



RON CHAPMAN, MD, MPH
Director & State Health Officer

State of California—Health and Human Services Agency
California Department of Public Health



EDMUND G. BROWN JR.
Governor

March 19, 2013

Certified Mail
7009 1680 001 3114 5134

City of Montague
P.O. Box 428
Montague, CA 96064

Attention: Chris Tyhurst, Water Superintendent

COMPLIANCE ORDER NO. 01-01-13R-001

Enclosed is a compliance order addressing the City of Montague's violation of the Maximum Contaminant Level (MCL) for Total Trihalomethanes (TTHM) in its drinking water. The compliance order specifies action to be taken by the City to help achieve compliance and avoid future civil penalties.

The Klamath District Office appreciates the City's ongoing, conscientious effort to resolve its TTHM problem and this compliance order does not reflect a lack of effort by the City. This compliance order is a result of the number of TTHM MCL violations. Our office is required to take an enforcement action when consistent or frequent MCL violations occur. This enforcement action is our administrative tool to help ensure that the violation will be corrected.

Should you have any questions, please contact me at (530) 224-4872, or Barry Sutter at (530) 224-4875.

Tony Wiedemann, P.E.
Klamath District Engineer
DRINKING WATER FIELD
OPERATIONS BRANCH

Enclosure

cc: Richard L. Hinrichs, Chief – DDW – Northern California Section

System No. 4710007

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

Name of Public Water System: City of Montague

Water System No.: 4710007

To: City of Montague
P.O. Box 428
Montague, CA 96064

Issued: March 19, 2013

Via Certified Mail

COMPLIANCE ORDER FOR NONCOMPLIANCE
OF TOTAL TRIHALOMETHANE MAXIMUM CONTAMINANT LEVEL

Section 116655, Chapter 4, Part 12, Division 104 of the California Health and Safety Code (CHSC), authorizes the issuance of a compliance order for failure to comply with a requirement of the California Safe Drinking Water Act, or any regulation, standard, permit, or order issued hereunder.

Applicable Authorities

Section 116655 of the CHSC 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.



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(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.

Attachment 1 includes applicable regulations, referenced in this order, from the California Code of Regulations (CCR), Title 22, Division 4, Chapter 15.5, Disinfectant Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors.

FINDINGS

The City of Montague has conducted monitoring for disinfection byproducts as required by Title 22, CCR, Section 64534.2. Monitoring results for total trihalomethanes (TTHM) during the last five years are summarized in Table 1, below. Table 1 shows the results for each quarter and the running annual average (RAA), which is the basis for compliance with the maximum contaminant level (MCL) [Title 22, CCR, Section 64535.2]. Table 1 shows that the City of Montague has consistently exceeded the TTHM MCL since the 3rd Quarter of 2009.

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**Table 1: TTHM monitoring data
(MCL = 80 µg/L)**

Date	TTHM (µg/L)	TTHM RAA (µg/L)
1 st Qtr. 2008	72	80
2 nd Qtr. 2008	99	92
3 rd Qtr. 2008	74	92
4 th Qtr. 2008	76	80
1 st Qtr. 2009	55	76
2 nd Qtr. 2009	95	75
3 rd Qtr. 2009	142	92
4 th Qtr. 2009	154	111
1 st Qtr. 2010	153	136
2 nd Qtr. 2010	102	138
3 rd Qtr. 2010	131	135
4 th Qtr. 2010	91	119
1 st Qtr. 2011	132	114
2 nd Qtr. 2011	76	108
3 rd Qtr. 2011	103	101
4 th Qtr. 2011	76.6	96.9
1 st Qtr. 2012	95.4	87.8
2 nd Qtr. 2012	71.4	86.6
3 rd Qtr. 2012	143	96.6
4 th Qtr. 2012	104	103.4

The City of Montague has performed public notification in accordance with Title 22, CCR, Section 64463.4(c)(1) as directed in letters from the Klamath District Office.

The City of Montague submitted applications for both Proposition 50 Funds and Safe Drinking Water State Revolving Funds (SRF) to finance a project for improvements to its water treatment plant to help reduce disinfection byproducts and disinfection byproduct precursors. The proposed project entitled, "Water Treatment Plant Improvements", steadily proceeded from preliminary planning to final design. Final plans and specifications were approved by the Klamath District Office on December 15, 2012. The project will be co-funded by both Proposition 50 and SRF and will be bid once funding agreements are issued. On February 20, 2013, the Engineering Technical Assistance Section of the Drinking Water Program authorized

1 the preparation of the Proposition 50, Chapter 4a.5 funding agreement for the City of
2 Montague's "Water Treatment Plant Improvements", identified as Project No. P50-
3 4710007-128. On March 13, 2013, the Engineering Technical Assistance Section of
4 the Drinking Water Program authorized the preparation of the SRF funding
5 agreement for the City of Montague's "Water Treatment Plant Improvements",
6 identified as Project No. Project No. 4710007-002C. If the funding agreements are
7 issued in April 2013 as anticipated, project construction will begin this spring or early
8 summer.

9
10 **CONCLUSIONS OF LAW**

11 Based on the above Findings, the Department has determined that the City of
12 Montague has violated the following provision contained in Title 22, California Code
13 of Regulations (CCR).

14 CCR Section 64533: Specifically, the water produced by the City of Montague
15 exceeds the Maximum Contaminant Level for Total Trihalomethanes of 80 µg/L.
16

17 **ORDER**

- 18 1. By October 1, 2016, the City of Montague shall cease and desist from failing to
19 comply with CCR Section 64533.
20
21 2. By October 1, 2013, the City of Montague shall begin construction of its proposed
22 project for improvements to the water treatment plant to help reduce disinfection
23 byproducts and disinfection byproduct precursors.
24
25 3. Until improvements are completed, the City of Montague shall continue to operate
26 its treatment plant as diligently as possible to produce the best possible water
27 quality and shall continue to monitor for disinfection byproducts as required by
Title 22, CCR, Section 64534.2.



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4. The City of Montague shall provide quarterly public notification of its violation of the TTHM MCL during any calendar quarter that the RAA exceeds the TTHM MCL. Notification must be completed within 30 days of learning of the violation and in accordance with each of the following:

a) Complete the enclosed notice titled, "IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER". Include the name, address, and telephone number of a water system representative as a source of additional information concerning the public notice. Also, in the space provided, you must give a legible, written description (preferably typed) of the corrective actions taken by the water system to prevent this violation from occurring in the future. At the bottom, provide the date or dates the notice was distributed.

b) Distribute the notice to the users in accordance with Section 64463.4(c)(1), Title 22, CCR, by:

1) Mail or direct delivery to each customer/residence that receive their drinking water from the water system and any other service connections to which water is delivered by the water system;

2). And by one or more of the following methods to reach persons not likely to be reached by mailing or direct delivery;

- Publication in a local newspaper
- Posting, for at least seven days, in conspicuous public places served by the water system or on the Internet
- Delivery to community organizations

c) A representative of the City of Montague shall complete the enclosed "Certification of Public Notice" form and return it to the Department within ten days of distribution of the notice. A copy of the notice that was distributed must be included with the form.

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5. The Department 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. All submittals required by this Order shall be addressed to:

Tony Wiedemann, P.E., Senior Sanitary Engineer
California Department of Public Health
Drinking Water Field Operations
364 Knollcrest Drive, Suite 101
Redding, CA 96002

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

7. If the City of Montague fails to perform any of the tasks specified in this Order by the time described herein or by the time as subsequently extended pursuant to Item 6 above, the City of Montague shall be deemed to have failed to comply with the obligations of this Order and may be subject to additional enforcement action, including civil penalties specified in the CHSC, Section 116650.

8. The State of California shall not be liable for any injuries or damages to persons or property resulting from acts of omissions by the City of Montague, its employees, agents, or contractors in carrying out activities pursuant to this Order, nor shall the State of California be held as a party to any contract entered into by the City of Montague or its agents in carrying out activities pursuant to this Order.

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PARTIES BOUND

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

SEVERABILITY

The requirements of this Order are severable, and the City of Montague shall comply with each and every provision thereof notwithstanding the effectiveness of any provisions.

CIVIL PENALTIES

Failure to comply with any provision of the Compliance Order may result in the Department imposing additional enforcement actions (Citations) and administrative penalties.



3/19/2013

Richard L. Hinrichs, P.E., Chief
Northern California Section
Drinking Water Field Operations Branch

Date

Attachments:

- Attachment 1 – Regulations relating to disinfection byproducts
- Notice - Important Information About Your Drinking Water
- Certification of Public Notice

Certified Mail No. 7009 1680 0001 3114 5134

CHAPTER 15.5 DISINFECTANT RESIDUALS, DISINFECTION BYPRODUCTS, AND DISINFECTION BYPRODUCT PRECURSORS

Article 1. General Requirements and Definitions

§64530. Applicability of this Chapter.

(a) Community water systems and nontransient noncommunity water systems that treat their water with a chemical disinfectant in any part of the treatment process or which provide water that contains a chemical disinfectant shall comply with the requirements of this chapter beginning on the dates specified in paragraphs (1) or (2), except as provided for in subsections (c) and (d).

(1) Systems using approved surface water and serving 10,000 or more persons shall comply beginning January 1, 2002.

(2) Systems using approved surface water and serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water shall comply beginning January 1, 2004.

(b) Transient noncommunity water systems using chlorine dioxide shall comply with the requirements for chlorine dioxide in this chapter beginning on the dates specified in paragraphs (1) or (2).

(1) Systems using approved surface water and serving 10,000 or more persons shall comply beginning January 1, 2002.

(2) Systems using approved surface water and serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water shall comply beginning January 1, 2004.

(c) Community water systems, and nontransient noncommunity water systems serving at least 10,000 persons, using a primary or residual disinfectant other than ultraviolet light or delivering water that has been treated with a primary or residual disinfectant other than ultraviolet light shall comply with the Individual Distribution System Evaluation (IDSE) requirements of 40 Code of Federal Regulations, parts 141.600 and either 141.601 and 141.605, 141.602 and 141.605, 141.603, or 141.604 (71 Fed. Reg. 388 (January 4, 2006); as amended at 74 Fed. Reg. 30953 (June 29, 2009)), which are incorporated by reference.

(d) Community water systems and nontransient noncommunity water systems using a primary or residual disinfectant other than ultraviolet light or delivering water that has been treated with a primary or residual disinfectant other than ultraviolet light shall:

(1) Comply with the applicable TTHM and HAA5 compliance date in table 64530-A;

Table 64530-A
TTHM and HAA5 Compliance Dates

Systems of this type... Shall comply with TTHM and HAA5 monitoring pursuant to section 64534.2(d) by...

(a) Systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serving a population of...	(1) $\geq 100,000$	April 1, 2012
	(2) 50,000 – 99,999	October 1, 2012
	(3) 10,000 – 49,999	October 1, 2013
	(4) <10,000	October 1, 2013, if no <i>Cryptosporidium</i> monitoring is required pursuant to 40 Code of Federal Regulations part 141.701(a)(4) (71 Fed. Reg. 654 (January 5, 2006)), which is incorporated by reference; or October 1, 2014, if <i>Cryptosporidium</i> monitoring is required pursuant to 40 Code of Federal Regulations part 141.701(a)(4) or (a)(6) (71 Fed. Reg. 654 (January 5, 2006)), which are incorporated by reference.
(b) Other consecutive or wholesale systems that are part of a combined distribution system	At the same time as the system with the earliest compliance date in the combined distribution system.	

(2) Systems required to conduct quarterly monitoring for TTHM and HAA5 pursuant to section 64534.2(d) shall:

(A) Begin monitoring in the first full calendar quarter that includes the compliance date in table 64530-A; and

(B) Make compliance calculations at the end of the fourth calendar quarter that follows the compliance date in table 64530-A and at the end of each subsequent quarter (or earlier if the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters).

(3) Systems required to conduct monitoring at a frequency that is less than quarterly shall:

(A) No later than 12 months after the compliance date in table 64530-A, begin monitoring in the calendar month recommended in the IDSE report prepared pursuant to section 64530(c) or the calendar month identified in the monitoring plan developed pursuant to section 64534.8; and

(B) Make compliance calculations beginning with the first compliance sample taken after the compliance date in table 64530-A.

Article 2. Maximum Contaminant Levels for Disinfection Byproducts and Maximum Residual Disinfectant Levels

§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
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

(b) A system installing GAC, membranes, or other technology to limit disinfectant byproducts to comply with this section may apply to the Department for an extension up to December 31, 2003. Applications for extensions shall include the results of disinfection byproduct monitoring, a description of the technology being installed and how it is expected to affect future disinfection byproduct levels, and a proposed schedule for compliance. If granted an extension, a system shall meet the schedule and interim treatment and monitoring requirements established by the Department.

(c) The best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for disinfection byproducts are identified in table 64533-B.

Table 64533-B

**Best Available Technology
Disinfection Byproducts**

<i>Disinfection Byproduct</i>	<i>Best Available Technology</i>
TTHM and HAA5	<p>Enhanced coagulation or enhanced softening or GAC10, with chlorine as the primary and residual disinfectant¹</p> <p>For all systems that disinfect their source water: (1) Enhanced coagulation or enhanced softening, plus GAC10; (2) Nanofiltration with a molecular weight cutoff ≤ 1000 Daltons; or (3) GAC20²</p> <p>For consecutive systems and applies only to the disinfected water that consecutive systems buy or otherwise receive:² (1) Systems serving $\geq 10,000$ persons: improved distribution system and storage tank management to reduce residence time, plus the use of chloramines for disinfectant residual maintenance; and (2) Systems serving $< 10,000$ persons: improved distribution system and storage tank management to reduce residence time</p>
Bromate	Control of ozone treatment process to reduce production of bromate
Chlorite	Control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels

¹ When using the monitoring and calculation methods specified in sections 64534, 64534.2(a), 64535, and 64535.2(a) and (b).

² When using the monitoring and calculation methods specified in sections 64534, 64534.2(d), 64535, and 64535.2(a) and (e).

§64533.5. Maximum Residual Disinfectant Levels.

(a) Using the monitoring and calculation methods specified in sections 64534, 64534.4, 64535, and 64535.4, the MRDLs for the disinfectants shown in table 64533.5-A shall not be exceeded in drinking water supplied to the public.

Table 64533.5-A
Maximum Residual Disinfectant Level

<i>Disinfectant Residual</i>	<i>MRDL (mg/L)</i>
Chlorine	4.0 (as Cl ₂)
Chloramines	4.0 (as Cl ₂)
Chlorine dioxide	0.8 (as ClO ₂)

(b) Notwithstanding subsection (a), systems may increase residual disinfectant levels of chlorine or chloramines (but not chlorine dioxide) in the distribution system in excess of the levels specified in table 64533.5-A in order to protect public health, to address specific microbiological contamination problems caused by circumstances such as, but not limited to, distribution line breaks, storm run-off events, source water contamination events, natural disasters, or cross-connection events. In such circumstances, systems shall immediately notify the Department of the source and cause of contamination, the levels of residual disinfectant, other actions being taken to correct the problem, and the expected duration of the exceedance.

(c) The best technologies, treatment techniques, or other means available for achieving compliance with the maximum residual disinfectant levels in this section are control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels.

Article 3. Monitoring requirements

§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. 69390 (December 16, 1998), as amended at 66 Fed. Reg. 3770 (January 16, 2001), 71 Fed. Reg. 388 (January 4, 2006), 71 Fed. Reg. 37168 (June 29, 2006), and 74 Fed. Reg. 30953 (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 <i>Type of System</i>	COLUMN B <i>Persons Served</i>	COLUMN C <i>Minimum monitoring frequency</i>	COLUMN D <i>Sample location in the distribution system & increased monitoring frequencies</i>
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	≥10,000	One sample per quarter per treatment plant	Locations representing maximum residence time ¹ .

water and using
chemical disinfectant

<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.
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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**

<i>If the system is a(n) ...</i>	<i>...serving...</i>	<i>...the system may reduce monitoring if it has monitored at least one year and...</i>	<i>...to this level</i>
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

<i>Source water type</i>	<i>Persons served</i>	<i>Number of distribution system monitoring locations</i>	<i>Minimum monitoring frequency¹</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>Source water type</i>	<i>Persons served</i>	<i>Number of distribution system monitoring locations</i>	<i>Minimum monitoring frequency</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 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 quarter with the highest TTHM single measurement, one at the location and during the quarter with the highest HAA5 single measurement	per year
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).

§64534.6. Disinfection Byproduct Precursors Monitoring.

(a) Systems that use approved surface water and conventional filtration treatment (as defined in section 64651.23) shall take one paired TOC sample (source water and treated water) and one source water alkalinity sample per month per treatment plant at a time representative of normal operating conditions and influent water quality. TOC and alkalinity in the source water shall be monitored prior to any treatment and at the same time as TOC monitoring in the treated water. TOC in the treated water shall be monitored no later than the point of combined filter effluent turbidity monitoring and shall be representative of the treated water.

(b) Systems using approved surface water with an annual average treated water TOC of less than 2.0 mg/L for two consecutive years, or less than 1.0 mg/L for one year, may reduce monitoring for both TOC and alkalinity to one paired sample and one source water alkalinity sample per plant per quarter. The system shall revert to monitoring pursuant to subsection (a) in the first month following the quarter that the annual average treated water TOC is equal to or greater than 2.0 mg/L.

(c) Systems using approved surface water and not monitoring pursuant to subsection (a) or (b):

(1) To qualify for reduced TTHM and HAA5 monitoring pursuant to table 64534.2-B or 64534.2-D, shall take monthly TOC samples every 30 days at a location prior to any treatment; and

(2) Once qualified for reduced TTHM and HAA5 monitoring pursuant to table 64534.2-B or 64534.2-D, may reduce source water TOC monitoring to quarterly TOC samples taken every 90 days at a location prior to any treatment. The system shall revert to source water TOC monitoring pursuant to paragraph (1) in the first month following the quarter that the annual average source water TOC is greater than 4.0 mg/L.

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.

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.

Levels of Total Trihalomethanes are above the Standards City of Montague – First Quarter of 2013

Our water system recently violated 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.

The average level of total trihalomethanes (TTHM's), byproducts of the chlorination of your drinking water, exceeded the maximum contaminant level (MCL) allowed. The MCL for TTHM's is 80 parts per billion. The average of the last four quarterly samples is _____ parts per billion. TTHM's form when chlorine interacts with total organic carbon in the water.

Some people who drink 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.

What should you do?

- **You do not need to boil your water or take other actions.**
- This is not an emergency. If it had been, you would have been notified immediately.
- If you have other health issues concerning the consumption of this water, you may wish to consult with your doctor.

What happened? What is being done to prevent this violation in the future?

Persons wishing more information should contact:

(name)

(address)

(phone number)

Please share this information with 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.

Upon receipt of this notice from a public water system the following establishments must provide secondary notification by distributing this notice within ten days as follows: Schools must notify school employees, students, and parents (if the students are minors). Residential rental property owners or managers (including nursing home and care facilities) must notify tenants. Business property owners, managers, or operators must notify employees of businesses located on the property. [Health and Safety Code Section 116450(g)]

Date(s) distributed: _____