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

IN RE: **CITY OF LEMOORE**
WATER SYSTEM NO. 1610005

TO: Mr. David Wlachin
City of Lemoore
711 W. Cinnamon Drive
Lemoore, CA 93245

COMPLIANCE ORDER NO. 03-12-14R-004

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

Issued on October 27, 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 the Division (hereinafter "Deputy Director"), hereby issues a compliance order to the City

of Lemoore (hereinafter "City") for violation of California Code of Regulations (hereinafter "CCR"), Section 64533(a), Maximum Contaminant Levels for Disinfection Byproducts.

APPLICABLE AUTHORITIES

Section 116655, California SDWA, 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.

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 City's water system is a publicly owned community water system located in Kings County that supplies water for domestic purposes to approximately 24,945 served through approximately 6,521 service connections, as reported to the Division. The City operates under revised Domestic Water Supply Permit No. 03-12-11P-011, issued on December 7, 2011.

The City utilizes ten (10) active ground water wells that are provided disinfection treatment with 12.5% sodium hypochlorite. In 2011, the Division issued a revised permit the City to

for use of an arsenic blending treatment plant. Four sources located in the City's North Well Field (N-2, N-4, N-5 and N-6) historically exceeded the arsenic maximum contaminant level. Raw water from the North Well Field wells is now blended with the raw water from the City's other wells in town at two compliance points (Effluent from the tank at Well No. 11 and effluent from the South Tank at 40 G. St.). All water delivered to the distribution system meets the arsenic maximum contaminant level.

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

CCR, Section 64534.2, establishes a routine monitoring frequency for a ground water system serving a population greater than or equal to 10,000 individuals of four samples for TTHMs and HAA5s per quarter per treatment plant.

CCR, Section 64535.2(e)(1), specifies ongoing compliance determinations for quarterly TTHM and HAA5 monitoring; specifically, compliance with the TTHM and HAA5 MCLs are based on a locational running annual average (LRAA), computed quarterly, at each

approved sample site. The City is required to collect four TTHM samples and four HAA5 samples at the locations in the distribution system with the highest historic TTHM and HAA5 results, respectively. The City's approved S2DBPR sample sites are:

1. Faun & Lemoore Avenue
2. Carmel & Stinson
3. 898 Iona Avenue
4. Lemoore Avenue & Iona Avenue

The Faun and Lemoore Avenue site (Site No. 1) is in violation of the S2DBPR. A summary of this site's recent TTHM and HAA5 monitoring is presented in the table below.

Table 1: Stage 2 DBPR Sample Site Results
Faun & Lemoore Ave.

Sample Quarter	TTHM (mg/L)	HAA5 (mg/L)
	MCL =	
	0.080	**0.060**
Fourth Qtr. 2013	**0.110**	0.035
First Qtr. 2014	0.061	0.012
Second Qtr. 2014	**0.100**	0.027
Third Qtr. 2014	**0.098**	0.025
4Q 2014 LRAA	**0.092**	0.0248

The City was previously in violation of the TTHM MCL under the Stage 1 Disinfection Byproduct Rule. Compliance Order No. 03-12-11O-002 was issued to the Water System on May 23, 2011, for that violation. This compliance order replaces and voids Compliance Order No. 03-12-11O-002 and its directives.

Section 64463.4 requires public notification to the Division and consumers of a water system whenever any violation of the MCL occurs. Notification to the Division is required by the end of the business day on which the violation has been determined. If the Division

is closed, notification shall be within 24 hours of the determination. The Division was notified on September 10, 2014, in accordance with the above-referenced section.

DETERMINATIONS

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

DIRECTIVES

To ensure that the water supplied by the City of Lemoore's water system is at all times safe, wholesome, healthful, and potable, and pursuant to the California SDWA, City is hereby directed to take the following actions:

1. Comply with CCR, Title 22, Section 64533(a) in future monitoring periods after conducting upgrades of the treatment facility and treatment operations.

2. Provide quarterly public notification of its inability to the meet the TTHM MCL during any calendar quarter that the four-quarter locational running annual average exceeds the TTHM MCL. Notification procedures and format are provided in Attachment B. An electronic version of Attachment B is available upon request.

3. Proof of public notification shall be provided to the Division following each quarterly notification by the 10th day of the month following notification, using the form provided as Attachment C.

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 **December 15, 2014**.

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 **January 10, 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 15, 2014**, indicating its willingness to comply with the directives of this Compliance Order.

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

All submittals required by this Order shall be addressed to:

Tricia A. Wathen, P.E.,
Senior Sanitary Engineer
State Water Resources Control Board
Division of Drinking Water
Visalia District
265 W. Bullard Avenue, Suite 101
Fresno, CA 93704

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

If the City of Lemoore's water system is unable to perform the tasks specified in this Order for any reason, whether within or beyond its control, and if the City of Lemoore's water system notifies the Division in writing no less than five days in advance of the due date, the Division may extend the time for performance if the City of Lemoore's water system demonstrates that it has used its best efforts to comply with the schedule and other requirements of this Order.

PARTIES BOUND

This Compliance Order shall apply to and be binding upon the City of Lemoore, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The directives of this Compliance Order are severable, and City of Lemoore 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 Division. The Division does not waive any further enforcement action by issuance of this compliance order.

10-27-2014
Date

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

CLC/TAW/SS

Attachments:
Attachment A: Applicable Authorities
Attachment B: Public Notification Form
Attachment C: Proof of Notification Form
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

MCLs or MRDLs, and shall notify the public pursuant to sections 64463, 64463.7, and 64465, in addition to reporting to the Department pursuant to sections 64537 through 64537.6.

(g) Systems that fail to monitor in accordance with the monitoring plan required by section 64534.8 shall be in violation of the monitoring requirements, and shall notify the public pursuant to sections 64463, 64463.7, and 64465, in addition to reporting to the Department pursuant to sections 64537 through 64537.6.

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

Table 64534.2-A
Routine and Increased Monitoring Frequency for TTHM and HAA5

COLUMN A *Type of System*	COLUMN B *Persons Served*	COLUMN C *Minimum monitoring frequency*	COLUMN D *Sample location in the distribution system & increased monitoring frequencies*
Systems using approved surface water	≥10,000	Four samples per quarter per treatment plant	At least 25 percent of all samples collected each quarter at locations representing maximum residence time. Remaining samples taken at locations representative of at least average residence time in the distribution system and representing the entire distribution system, taking into account number of persons served, different sources of water, and different treatment methods[1].
	500 - 9,999	One sample per quarter per treatment plant	Locations representing maximum residence time[1].
	< 500	One sample per year per treatment plant during month of warmest water temperature	Locations representing maximum residence time[1]. If the sample (or average of annual samples, if more than one sample is taken) exceeds MCL, system shall increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until system meets reduced monitoring criteria in paragraph (3) of this subsection.

Systems using only ground water not under direct influence of surface water and using chemical disinfectant	≥10,000	One sample per quarter per treatment plant	Locations representing maximum residence time[1].
	<10,000	One sample per year per treatment plant during month of warmest water temperature	Locations representing maximum residence time[1]. If the sample (or average of annual samples, if more than one sample is taken) exceeds MCL, system shall increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until system meets reduced monitoring criteria in paragraph (3) of this subsection.

[1] If a system elects to sample more frequently than the minimum required, at least 25 percent of all samples collected each quarter (including those taken in excess of the required frequency) shall be taken at locations that represent the maximum residence time of the water in the distribution system. The remaining samples shall be taken at locations representative of at least average residence time in the distribution system.

(1) Systems may apply to the Department to monitor at a reduced frequency in accordance with table 64534.2-B. The application shall include the results of all TOC, TTHM, and HAA5 monitoring conducted in the previous 12 months and the proposed revised monitoring plan as required by section 64534.8. The Department will evaluate data submitted with the application to determine whether or not the system is eligible for the reduced monitoring specified in table 64534.2-B;

Table 64534.2-B
Reduced Monitoring Frequency for TTHM and HAA5

If the system is a(n) ...		*serving...*		*the system may reduce monitoring if it has monitored at least one year and...*		*to this level*
Approved surface water system which has a source water TOC[1] level, before any treatment, ≤4.0 mg/L		≥10,000		TTHM[1] ≤0.040 mg/L and HAA5[1] ≤0.030 mg/L		One sample per treatment plant per quarter at distribution system location reflecting maximum residence time.
		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

			Minimum monitoring frequency[1]	
Source water type		*Persons served*	*Number of distribution system monitoring locations*	*Monitoring period*[2]
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

				Minimum monitoring frequency		
Source water type		*Persons served*		*Number of distribution system monitoring locations*		*Monitoring period*[1]
Systems using approved surface water		≥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 four highest TTHM and four highest HAA5 LRAAs		per quarter
		250,000 – 999,999		6 dual sample sets: at the locations with the three highest TTHM and three highest HAA5 LRAAs		per quarter
		50,000 – 249,999		4 dual sample sets: at the locations with the two highest TTHM and two highest HAA5 LRAAs		per quarter
		10,000 – 49,999		2 dual sample sets: at the locations with the highest TTHM and highest HAA5 LRAAs		per quarter
		3,301 – 9,999		2 dual sample sets: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement		per year
		500 – 3,300		1 TTHM and 1 HAA5 sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter		per year
Systems using only ground water not under direct influence of surface water		≥500,000		4 dual sample sets: at the locations with the two highest TTHM and two highest HAA5 LRAAs		per quarter
		100,000 – 499,999		2 dual sample sets: at the locations with the highest TTHM and highest HAA5 LRAAs		per quarter
		10,000 – 99,999		2 dual sample sets: one at the location and during the		per year

				quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement		
		500 – 9,999		1 TTHM and 1 HAA5 sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set per year if the highest TTHM and HAA5 measurements occurred at the same location and quarter		per year
		<500		1 TTHM and 1 HAA5 sample: one at the location and during the quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement; 1 dual sample set every third year if the highest TTHM and HAA5 measurements occurred at the same location and quarter		every third year

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

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

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

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

(7) Systems on reduced monitoring pursuant to table 64534.2-B may remain on reduced monitoring after the applicable date in table 64530-A for compliance with this subsection provided the system meets IDSE requirements under section 64530(c) by qualifying for a 40/30 certification (40 CFR part 141.603) or receiving a very small system waiver (40 CFR part 141.604), meets the reduced monitoring criteria in paragraphs (3) and (4), and does not change or add monitoring locations from those used for compliance monitoring under subsection (a); and
(8) Systems on increased monitoring pursuant to table 64534.2-A shall remain on increased monitoring and conduct increased monitoring pursuant to paragraph (5) at the locations in the monitoring plan developed under section 64534.8 beginning at the applicable date in table 64530-A for compliance with this subsection. Systems on increased monitoring may return to routine monitoring specified in table 64534.2-C pursuant to paragraph (5).

Article 4. Compliance requirements

§64535. General Requirements for Determining Compliance.

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

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

§64535.2. Determining Disinfection Byproducts Compliance.

(a) During the first year of monitoring for disinfection byproducts under sections 64534.2(a), (b), and (c), the system shall comply with paragraphs (1) through (3). During the first year of monitoring for TTHM and HAA5 under section 64534.2(d), the system shall comply with paragraphs (1) through (3) at each monitoring location:
(1) The average of the first quarter's results shall not exceed four times the MCLs specified in section 64533.
(2) The average of the first and second quarter's results shall not exceed two times the MCLs specified in section 64533.
(3) The average of the first, second, and third quarter's results shall not exceed 1.33 times the MCLs specified in section 64533.

(b) TTHM and HAA5 MCL compliance, as monitored pursuant to section 64534.2.(a), shall be determined as follows:
(1) For systems monitoring quarterly, the running annual arithmetic average, computed quarterly, of quarterly arithmetic averages of all samples collected pursuant to section 64534.2(a) shall not exceed the MCLs specified in section 64533;
(2) For systems monitoring less frequently than quarterly, the average of samples collected that calendar year pursuant to section 64534.2(a) shall not exceed the MCLs specified in section 64533. If the average of the samples collected under section 64534.2(a) exceeds the MCL, the system shall increase monitoring to once per quarter per treatment plant. Compliance with the MCL shall then be determined by the average of the sample that triggered the quarterly monitoring and the following three quarters of monitoring, unless the result of fewer than four quarters of monitoring will cause the running annual average to exceed the MCL, in which case the system is in violation immediately. After monitoring quarterly for four consecutive quarters (including the quarter that triggered the quarterly monitoring), and until such time as monitoring returns to routine monitoring pursuant to section 64534.2(a)(3), compliance shall be determined pursuant to paragraph (1);

(3) If the running annual arithmetic average of quarterly averages covering any consecutive four-quarter period exceeds the MCL, the system is in violation of the MCL and shall notify the public pursuant to sections 64463, 64463.4, and 64465, including language in appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6; and
(4) If a public water system fails to complete four consecutive quarters of monitoring, compliance with the MCL for the last four-quarter compliance period shall be based on an average of the available data.

(c) Compliance for bromate shall be based on a running annual arithmetic average, computed quarterly, of monthly samples (or, for months in which the system takes more than one sample, the average of all samples taken during the month) collected by the system as prescribed by section 64534.2(c). If the average of samples covering any consecutive four-quarter period exceeds the MCL, the system is in violation of the MCL and shall notify the public pursuant to sections 64463, 64463.4, and 64465, including language in appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6. If a public water system fails to complete 12 consecutive months of monitoring, compliance with the MCL for the last four-quarter compliance period shall be based on an average of the available data.

(d) Compliance for chlorite shall be based on the results of samples collected by the system pursuant to sections 64534.2(b).
(1) If any daily sample taken at the entrance to the distribution system exceeds the chlorite MCL and one (or more) of the three samples taken in the distribution system pursuant to section 64534.2(b)(1) exceeds the chlorite MCL, the system is in violation of the MCL and shall take immediate corrective action to reduce the concentration of chlorite to a level below the MCL. The system shall notify the Department within 48 hours of the determination and notify the public pursuant to the procedures for acute health risks in sections 64463, 64463.1, and 64465, including language in appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6. Failure to take samples in the distribution system the day following an exceedance of the chlorite MCL at the entrance to the distribution system is also an MCL violation and the system shall notify and report as described in this paragraph;
(2) If the average of an individual sample from the three-sample set taken pursuant to 64534.2(b)(2) and its confirmation sample taken pursuant to section 64634.2(b)(4) exceeds the chlorite MCL, the system is in violation of the MCL and shall take the corrective action and notify and report as described in paragraph (1). If the average of the individual sample and its confirmation does not exceed the MCL, the system shall inform the Department of the results within seven days from receipt of the original analysis. Failure to take a confirmation sample pursuant to section 64534.2(b)(4) is also an MCL violation and the system shall notify and report as described in paragraph (1); and
(3) If any two consecutive daily samples taken at the entrance to the distribution system exceed the chlorite MCL and all distribution system samples taken pursuant to 64534.2(b)(1) are less than or equal to the chlorite MCL, the system is in violation of the MCL and shall take corrective action to reduce the concentration of chlorite to a level below the MCL at the point of sampling. The system shall notify the public pursuant to the procedures for nonacute health risks in sections 64463, 64463.4, and 64465, including the language in appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6. Failure to monitor at the entrance to the distribution system the day following an exceedance of the chlorite MCL at the entrance to the distribution system is also an MCL violation and the system shall notify and report as described in this paragraph.

(e) TTHM and HAA5 MCL compliance, as monitored pursuant to section 64534.2(d), shall be determined as follows:
(1) For systems monitoring quarterly, each locational running annual average (LRAA), computed quarterly, shall not exceed the MCLs specified in section 64533;
(2) For systems monitoring annually or less frequently, each sample collected shall not exceed the MCLs specified in section 64533. If no sample exceeds the MCL, the sample result for each monitoring location shall be considered the LRAA for the monitoring location. If any sample exceeds the MCL, systems shall increase monitoring pursuant to section 64534.2(d)(5). Compliance with the MCL shall then be determined by the average of the sample that triggered the quarterly monitoring and the following three quarters of monitoring, unless the result of fewer than four quarters of monitoring will cause the LRAA to exceed the MCL, in which case the system is in violation immediately. After monitoring quarterly for four consecutive quarters (including the quarter that triggered the quarterly monitoring), and until such time as monitoring returns to routine monitoring pursuant to section 64534.2(d)(5), compliance shall be determined pursuant to paragraph (1);
(3) If a system fails to complete four consecutive quarters of monitoring, compliance with the MCL for the last four-quarter compliance period shall be based on an average of the available data. If more than one sample per quarter is taken at a monitoring location, all the samples taken in the quarter at that monitoring location shall be averaged to determine a quarterly average to be used in the LRAA calculation; and
(4) If the LRAA exceeds the MCL, calculated based on four consecutive quarters of monitoring (or the LRAA calculated based on fewer than four quarters of data if the MCL would be exceeded regardless of the monitoring results of subsequent quarters), the system is in violation of the MCL and shall notify the public pursuant to sections 64463, 64463.4, and 64465, including the language in appendix 64465-G, in addition to reporting to the Department pursuant to sections 64537 through 64537.6.

§64469 Reporting Requirements

(d) Within 10 days of giving initial or repeat public notice pursuant to Article 18 of this Chapter, except for notice given under 64463.7(d), each water system shall submit a certification to the Department that it has done so, along with a representative copy of each type of public notice given.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

City of Lemoore has levels of Disinfection Byproducts Above Drinking Water Standards

Our water system recently failed a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what you should do, what happened, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results we received on _____ show that our system exceeds the standard, or maximum contaminant level (MCL), for Total Trihalomethanes. The MCL standards for Total Trihalomethanes and Haloacetic Acids (Five) are 80 ug/L and 60 ug/L, respectively. The average level of Total Trihalomethanes over the last year was _____ ug/L. The average level of Haloacetic Acids (Five) over the last year was _____ ug/L.

What should I do?

- **You do not need to use an alternative (e.g. , bottled) water supply.**
- This is not an immediate risk. If it had been, you would have been notified immediately. However, *some people who use water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.*
- If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

What happened? What was done?

[Describe corrective action]_____

_____

We anticipate resolving the problem within _____.

For more information, please contact [name] _____ at [phone number] _____ or at the following mailing address: _____.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- SCHOOLS: Must notify school employees, students, and parents (if the students are minors).
- RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.
- BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.

This notice is being sent to you by the City of Lemoore water system.

State Water System ID#: 1610005. Date distributed: _____.

Certification of Completion of Public Notification

This form, when completed and returned to the Division of Drinking Water - Visalia District (265 W. Bullard Ave. #101, Fresno, CA 93704 or fax to 559-447-3304), serves as certification that public notification to water users was completed as required by Title 22, California Code of Regulations, Sections 64463-64465.

Public Water System Name: _____

Public Water System No.: _____

Public notification for **failure to comply with the TTHM MCL and/or HAA5 MCL for the third quarter of 2014** was performed by the following method(s) (check and complete those that apply):

The notice was mailed to users on: _____
A copy of the notice is attached.

The notice was hand delivered to water customers on: _____
A copy of the notice is attached.

The notice was published in the local newspaper on: _____
A copy of the newspaper notice is attached.

The notice was published in conspicuous places on: _____
A copy of the notice is attached.
A list of locations the notice was posted is attached.

The notice was delivered to community organizations on: _____
A copy of the notice is attached.
A list of community organizations the notice was delivered to is attached.

I hereby certify that the above information is factual.

_____
Printed Name

_____
Title

_____
Signature

_____
Date

Disclosure: Be advised that Section 116725 and 116730 of the California Health and Safety Code state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the attached order may be liable for a civil penalty not to exceed five thousand dollars ($5,000) for separate violation each day that the violation continues. In addition, the violators may be prosecuted in criminal court and, upon conviction, be punished by a fine of not more than $25,000 for each day of violation, or be imprisoned in the county jail not to exceed one year, or by both the fine and imprisonment.

Due to the Division of Drinking Water within 10 days of issuance of notice to customers
System Number: 1610005
Enforcement Action No. _____

Attachment D

Quarterly Progress Report

Water System: City of Lemoore	Water System No.:1610005
Compliance Order No.: 03-12-14R-004	Violation: TTHM MCL
Calendar Quarter:	Date Prepared:

This form should be prepared and signed by City personnel with appropriate authority to implement the directives of the Compliance Order and the Corrective Action Plan. Please attach additional sheets as necessary. The quarterly progress report must be submitted by the 10th day of each subsequent quarter, to the Division of Drinking Water, Visalia District Office.

Summary of Compliance Plan:

Tasks completed in the reporting quarter:

Tasks remaining to complete:

Anticipate compliance date:

Name

Signature

Title

Date