



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

Division of Drinking Water

November 7, 2014

Ms. Amina Flores, Staff Analyst
Fresno County Special Districts
2220 Tulare Street, 6th Floor
Fresno, CA 93721

RE: FCSA #49/Five Points – System No. 1000546
Compliance Order No. 03-23-14R-025

Dear Ms. Amina Flores:

The State Water Resources Control Board – Division of Drinking Water (Division) has issued Compliance Order No. 03-23-14R-025, for violation of the Stage 2 Disinfection Byproduct Rule Total Trihalomethanes Maximum Contaminant Level (TTHM MCL). The compliance order is enclosed.

The Water System was previously in violation of the TTHM MCL under the Stage 1 Disinfection Byproduct Rule. Compliance Order No. 03-23-12O-012 was issued to the Water System on October 30, 2012, for the TTHM MCL violation. This compliance order replaces and voids Compliance Order No. 03-23-12O-012 and its directives.

The California Safe Drinking Water Act, Section 116577 provides for this agency to be reimbursed by the public water system for costs incurred for preparing and issuing an enforcement action to that system. Therefore, your water system will be billed for the preparation and issuance of this order. Our costs are approximately \$128 per hour. At this time we have spent approximately 3 hours on enforcement activities associated with this violation. You will receive a bill for these costs in August 2015, following the end of the State's fiscal year, from our Fee Billing Unit in Sacramento

If you have any questions regarding this matter, please contact Sudarshan Poudyal at (559) 447-3300.

Sincerely,

A handwritten signature in cursive script that reads "Betsy S. Lichti".

Betsy S. Lichti, P.E.
Senior Sanitary Engineer, Fresno District
SOUTHERN CALIFORNIA BRANCH
DRINKING WATER FIELD OPERATIONS

BSL/sp

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**STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER**

IN RE: **FCSA #49/FIVE POINTS**
WATER SYSTEM NO. 1000546

TO: MS. AMINA FLORES, Staff Analyst
Fresno County Special Districts
2220 Tulare Street, 6th Floor
Fresno, CA 93721

COMPLIANCE ORDER NO. 03-23-14R-025

**FOR NONCOMPLIANCE WITH THE
STAGE 2 DISINFECTION BYPRODUCT RULE
MAXIMUM CONTAMINANT LEVELS FOR
TOTAL TRIHALOMETHANES
SECTION 64533(a), TITLE 22, CALIFORNIA CODE OF REGULATIONS**

Issued on November 7, 2014

Section 116655 of the California Health and Safety Code authorizes the issuance of a compliance order to a public water system for violation of the California Safe Drinking Water Act (Health and Safety Code, Division 104, Part 12, Chapter 4, commencing with Section 116270) (hereinafter "California SDWA"), or any regulation, standard, permit or order issued or adopted thereunder.

The State Water Resources Control Board (hereinafter "State Board"), acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for

1 the Division (hereinafter "Deputy Director"), hereby issues a compliance order to FCSA
2 #49/Five Points (hereinafter "Water System") for violation of California Code of
3 Regulations (hereinafter "CCR"), Section 64533(a), Maximum Contaminant Levels for
4 Disinfection Byproducts.

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6 **APPLICABLE AUTHORITIES**

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8 **Section 116655, California SDWA, states in relevant part:**

9
10 (a) Whenever the department determines that any person has violated or is violating this
11 chapter, or any permit, regulation, or standard issued or adopted pursuant to this chapter, the
12 director may issue an order doing any of the following:

- 13 (1) Directing compliance forthwith.
14 (2) Directing compliance in accordance with a time schedule set by the department.
15 (3) Directing that appropriate preventive action be taken in the case of a threatened
16 violation.

17 (b) An order issued pursuant to this section may include, but shall not be limited to, any or
18 all of the following requirements:

- 19 (1) That the existing plant, works, or system be repaired, altered, or added to.
20 (2) That purification or treatment works be installed.
21 (3) That the source of the water supply be changed.
22 (4) That no additional service connection be made to the system.
23 (5) That the water supply, the plant, or the system be monitored.
24 (6) That a report on the condition and operation of the plant, works, system, or water
25 supply be submitted to the department.

26
27 **Section 64533(a), Title 22, CCR, states in relevant part:**

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

Table 64533-A
Maximum Contaminant Levels and Detection Limits for Purposes of Reporting
Disinfection Byproducts

| Disinfection Byproduct | Maximum Contaminant Level (mg/L) | Detection Limit for Purposes of Reporting (mg/L) |
|--------------------------------|----------------------------------|--|
| Total trihalomethanes (TTHM) | 0.080 | |
| Bromodichloromethane | | 0.0010 |
| Bromoform | | 0.0010 |
| Chloroform | | 0.0010 |
| Dibromochloromethane | | 0.0010 |
| Haloacetic acids (five) (HAA5) | 0.060 | |
| Monochloroacetic Acid | | 0.0020 |
| Dichloroacetic Acid | | 0.0010 |
| Trichloroacetic Acid | | 0.0010 |
| Monobromoacetic Acid | | 0.0010 |
| Dibromoacetic Acid | | 0.0010 |
| Bromate | 0.010 | 0.0050 |
| Chlorite | 1.0 | 0.020 |

Additional *Applicable Authorities* are located in Attachment A, which is attached hereto and incorporated by reference.

STATEMENT OF FACTS

The Water System is classified as a community water system and serves a rural community near Five Points in the westside Fresno County. The Water System serves a total of 46 service connections and a year round population of approximately 180 people, as reported to the Division. It operates under a Domestic Water Supply Permit No. 03-23-12P-016 issued on March 12, 2012.

The Water System obtains raw water from the California Aqueduct via Westlands Water District lateral # 20-L. Raw water is treated using two (2) Siemens Tri-mite TM 175

1 packaged treatment plants which is classified as a conventional filtration plant by the
2 Division.

3
4 CCR, Title 22, Chapter 15.5 (hereinafter “Stage 2 Disinfection Byproduct Rule” or
5 “S2DBPR”) adopted by California, effective June 21, 2012, requires water systems serving
6 less than 10,000 persons to monitor and report disinfection byproduct and residual
7 disinfectant levels. The S2DBPR applies to any community or nontransient noncommunity
8 water system that treats water with a chemical disinfectant in any part of the treatment
9 process or that provides water containing a chemical disinfectant. CCR Section 64533
10 establishes a maximum contaminant level (hereinafter “MCL”) in drinking water for total
11 trihalomethanes (hereinafter “TTHM”) and haloacetic acids (five) (hereinafter “HAA5”) in
12 drinking water of 0.080 mg/L and 0.060 mg/L, respectively.
13

14
15 CCR, Section 64534.2, establishes a routine monitoring frequency for a surface water
16 system serving a population less than 500 individuals of one sample for TTHMs and
17 HAA5s per year per treatment plant during the month of warmest water temperature. The
18 Water System is on an increased monitoring frequency of one sample per quarter per
19 treatment plant, as required by Table 64534.2-A.
20

21
22 CCR, Section 64535.2(e)(1), specifies ongoing compliance determinations for quarterly
23 TTHM and HAA5 monitoring; specifically, compliance with the TTHM and HAA5 MCLs
24 are based on a locational running annual average (LRAA), computed quarterly, at each
25 approved sample site. The Water System is required to collect one TTHM sample and one
26 HAA5 sample at the location in the distribution system with the highest historic TTHM and
27

HAA5 results, respectively. The Water System's approved S2DBPR sample site is: 23091 Fresno Coalinga Road.

A summary of the Water System's recent TTHM and HAA5 monitoring is presented in the table below.

**Table 1: Stage 2 DBPR Sample Site Results
23091 Fresno Coalinga Road**

| Sample Quarter | TTHM (mg/L) | HAA5 (mg/L) |
|------------------------------|----------------|----------------|
| | MCL = | |
| | 0.080 | 0.060 |
| 4 th quarter 2013 | 0.140 | 0.026 |
| 1 st quarter 2014 | 0.130 | 0.020 |
| 2 nd quarter 2014 | 0.200 | 0.045 |
| 3 rd quarter 2014 | 0.220 | 0.055 |
| LRAA | 0.172 | 0.036 |

The Water System was previously in violation of the TTHM MCL and HAA5 MCL under the Stage 1 Disinfection Byproduct Rule. Compliance Order No. 03-23-12O-012 was issued to the Water System on October 30, 2012 for TTHM MCL violation. Compliance Order No. 03-23-13R-006 was issued to the Water System on August 27, 2013 for HAA5 MCL violation. This compliance order replaces and voids Compliance Order No. 03-23-12O-012 and 03-23-13R-006, and their directives.

The Water System has submitted a SDWSRF funding application to the Division to conduct a planning study to identify a solution to correct the TTHM and HAA5 violations.

DETERMINATIONS

1 Based on the above Statement of Facts, the Division has determined that the Water System
2 has violated the LRAA MCL for TTHMs during the third quarter of 2014, as shown in
3 Table 1 above.
4

5
6 **DIRECTIVES**
7

8 To ensure that the water supplied by the FCSA #49/Five Points water system is at all times
9 safe, wholesome, healthful, and potable, and pursuant to the California SDWA, the Water
10 System is hereby directed to take the following actions:
11

- 12
13 1. Comply with CCR, Title 22, Section 64533(a) in future monitoring periods after
14 conducting upgrades of the treatment facility and treatment operations.
15
- 16
17 2. Provide quarterly public notification of its inability to meet the TTHM MCL
18 during any calendar quarter that the four-quarter locational running annual average
19 exceeds the TTHM MCL. Notification procedures and format are provided in
20 Attachment B. An electronic version of Attachment B is available upon request.
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- 22
23 3. Proof of public notification shall be provided to the Division following each
24 quarterly notification by the 10th day of the month following notification, using the
25 form provided as Attachment C.
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4. Continue to collect quarterly samples for TTHM's and HAA5's from the distribution system in accordance with an approved DBP monitoring plan. The analytical results shall be reported to the Division electronically by the analyzing laboratory no later than the 10th day following the month in which the analysis was completed.
5. Prepare a Corrective Action Plan identifying improvements to the water system designed to correct the water quality problem (violation of the TTHM MCL) and eliminate the need to deliver water to consumers that does not meet primary drinking water standards. The plan shall include a time schedule for completion of various phases of the project such as design, construction, and startup.
6. Present the Corrective Action Plan required under Directive No. 5, above, to the Division in an office meeting no later than **January 31, 2015**.
7. Submit quarterly progress reports to the Division. The first quarterly progress report shall describe progress made in the fourth quarter of 2014 and shall be submitted to the Division by **April 30, 2015**, using the form provided as Attachment D.
8. Operate the existing water system to minimize formation of total trihalomethanes and haloacetic acids in the distribution system.
9. Submit a written response by **November 30, 2014**, indicating its willingness to comply with the directives of this Compliance Order.

1 10. By no later than **December 31, 2017**, achieve compliance with the total
2 trihalomethanes maximum contaminant level , with the completion of a project and
3 demonstration that the locational running annual average is reliably less than the
4 MCL. The Water System shall provide written notification of the date that
5 compliance is achieved, no later than ten days following receipt of the laboratory
6 sampling results.
7

8
9 All submittals required by this Order shall be addressed to:

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11 Betsy S. Lichti, P.E.,
12 Senior Sanitary Engineer
13 State Water Resources Control Board
14 Division of Drinking Water
15 Fresno District
16 265 W. Bullard Avenue, Suite 101
17 Fresno, CA 93704

18 The Division reserves the right to make such modifications to this Order as it may deem
19 necessary to protect public health and safety. Such modifications may be issued as
20 amendments to this Order and shall be effective upon issuance. Nothing in this Compliance
21 Order relieves the Water System of its obligation to meet the requirements of the California
22 SDWA, or any regulation, standard, permit or order issued thereunder.

23 If the FCSA #49/Five Points water system is unable to perform the tasks specified in this
24 Order for any reason, whether within or beyond its control, and if the Water System
25 notifies the Division in writing no less than five days in advance of the due date, the
26 Division may extend the time for performance if it demonstrates that it has used its best
27 efforts to comply with the schedule and other requirements of this Order.

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PARTIES BOUND

This Compliance Order shall apply to and be binding upon FCSA #49/Five Points, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The directives of this Compliance Order are severable, and FCSA #49/Five Points shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the Division to issue citations and compliance orders with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any permit, regulation, permit or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the Division to take action to suspend or revoke a permit that has been issued to a public water system if the system has violated applicable law or regulations or has failed to comply with an order of the Division; and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the

1 Division. The Division does not waive any further enforcement action by issuance of this
2 compliance order.

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8 11-7-2014
9 Date


10 Carl L. Carlucci, P.E.
11 Supervising Sanitary Engineer
12 Central California Section
13 SOUTHERN CALIFORNIA BRANCH
14 DRINKING WATER FIELD OPERATIONS

15
16 CLC/BSL/SP

- 17 **Attachments:**
18 **Attachment A: Applicable Authorities**
19 **Attachment B: Public Notification Form**
20 **Attachment C: Proof of Notification Form**
21 **Attachment D: Quarterly Progress Report Form**



Applicable Authorities
Violation of Maximum Contaminant Levels of
Disinfectant Byproducts

California Health and Safety Code, Section 116655, states in relevant part:

- (a) Whenever the department determines that any person has violated or is violating this chapter, or any permit, regulation, or standard issued or adopted pursuant to this chapter, the director may issue an order doing any of the following:
- (1) Directing compliance forthwith.
 - (2) Directing compliance in accordance with a time schedule set by the department.
 - (3) Directing that appropriate preventive action be taken in the case of a threatened violation.
- (b) An order issued pursuant to this section may include, but shall not be limited to, any or all of the following requirements:
- (1) That the existing plant, works, or system be repaired, altered, or added to.
 - (2) That purification or treatment works be installed.
 - (3) That the source of the water supply be changed.
 - (4) That no additional service connection be made to the system.
 - (5) That the water supply, the plant, or the system be monitored.
 - (6) That a report on the condition and operation of the plant, works, system, or water supply be submitted to the department.

California Code of Regulations, Title 22, states in relevant part:

§64533. Maximum Contaminant Levels for Disinfection Byproducts.

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

Table 64533-A
Maximum Contaminant Levels and Detection Limits for Purposes of Reporting
Disinfection Byproducts

| Disinfection Byproduct | Maximum Contaminant Level (mg/L) | Detection Limit for Purposes of Reporting (mg/L) |
|-------------------------------|---|---|
| Total trihalomethanes (TTHM) | 0.080 | |
| Bromodichloromethane | | 0.0010 |
| Bromoform | | 0.0010 |
| Chloroform | | 0.0010 |
| Dibromochloromethane | | 0.0010 |
| Disinfection Byproduct | Maximum Contaminant Level (mg/L) | Detection Limit for Purposes of Reporting (mg/L) |

| | | |
|--------------------------------|-------|-------------------------------|
| Haloacetic acids (five) (HAA5) | 0.060 | |
| Monochloroacetic Acid | | 0.0020 |
| Dichloroacetic Acid | | 0.0010 |
| Trichloroacetic Acid | | 0.0010 |
| Monobromoacetic Acid | | 0.0010 |
| Dibromoacetic Acid | | 0.0010 |
| Bromate | 0.010 | 0.0050 0.0010 ¹ |
| Chlorite | 1.0 | 0.020 |

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

§64534. General Monitoring Requirements.

(a) Except as provided in subsection (b), analyses required pursuant to this chapter shall be performed by laboratories certified by the Department 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 otherwise directed by the Department, analyses shall be made in accordance with EPA approved methods as prescribed in 40 Code of Federal Regulations, part 141.131 (63 Fed. Reg. 69466 (December 16, 1998), as amended at 66 Fed. Reg. 3776 (January 16, 2001), 71 Fed. Reg. 479 (January 4, 2006), 71 Fed. Reg. 37168 (June 29, 2006), and 74 Fed. Reg. 30958 (June 29, 2009)), which are incorporated by reference.

(b) Sample collection, and field tests including pH, alkalinity, and chlorine, chloramines, and chlorine dioxide residual disinfectants, shall be performed by personnel trained to perform such sample collections and/or tests by:

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

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

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

(e) Systems shall use only data collected under the provisions of this chapter to qualify for reduced monitoring pursuant to this article.

(f) Systems that fail to monitor shall be in violation of the monitoring requirements for the entire monitoring period that a monitoring result would be used in calculating compliance with

| | | | |
|--|-----------|---|--|
| any treatment, ≤4.0 mg/L | | | |
| | 500-9,999 | TTHM ¹ ≤0.040 mg/L and HAA5 ¹ ≤0.030 mg/L | One sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature. |
| System using only ground water not under direct influence of surface water and using chemical disinfectant | ≥10,000 | TTHM ¹ ≤0.040 mg/L and HAA5 ¹ ≤0.030 mg/L | One sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature. |
| | <10,000 | TTHM ¹ ≤0.040 mg/L and HAA5 ¹ ≤0.030 mg/L for two consecutive years OR TTHM ¹ ≤0.020 mg/L and HAA5 ¹ ≤0.015 mg/L for one year | One sample per treatment plant per three-year monitoring cycle at distribution system location reflecting maximum residence time during month of warmest water temperature, with the three-year cycle beginning on January 1 following the quarter in which system qualifies for reduced monitoring. |
| ¹ TOC, TTHM, and HAA5 values based on annual averages. | | | |

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

(3) Systems on increased monitoring pursuant to column D of table 64534.2-A may return to routine monitoring specified in column C of table 64534.2-A if, after at least one year of monitoring, TTHM annual average is ≤0.060 mg/L and HAA5 annual average is ≤0.045 mg/L.

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

(1) Systems shall take daily samples at the entrance to the distribution system and analyze the samples the same day the samples are taken. For any daily sample that exceeds the chlorite

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

(2) Systems shall take a three-sample set each month in the distribution system. The system shall take one sample at each of the following locations: as close to the first customer as possible, at a location representative of average residence time, and at a location reflecting maximum residence time in the distribution system. Any additional routine sampling shall be conducted in the same manner (as three-sample sets, at the specified locations). The system may use the results of additional monitoring conducted under paragraph (1) to meet the monitoring requirement in this paragraph;

(3) Systems may apply to the Department to reduce monthly chlorite monitoring in the distribution system pursuant to paragraph (2) to one three-sample set per quarter after one year of monitoring during which no individual chlorite sample taken in the distribution system has exceeded the chlorite MCL and the system has not been required to conduct additional monitoring under paragraph (1). The application shall include the results of all chlorite monitoring conducted in the previous 12 months and the proposed revised monitoring plan as required by section 64534.8. The Department will evaluate data submitted with the application and determine whether or not the system is eligible to reduce monitoring to one three-sample set per quarter. The system may remain on the reduced monitoring schedule until either any of the three individual chlorite samples taken quarterly in the distribution system under paragraph (2) exceeds the chlorite MCL or the system is required to conduct additional monitoring under paragraph (1), at which time the system shall revert to routine monitoring; and

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

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

(1) Systems shall take one sample per month for each treatment plant in the system using ozone. Samples shall be taken at the entrance to the distribution system while the ozonation system is operating under normal conditions;

(2) Systems may reduce bromate monitoring from monthly to once per quarter, if the system's running annual average bromate concentration is ≤ 0.0025 mg/L based on monthly bromate measurements under paragraph (1) for the most recent four quarters, with samples analyzed using Method 317.0 Revision 2.0, 321.8, or 326.0. The system shall notify the Department in writing within 30 days of the change in monitoring frequency. The system shall continue monthly bromide monitoring of the source water to remain on reduced bromate monitoring; and

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

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

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

(d) By the applicable date specified in section 64530(d), and in lieu of TTHM and HAA5 monitoring in subsection (a):

(1) Community and nontransient noncommunity water systems shall monitor for TTHM and HAA5 at the frequencies and location totals indicated in table 64534.2-C and in accordance with the monitoring plan developed pursuant to section 64534.8;

**Table 64534.2-C
Routine Monitoring Frequency for TTHM and HAA5**

| <i>Source water type</i> | <i>Persons served</i> | <i>Minimum monitoring frequency¹</i> | |
|--|---|--|--------------------------------------|
| | | <i>Number of distribution system monitoring locations</i> | <i>Monitoring period²</i> |
| Systems using approved surface water | ≥5,000,000 | 20 dual sample sets | per quarter |
| | 1,000,000 – 4,999,999 | 16 dual sample sets | per quarter |
| | 250,000 – 999,999 | 12 dual sample sets | per quarter |
| | 50,000 – 249,999 | 8 dual sample sets | per quarter |
| | 10,000 – 49,999 | 4 dual sample sets | per quarter |
| | 3,301 – 9,999 | 2 dual sample sets | per quarter |
| | 500 – 3,300 | 1 TTHM and 1 HAA5 sample: one at the location with the highest TTHM measurement, one at the location with the highest HAA5 measurement | per quarter |
| <500 | 1 TTHM and 1 HAA5 sample: one at the location with the highest TTHM measurement, one at the location with the highest HAA5 measurement ³ | per year | |
| Systems using ground water not under direct influence of surface water | ≥500,000 | 8 dual sample sets | per quarter |
| | 100,000 – 499,999 | 6 dual sample sets | per quarter |
| | 10,000 – 99,999 | 4 dual sample sets | per quarter |

| | | | |
|--|-------------|---|----------|
| | | | |
| | 500 – 9,999 | 2 dual sample sets | per year |
| | <500 | 1 TTHM and 1 HAA5 sample: one at the location with the highest TTHM measurement, one at the location with the highest HAA5 measurement ³ | per year |
| | | | |

¹ All systems shall monitor during the month of highest disinfection byproduct concentrations.

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

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

(2) Undisinfected systems that begin using a disinfectant other than UV light after the applicable dates in 40 Code of Federal Regulations, part 141.600 (71 Fed. Reg. 388, January 4, 2006), which is incorporated by reference, shall consult with the Department to identify compliance monitoring locations for this subsection. Systems shall then develop a monitoring plan in accordance with section 64534.8 that includes those monitoring locations;

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

**Table 64534.2-D
Reduced Monitoring Frequency for TTHM and HAA5**

| | | <i>Minimum monitoring frequency</i> | |
|--------------------------------------|-----------------------|--|--------------------------------------|
| <i>Source water type</i> | <i>Persons served</i> | <i>Number of distribution system monitoring locations</i> | <i>Monitoring period¹</i> |
| Systems using approved surface water | $\geq 5,000,000$ | 10 dual sample sets: at the locations with the five highest TTHM and five highest HAA5 LRAAs | per quarter |
| | 1,000,000 – 4,999,999 | 8 dual sample sets: at the locations with the | per quarter |