potential pathway exists through which	
<u>Action</u>	contamination may enter the drinking water distribution	
<u>Violations</u>	system. We found coliforms indicating the need to look for	
	potential problems in water treatment or distribution. When	
	this occurs, we are required to conduct assessment(s) to	
	identify problems and to correct any problems that were found.	
	Todina.	
	For a public notice, the water system shall use the following	
	applicable sentences:	
	We failed to conduct the required assessment.	
	We failed to correct all identified sanitary defects that were	
	found during the assessment(s).	
E. coli	E. coli are bacteria whose presence indicates that the water	
<u>Assessment</u>	may be contaminated with human or animal wastes.	
and/or	Human pathogens in these wastes can cause short-term	
Corrective	effects, such as diarrhea, cramps, nausea, headaches, or	
Action	other symptoms. They may pose a greater health risk for	
<u>Violations</u>	infants, young children, the elderly, and people with	
	severely compromised immune systems. We violated the	
	standard for E. coli, indicating the need to look for potential	
	problems in water treatment or distribution. When this	
	occurs, we are required to conduct a detailed assessment	
	to identify problems and to correct any problems that are	
	found.	

Contaminant	Health Effects Language
	For a public notice, the water system shall use the following
	applicable sentences:
	We failed to conduct the required assessment.
	We failed to correct all identified sanitary defects that were
	found during the assessment.
<u>Seasonal</u>	When this violation includes the failure to monitor for total
<u>System</u>	coliforms or E. coli prior to serving water to the public, the
<u>Treatment</u>	mandatory language found at section 64465(a)(11) shall be
Technique	used.
<u>Violations</u>	When the violation includes failure to complete other
	actions, the appropriate elements found in sections
	64465(a)(1) through (10) to describe the violation shall be
	<u>used.</u>
Turbidity	No change to text.

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.

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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 Disinfectant Residuals

Appendix 64465-H. Health Effects Language

Other Treatment Techniques

No change to Appendices 64465-B through H.

Note: Authority cited: Sections 116271, 116325, 116350 and 116375, Health and Safety Code. Reference: Section 116450, Health and Safety Code.

Article 19. Records, Reporting and Recordkeeping

(32) Amend Section 64470 to read as follows:

§ 64470. Recordkeeping.

- (a) No change to text.
- (b) No change to text.
- (1) through (4) No change to text.
- (5) Copies of any Tier 1, Tier 2, and Tier 3 public notices, for not less than three years; and

- (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)-; and
- (7) Copies of any Level 1 and Level 2 assessments, regardless who conducts the assessments, and documentation of corrective actions completed as a result of those assessments, or other available summary documentation of the sanitary defects and corrective actions taken pursuant to section 64426.8 for State Board review, for not less than five years following completion of the assessment or corrective action.

Note: Authority cited: Sections 116271, 116350 and 116375, Health and Safety Code. Reference: Section 116385, Health and Safety Code.

Article 20. Consumer Confidence Report

(33) Amend Section 64481 to read as follows:

§ 64481. Content of the Consumer Confidence Report.

- (a) through (a)(2) No change to text.
- (b) No change to text.
- (1) through (9) No change to text.
- (10) Level 1 Assessment: "A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system."
- (11) Level 2 Assessment: "A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli*MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions."
 - (c) No change to text.
- (1) Contaminants subject to an MCL, regulatory action level, MRDL, or treatment technique (regulated contaminants), as specified in sections 64426.1, <u>64426.6</u>, 64431,

64442, 64443, 64444, 64448, 64449, 64533, 64533.5, 64536, 64536.2, 64653, and 64678:

- (2) through (4) No change to text.
- (d) No change to text.
- (1) No change to text.
- (2) No change to text.
- (A) through (C) No change to text.
- (D) For detected contaminants subject to an MCL, except turbidity and total coliforms *E. coli*, the sample result(s) collected at compliance monitoring sampling points shall be reported in the same units as the MCL as follows:
 - 1. through 2.B.5. No change to text.
 - (E) through (F) No change to text.
 - (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.
- (<u>HG</u>) For fecal coliform or *E. coli*: the total number of positive samples during the year; and
- (<u>IH</u>) The likely source(s) of any detected contaminants having an MCL, MRDL, regulatory action level, or treatment technique. 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 appendix 64481-A or 64481-B that are most applicable to the system.
 - (3) and (4) No change to text.
 - (e) through (m) No change to text.
 - (n) A Consumer Confidence Report shall:

(1) If a water system is required to comply with a Level 1 or Level 2 assessment requirement that is not due to an *E. coli* MCL violation, contain the information indicated in table 64481-A;

Table 64481-A. CCR Language

Level 1 or Level 2 Assessment Not Due to an E. coli MCL Violation

CCR Language

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

The water system shall include the following statements, as appropriate:

During the past year we were required to conduct [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s). [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s) were completed. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions.

During the past year [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level

2 assessments were required to be completed for our water system. [INSERT

NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were

completed. In addition, we were required to take [INSERT NUMBER OF

CCR Language

CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions.

If the water system failed to complete all the required assessments or correct all identified sanitary defects, the water system is in violation of the treatment technique requirement and shall include the following statements, as appropriate:

<u>During the past year we failed to conduct all of the required assessment(s).</u>

<u>During the past year we failed to correct all identified defects that were found during the assessment.</u>

(2) If a water system is required to comply with a Level 2 assessment requirement that is due to an *E. coli* MCL violation, contain the information indicated in Table 64481-B;

Table 64481-B. CCR Language

Level 2 Assessment Due to an *E. coli* MCL Violation

CCR Language

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found E. coli bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we

CCR Language

are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

We were required to complete a Level 2 assessment because we found *E. coli* in our water system. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions.

If a water system failed to complete the required assessment or correct all identified sanitary defects, the water system is in violation of the treatment technique requirement and shall include the following statements, as appropriate:

We failed to conduct the required assessment.

We failed to correct all sanitary defects that were identified during the assessment.

- (3) If a water system detects *E. coli* and has violated the *E. coli* MCL, include one or more the following statements to describe any noncompliance, as applicable:
- (A) "We had an *E. coli*-positive repeat sample following a total coliform positive routine sample."
- (B) "We had a total coliform-positive repeat sample following an *E. coli*-positive routine sample."
- (C) "We failed to take all required repeat samples following an *E. coli*-positive routine sample."
- (D) "We failed to test for *E. coli* when any repeat sample tests positive for total coliform."; and

- (4) If a water system detects *E. coli* and has not violated the *E. coli* MCL, may include a statement that explains that although they have detected *E. coli*, they are not in violation of the *E. coli* MCL.
- (o) The consumer confidence report prepared and delivered by July 1, 2022 shall, for bacteriological monitoring conducted from January 1, 2021 to [ONE DAY PRIOR TO EFFECTIVE DATE OF REGULATIONS], inclusive, include the following additional information in the report:
 - (1) The total coliform MCL expressed as shown in table 64481-C.

Table 64481-C

Total Coliform MCL for Consumer Confidence Report

<u>Contaminant</u>	<u>MCL</u>
Total Coliform	(A) For a water system collecting at least 40
	samples per month: 5.0 percent of monthly
	samples are positive.
	(B) For a water system collecting fewer than 40
	samples per month: one positive monthly sample.
Fecal coliform and E. coli	<u>0</u>

(2) For total coliform:

- (A) The highest monthly percentage of positive samples for a water system collecting at least 40 samples per month; or
- (B) The highest monthly number of positive samples for a water system collecting fewer than 40 samples per month.
- (3) For fecal coliform and *E. coli*: the total number of positive samples during the year.

(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 table 64481-D.

Table 64481-D

Typical Origins of Microbiological Contaminants with Primary MCL

<u>Contaminant</u>	<u>Major Origins in Drinking Water</u>
Total coliform bacteria	Naturally present in the environment
Fecal coliform and E. coli	Human and animal fecal waste

(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 table 64481-E.

<u>Table 64481-E</u>

<u>Health Effects Language for Microbiological Contaminants</u>

<u>Contaminant</u>	<u>Health Effects Language</u>
Total Coliform	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Fecal Coliform	Fecal coliforms are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause

<u>Contaminant</u>	<u>Health Effects Language</u>
<u>Contaminant</u> <u>E. coli</u>	short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. E. coli are bacteria whose presence indicates that the
	water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, some of the elderly, and people with severely-compromised immune systems.

(6) For violation of subsection (g)(1), (5), or (7), note the violation and give related information, including any potential adverse health effects, and the steps the water system has taken to correct the violation.

Appendix 64481-A.

Typical Origins of Contaminants with Primary MCLs, MRDLs, Regulatory Action Levels, and Treatment Techniques

Contaminant	Major origins in drinking water
<u>Microbiological</u>	
Total coliform bacteria	Naturally present in the environment
Fecal coliform and E. coli	Human and animal fecal waste
Turbidity	No change to text.

Surface water treatment	
No change to list of	No change to text.
contaminants.	
Radioactive	
No change to list of	No change to text.
contaminants.	
<u>Inorganic</u>	
No change to list of	No change to text.
contaminants.	

Contaminant	Major origins in drinking water
Synthetic organic	
No change to list of	No change to text.
contaminants.	
Volatile organic	
No change to list of	No change to text.
contaminants.	
<u>Disinfection Byproducts,</u>	
<u>Disinfection Byproduct</u>	
Precursors, and	
<u>Disinfectant Residuals</u>	
No change to list of	No change to text.
contaminants.	

Appendix 64481-B.

Typical Origins of Contaminants with Secondary MCLs

No change to Appendix 64481-B.

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

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

Article 3. Monitoring Requirements

(34) Amend Section 64534.4 to read as follows:

§ 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 sections 6442164423, 64424, and 64425. 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) through (b)(2) No change to text.

Note: Authority cited: Sections <u>116271</u>, 116350, <u>and</u> 116375, <u>131052 and 131200</u>, Health and Safety Code. Reference: Sections 116350, 116385 and 116555, Health and Safety Code.

Chapter 17. Surface Water Treatment

Article 1. General Requirements and Definitions

(35) Amend Section 64650 to read as follows:

§ 64650. General Requirements.

- (a) through (e) No change to text.
- (f) No change to text.
- (1) No change to text.

Regulation Text

- (A) through (H) No change to text.
- (I) section 141.701(a)(5), the alternative *E. coli* concentration to trigger

 Cryptosporidium monitoring shall be 100 *E. coli*/100 mL for both lake/reservoir and flowing stream sources;
- (IJ) section 141.703(d)(1), the phrase "§ 141.173(b) or § 141.522(a)" is replaced by "sections 64653(e) and (f)";
- $(J\underline{K})$ section 141.709(c)(2), the phrase "§ 141.172 or §§ 141.530 through 141.536" is replaced by "section 64656.5(a)";
- $(\underbrace{\mathsf{KL}})$ section 141.712(d), the phrase "§ 141.72(a)" is replaced by "section 64652.5(k)";
- ($\underline{\mathsf{LM}}$) section 141.718(b), the phrase "§ 141.174 or § 141.560" is replaced by "sections 64655 and 64661"; and
 - (\underline{MN}) section 141.719(b), the phrase "§ 141.2" is replaced by "section 64651.54";
 - (2) and (3) No change to text.

Note: Authority cited: Sections 116271, 116350 and 116375, Health and Safety Code. Reference: Sections 116350, 116365 and 116375, Health and Safety Code.

Article 2. Treatment Technique Requirements, Watershed Protection Requirements, and Performance Standards

(36) Amend Section 64652.5 to read as follows:

§ 64652.5. Criteria for Avoiding Filtration.

- (a) through (g) No change to text.
- (h) The water system shall comply with the total coliform *E. coli* maximum contaminant level (MCL) specified in 22 CCR 64426.1 at least 11 of the 12 previous months that the system served water to the public on an ongoing basis, unless the State Board determines that failure to meet this requirement was not caused by the unfiltered approved surface water.
 - (i) through (l) No change to text.

Note: Authority cited: Sections 116271, 116350 and 116375, Health and Safety Code. Reference: Sections 116350, 116365, 116375, 116385 and 116735, Health and Safety Code.

(37) Amend Section 64653 to read as follows:

§ 64653. Filtration.

(a) through (c). No change to text.

Table 64653

Combined Filter Effluent Turbidity Performance Standards^(a)

If a supplier uses	The turbidity level of the combined filter effluent
(1) No change to text.	(A) through (D) No change to text.
(2) No change to text.	(A) through (C)2. No change to text.
(3) No change to text.	(A) through (D) No change to text.
(4) Slow sand filtration	(A) Shall be less than or equal to 1.0 NTU in at
	least 95 percent of the measurements taken
	each month. Filtered water from the treatment
	plant may exceed 1.0 NTU, provided the filter
	effluent prior to disinfection meets the
	maximum contaminant level for total coliforms
	as specified in 22 CCR section 64426.1; and
	(B) No change to text.
(a) No change to text in footnote (a).	

⁽d) through (j) No change to text.

Note: Authority cited: Sections 116271, 116350 and 116375, Health and Safety Code. Reference: Sections 116350, 116365, 116375, 116385, 116525, 116530, 116540, 116550 and 116735, Health and Safety Code.

Regulation Text

Article 3. Monitoring Requirements

(38) Amend Section 64656 to read as follows:

§ 64656. Disinfection Monitoring.

- (a) through (b) No change to text.
- (c) To determine compliance with section 64654(b)(2), the residual disinfectant concentration shall, at a minimum, be measured at the same points in the distribution system and at the same time as total coliforms are sampled in accordance with 22 CCR sections 6442164423, 64424, and 64425, and described in the operations plan required by section 64661, except as provided in subsection (d).
- (d) A supplier that uses both an approved surface water and a groundwater may take disinfectant residual samples at points other than those specified in subsection (c) provided the supplier demonstrates to the State Board that such sampling points are representative of the disinfected approved surface-water in the distribution system.
 - (e) through (g) No change to text.

Note: Authority cited: Sections 116271, 116350 and 116375, Health and Safety Code. Reference: Sections 116350, 116375 and 116385, Health and Safety Code.