



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 7, 2013

System No. 3910012

Mr. Robert Granberg
Deputy Director of Water Resources Planning
City of Stockton
11373 N. Lower Sacramento Road
Lodi, CA 95242

TRANSMITTAL OF COMPLIANCE ORDER NO. 03-10-13R-001

This letter transmits Compliance Order No. 03-10-13R-001 to the City of Stockton (City) for the recent violation of the Stage 2 Disinfectants and Disinfection Byproducts Rule (ST2DBPR) due to the exceedance of the maximum contaminant level (MCL) for total trihalomethanes (TTHM). Specifically, the City has exceeded the MCL of 0.080 milligrams per liter (mg/L) for TTHM. Compliance with the TTHM MCL is based on the locational running annual average (LRAA), computed quarterly, of the quarterly averages of all samples collected at each monitoring location. The MCL for TTHM was violated for the 1st quarter of 2013 at four monitoring locations.

As a result, the City water system is in violation of Section 64533, Title 22, California Code of Regulations which established a MCL of 0.080 mg/L for TTHM.

Please respond to the Directives in the Compliance Order by the deadlines established with each item. If you have any questions regarding this matter, please contact Bhupinder Sahota at (209) 948-3881 or me at (559) 447-3132.

Sincerely,

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

Enclosures

H:\SSF\ISJ County\3910012\2013\Compliance Order No. 03-10-13R-001 Transmittal Letter

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**STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH**

IN RE: **CITY OF STOCKTON**
Water System No. 3910012

TO: Mr. Robert Granberg
Deputy Director of Water Resources Planning
Department of Municipal Utilities
City of Stockton
11373 N. Lower Sacramento Road
Lodi, CA 95242

**COMPLIANCE ORDER FOR NONCOMPLIANCE
OF TOTAL TRIHALOMETHANES
MAXIMUM CONTAMINANT LEVEL**

Issued on March 7, 2013

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.

FINDINGS

The City of Stockton Domestic Water System (hereinafter City) is a community water system that supplies water for domestic purposes to a population of approximately 171,459

1 persons through 47,414 service connections in the North Stockton, South Stockton, and
2 Walnut Plant service areas. The City of Stockton domestic water system is owned and
3 operated by the City of Stockton Municipal Utilities Department. The sources of supply in
4 the North Stockton service area are purchased water from Stockton East Water District's
5 (hereinafter SEWD) surface water treatment plant located to the east of the City, 25
6 groundwater wells located within the North Stockton service area (17 active and 8 standby),
7 and surface water from the City's new Delta Water Supply Project located in North
8 Stockton. All of the water supply for the Walnut Plant service area is obtained from the
9 California Water Service via three interconnections. The sources of supply for the South
10 Stockton service area are purchased surface water from SEWD and groundwater obtained
11 from five wells in the airport and the industrial park areas. The water supply from all the
12 groundwater wells is chlorinated. The storage capacity in the North Stockton service area is
13 16.29 million gallons (MG) and is provided by five ground level storage reservoirs. The
14 South Stockton service area has two 3.0 MG ground level storage reservoirs.

15
16 The Stage 2 Disinfectants/Disinfection By-Products Rule (ST2DBPR) applies to any
17 community and non-transient non-community water system that treats their water with a
18 chemical disinfectant in any part of the treatment process or which provides water that
19 contains a chemical disinfectant. The ST2DBPR has been adopted for California and
20 became effective June 21, 2012. Prior to this date, any non-compliance issues were referred
21 to USEPA for enforcement action. The maximum contaminant level (MCL) in drinking
22 water for total trihalomethanes (TTHM) is 0.080 mg/l (or 80 ug/L) and the MCL for five
23 haloacetic acids (HAA5) is 0.060 mg/L (or 60 ug/L). Compliance with the TTHM and
24 HAA5 MCLs is based on the locational running annual average (LRAA), computed
25 quarterly, of the quarterly averages of all samples collected at each monitoring location.
26 Per §64400.66 "Locational running annual average" or "LRAA" means the average of
27 sample analytical results for samples taken at a particular monitoring location during the



1 previous four calendar quarters. If the LRAA covering any consecutive four-quarter period
 2 exceeds the TTHM MCL or the HAA5 MCL at any monitoring location, then the system is
 3 in violation of the MCL.

4 Based on its population, the City's water system was on Schedule 1 for the implementation
 5 of the ST2DBPR. The City started ST2DBPR compliance monitoring in January 2012.
 6 Based on the City's population in each service area, and as per the City's approved
 7 ST2DBPR compliance monitoring plan, the City is required to collect 19 samples (14 in the
 8 North Stockton service area, 4 in the South Stockton service area, and one in Walnut Plant
 9 service area) from the distribution system per quarter.

10
 11 The LRAA of the analytical results submitted to the California Department of Public Health
 12 (hereinafter Department) for the 1st quarter of 2013 have exceeded the TTHM MCL at four
 13 monitoring locations (2 in the North Stockton service area and 1 each in the South Stockton
 14 and Walnut Plant service areas). TTHM MCL compliance, as monitored pursuant to
 15 section 64534.2(d), shall be determined as follows: For systems monitoring quarterly, the
 16 LRAA computed quarterly, shall not exceed the MCLs specified in Section 64533 at all of
 17 the monitoring locations. The City is in violation of the TTHM MCL for the 1st quarter of
 18 2013. The following is a summary of TTHM monitoring results for the last four quarters at
 19 the four monitoring locations that exceeded the TTHM MCL.

Sample Location	Service Area	Sample Date				LRAA (TTHM)
		04/18/2012	07/18/2012	10/08/2012	01/17/2013	
5376 Feather River Dr.	North Stockton	110 ug/L	46 ug/L	82 ug/L	90 ug/L	82 ug/L
4046 Pine Lake Cir.	North Stockton	100 ug/L	68 ug/L	84 ug/L	130 ug/L	96 ug/L
1050	Walnut	98 ug/L	48 ug/L	73 ug/L	110 ug/L	82 ug/L



1	Diamond St.	Plant					
2	750 French	South	88 ug/L	63 ug/L	45 ug/L	130 ug/L	82 ug/L
3	Camp Rd.	Stockton					

4 The ST2DBPR monitoring results listed in the above table clearly indicate that the
 5 compliance monitoring conducted at four locations in the last four quarters yielded LRAA
 6 levels ranging from 82 ug/L to 96 ug/L. Since the LRAA exceeds the 80 ug/L TTHM
 7 MCL, the City is in violation of the MCL for TTHM.

8
 9 Specifically, the City exceeded the TTHM MCL as specified in Section 64533 (a), Title 22,
 10 California Code of Regulations (CCR).

11
 12 The elevated levels of TTHMs during the January 2013 monitoring period may be due to
 13 the following:

- 14 • Use of a poorer quality source of surface water supply by SEWD due to storms during
 15 the December 2012/January 2013 time period. SEWD switched their raw water source
 16 of supply from New Melones Reservoir to New Hogan Reservoir due to the winter
 17 storms in December 2012. The New Hogan raw water source has higher levels of DBP
 18 precursors that result in higher TTHM and HAA5 levels.
- 19 • A large amount of storage capacity in the distribution system and low water demands
 20 during the winter. The City has seven large capacity reservoirs (at least 3.0 MG each)
 21 that are used for storing water and all the reservoirs have common inlet/outlet piping
 22 that results in long detention time and poor turnover during the winter due to low water
 23 demand.

24
 25 The following short-term actions have been or will be taken to improve the TTHM and
 26 HAA5 levels in the City’s distribution system:

- 27 • SEWD switched back to the better quality raw water source (New Melones Reservoir).

- 1 • The City has started conducting flushing in the distribution system and the City has
2 made some operational changes at the storage reservoirs to reduce detention time.
- 3 • The City is planning to make modifications to the storage reservoirs to promote better
4 mixing and reduce detention time and water age by installing mixing devices in the
5 reservoirs.

6
7 The City is also planning to take the following long-term actions to comply with the TTHM
8 MCL:

- 9 • The City is planning to begin chloramination of the North Stockton service area in June
10 2014.
- 11 • SEWD is working with its consulting engineers to evaluate treatment options that may
12 be needed during the use of the New Hogan Reservoir source of raw water supply.

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15 **CONCLUSIONS OF LAW**

16 Based on the above Findings, the Department has determined that the City of Stockton
17 water system has violated provisions contained in the California Health and Safety Code
18 (CHSC) and Title 22, California Code of Regulations (CCR). These violations include, but
19 are not limited to, the following:

- 20
21 1. CHSC Section 116555 (a)(1): Specifically, the City has failed to provide water that
22 complies with primary and secondary drinking water standards.
- 23
24 2. CHSC Section 116555 (a)(3): Specifically, the City has failed to ensure the system
25 is provided with a reliable and adequate source of pure, wholesome, healthful and
26 potable water.

27



1 3. CCR, Section 64533: Specifically, the City has failed to comply with Section 64533
2 of Title 22 of the CCR, which established the MCLs for TTHMs. The City does not
3 at all times deliver water to its customers which contains less than 80 ug/L of
4 TTHMs based on a locational running annual average, thereby failing to provide
5 water to the public that complies with all primary drinking water standards. Section
6 64535.2 (e)(1) determines and specifies that compliance is based on a locational
7 running annual average.

8
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10 **ORDER**

11 To ensure that the water supplied by the City is at all times safe, wholesome, healthful, and
12 potable, and pursuant to Section 116555 of the CHSC, the City of Stockton is ordered to
13 take the following actions:

14
15 1. a) Cease and Desist from failing to comply with CHSC Section 116555(a)(1),
16 (a)(3), and CCR Section 64533, by ensuring that the system is provided with a
17 reliable and adequate supply of pure, wholesome, healthful, and potable water,
18 which is in compliance with all primary drinking water standards.

19
20 b) The City shall provide quarterly public notification, which has been
21 approved by the Department, of its inability to meet the TTHM MCL during any
22 calendar quarter that the four-quarter locational running annual average exceeds the
23 TTHM or HAA5 MCL at any monitoring location. Proof of public notification shall
24 be provided to the Department following each quarterly notification by the 10th day
25 of the month following notification. Public notification for the current LRAA
26 TTHM MCL violation shall be provided by March 16, 2013.

27



1 c) By April 15, 2013, the City shall submit a plan and time schedule for
2 implementation of appropriate short-term and long-term corrective measures to
3 ensure that the water distributed to the customers of the City complies with the
4 TTHM MCL of 0.080 mg/L.

5 d) The City shall submit quarterly progress reports to the Department beginning
6 on July 1, 2013.

7
8 e) The City shall operate the existing water system to minimize formation of
9 TTHM and HAA5 levels.

10
11 2. The City shall submit a written response by March 31, 2013, indicating its
12 willingness to comply with the directives of this Compliance Order.

13
14 3. The Department reserves the right to make modifications to this Order as it may
15 deem necessary to protect public health and safety. Such modifications may be
16 issued as amendments to this Order and shall be effective upon issuance. All
17 submittals required by this Order shall be addressed to:

18
19 Carl L. Carlucci, P.E., Supervising Sanitary Engineer
20 Department of Public Health
21 Southern California Branch
22 Drinking Water Field Operations
31 E. Channel Street, Room 270
Stockton, CA 95202

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

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5. If the City fails to perform any of the tasks specified in this Order by the time described herein or by the time subsequently extended pursuant to Item 4 above, the City shall be deemed to have not complied with the obligations of this Order and may be subject to additional judicial action, including civil penalties specified in CHSC, Sections 116725 and 116730.

6. 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, 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 or its agents in carrying out activities pursuant to this Order.

PARTIES BOUND

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

SEVERABILITY

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

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CIVIL PENALTIES

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

3-7-2013

Date



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

H:\SSF\SJ County\3910012\2013\03-10-13R-001 TTHM MCL

