

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27

**STATE OF CALIFORNIA**  
**CALIFORNIA DEPARTMENT OF PUBLIC HEALTH**

**IN RE:** City of Inglewood  
Public Works Department  
One W. Manchester Boulevard  
Inglewood, CA 90301-1750

**TO:** Mr. Louis A. Atwell, P.E.  
Public Works Director  
City of Inglewood

**CITATION FOR NONCOMPLIANCE - WATER SYSTEM NO. 1910051**

**CITATION NO. 04-15-13C-001**

**Issued on June 25, 2013**

Section 116650 of Chapter 4, Part 12, Division 104 of the California Health and Safety Code (H&S Code), authorizes the issuance of a citation for failure to comply with a requirement of the California Safe Drinking Water Act, or any regulation, standard, permit or order issued thereunder.

**VIOLATION**

The Division of Drinking Water and Environmental Management of the California Department of Public Health (hereinafter Department) hereby issues a citation to the City of Inglewood (hereinafter City) for the following violation:

**Section 64533, Title 22, California Code of Regulations (CCR).** Specifically, during the 2<sup>nd</sup> quarter (April-June) of 2013, the locational running annual average (LRAA) of total trihalomethanes (TTHM), computed based on the last four



1 consecutive quarters of monitoring at 359 North Eucalyptus Avenue sample site,  
2 has exceeded the Maximum Contaminant Level (MCL) of 80 ug/L for TTHM.

3  
4 According to Section 116650 of the Health and Safety Code, the above is  
5 classified as a non-continuing violation.

## 6 BACKGROUND

7  
8  
9 The City of Inglewood (City) is a community water system serving treated  
10 domestic water to an estimated permanent population of 115,163 through 13,020  
11 residential, 1,421 commercial, 63 industrial and 401 other connections. The City  
12 has been operating under a domestic water supply permit issued by the  
13 Department on January 11, 2001.

14  
15 The permitted sources of drinking water supply are four local groundwater wells  
16 (Wells 1, 2, 4, and 6) and purchased treated surface water from Metropolitan  
17 Water District (MWD) through two West Basin Municipal Water District (WBMWD)  
18 connections (WB-17 and WB-38). WB-17 is supplied by Weymouth Water  
19 Treatment Plant located in La Verne while WB-18 is supplied by Jensen Water  
20 Treatment Plant located in Sylmar. Complete conventional treatment is provided  
21 at both of these treatment plants and the water produced meets all Federal and  
22 State drinking water standards.

23  
24 The raw groundwater from Wells 1, 2, 4, and 6 is conveyed to the City's 13 MGD  
25 Sanford M. Anderson Treatment Plant for manganese and iron removal. The  
26 treatment processes include chemical additions of chlorine and potassium  
27 permanganate, achieving oxidation detention time in two 202,500 gallon contact



1 tanks, and gravity filtration using six dual-media greensand filters. The final  
 2 chemical added after filtration is aqueous ammonia to change the free chlorine to  
 3 chloramines. The total chlorine (chloramine) residual currently leaving the  
 4 treatment plant varies between 2.5 and 3.5 mg/L. Treated groundwater leaving  
 5 the Sanford Treatment Plant is then pumped into one of the two storage tanks,  
 6 North Inglewood Reservoir with a storage capacity of 4.6 MG and Morningside  
 7 Reservoir with a storage capacity of 16 MG. Enroute to the reservoirs, purchased  
 8 treated MWD water enters through the two WBMWD connections (WB-17 and  
 9 WB-38) and blends with the treated groundwater leaving the Sanford Treatment  
 10 Plant. Water is then distributed to serve the customers.

11  
 12 In accordance with Section 64534.2(d), Title 22, CCR and the Department  
 13 approved Stage 2 DBPR monitoring plan dated October 2011, the City is required  
 14 to sample eight distribution system monitoring locations quarterly for TTHM and  
 15 HAA5 analyses via dual sample sets and determine compliance based on  
 16 calculated locational running annual average at all eight monitoring locations.  
 17 Provided in the table below is a summary of TTHM concentrations (ug/L) at one of  
 18 the eight monitoring locations at the Sanford Treatment Plant effluent (359 North  
 19 Eucalyptus Avenue) collected to date:

TTHM (ug/L)	2/16/2012	5/14/2012	8/15/2012	11/13/2012	2/11/2013	5/13/2013
	1st qtr 2012	2nd qtr 2012	3 <sup>rd</sup> qtr 2012	4 <sup>th</sup> qtr 2012	1st qtr 2013	2nd qtr 2013
<b>Result</b>	64.6	48.6	63.9	86.1	119.7	69.0
<b>OEL</b>			60.3	71.2	97.4	86.0
<b>LRAA</b>				65.8	79.6	84.7
<b>Exceed OEL</b>			N	N	Y	Y
<b>Exceed MCL</b>				N	N	Y

LRAA: Locational Running Annual Average, OEL: Operational Evaluation Level



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27

In the 4<sup>th</sup> quarter of 2012, the Sanford Treatment Plant effluent experienced a 35% increase in TTHM concentrations, compared to the previous quarter. The subsequent quarterly sample collected on February 11, 2013 showed another sharp increase of 39% to 119.7 ug/L. While the calculated LRAA slightly fell below the MCL of 80 ug/L at 79.6 ug/L, the OEL was exceeded at 97.4 ug/L. The City submitted their OEL report on April 23, 2013 indicating that two of their wells (Wells 1 and 6) going offline, one of which was a high producing well (Well 6), might have contributed to the OEL exceedance. Therefore, the groundwater production rate in February 2013 at the time of the TTHM sampling dropped significantly from 2.3 MGD to 0.5 MGD. As a result, the contact time observed in the contact tanks increased considerably which in turn caused more TTHMs to form as shown in the elevated TTHM level of 119.7 ug/L.

In the 2<sup>nd</sup> quarter of 2013, the City installed an aeration system after ammonia injection and before the clear well to help remove TTHMs. The installation occurred shortly before the 2<sup>nd</sup> quarterly TTHM sample was collected on May 13, 2013; therefore it was believed that this might have partially contributed to the decrease in TTHM level at 69 ug/L. The other contributing factor could be due to increased groundwater flow through the Sanford Treatment Plant by having Well 6 back online. Regardless, the decrease in TTHM still resulted in a LRAA of 84.7 ug/L, computed based on the last four quarterly samples. Since this value exceeds the TTHM MCL of 80 ug/L, the City is in violation of Section 64533 (a), Title 22, CCR, for the 2<sup>nd</sup> quarter (Apr-Jun) of 2013. In addition, the City also exceeds the OEL at 86 ug/L for the second consecutive quarter.

Despite the LRAA TTHM exceedance at the Sanford Treatment Plant effluent, the impact to the customers should be relatively minimal since the treated



1 groundwater actually blends with low TTHM purchased treated MWD water en-  
 2 route to the City's reservoirs before the water is being distributed to the customers.  
 3 The TTHM levels of the purchased treated MWD water delivered through WB-17  
 4 and WB-38 connections were detected at 54 and 15 ug/L, respectively. The blend  
 5 ratios of the treated water and purchased treated MWD water were 1:15 and 1:4  
 6 on the days of TTHM sampling in Feb and May 2013. Evidently, large amount of  
 7 purchased treated MWD water was used to blend down the TTHM levels in the  
 8 water served to the customers in the distribution system.

9  
 10 The City has indicated its intent to lower the TTHM levels at the Sanford  
 11 Treatment Plant immediately. To lower the contact time at the contact tanks, the  
 12 City has taken one contact tank and one filter offline, leaving only one contact tank  
 13 and three filters in service since June 13, 2013. The City will also install one  
 14 additional aeration system before ammonia injection. By end of June 2013, the  
 15 City will have aeration systems installed before and after ammonia injection to help  
 16 remove TTHM at the clear well where the quarterly TTHM samples are collected.  
 17 Lastly, the City plans on adding two new wells within the next two years to bring up  
 18 the groundwater production level which in turn will reduce the contact time at the  
 19 contact tanks.

20  
 21 Due to the TTHM MCL violation as described in length earlier, the City is required  
 22 to give Tier 2 public notice pursuant to Section 64463.4, Title 22, CCR.

23  
 24 **DIRECTIVES**

25 The City is hereby directed to take the following actions:  
 26  
 27



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27

1. By **August 15, 2013**, the City shall complete notifying the public of the TTHM MCL violation listed in this citation, pursuant to the Tier 2 public notification procedures and format approved by the Department (see enclosed). This deadline includes an extension requested by the City on June 17, 2013, which has been approved by the Department on June 20, 2013.
  
2. Submit certification of public notice issuance to the Department within 30 days of its completion, using the enclosed proof of notification form.
  
3. By **August 1, 2013**, submit a TTHM compliance plan and implementation schedule for complying with the TTHM MCL. An updated compliance plan shall continue to be submitted to the Department at least every 90 days thereafter, based on new and planned changes to treatment, sources of supply, and/or distribution system storage reservoir operations; until the Department determines it is no longer necessary.
  
4. Proof of public notification shall be submitted to:

Chi Diep, P.E.  
 District Engineer, Metropolitan District  
 Southern California Drinking Water Field Operations Branch  
 500 North Central Avenue, Suite 500  
 Glendale, CA 91203

**CIVIL PENALTIES**

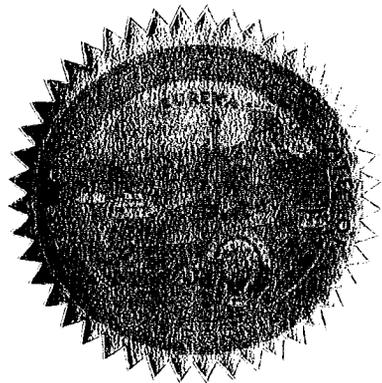
Sections 116650 (a), (d), and (e) of the H&S Code allow for the assessment of a civil penalty for failure to comply with requirements of Chapter 4. Failure to comply with any provision of this Citation will result in the Department imposing an

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27

administrative penalty of up to \$1000.00 (one thousand dollars) per day as of the date of violation of any provision of this Citation.

Date June 25, 2013

  
Chi Diep, P.E.  
District Engineer  
Metropolitan District



## **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 Inglewood**

## **Has Levels of Total Trihalomethanes Above the Drinking Water Standard**

All public water systems are required by state and federal law to notify users of any exceedence of a water quality standard and any other noncompliance affecting their water system. The purpose of this notice is to keep consumers informed about water quality. Our water system recently violated a drinking water standard. This is not an emergency, the incident was contained and resolved but as our customers, you have a right to know what happened and what we are doing to correct this situation.

#### **What happened?**

Disinfection of water supplies is necessary to prevent illness and is a United States Environmental Protection Agency (USEPA) requirement. Chlorine is added to drinking water as a disinfectant to kill disease causing organisms which can cause illness. Chlorine can also react with naturally occurring organic material in the water creating disinfection by-products (DBPs). We routinely monitor for disinfection by-products including total trihalomethanes (TTHMs) at various locations throughout the City.

**Samples collected at Sanford Anderson Water Treatment effluent exceeded the TTHM standard as shown below:**

Location	TTHM Results		
	Range (ppb)	Average (ppb)	Standard (ppb)
Sanford Anderson Water Treatment Plant effluent	64 - 120	85	No Greater Than 80

ppb = parts per billion

#### **How did this happen?**

On December 26, 2012, Well #6, the highest producing water well in the City was taken out of service because of a mechanical failure. This unforeseen event slowed down the groundwater production and treatment process resulting in chlorine reacting with naturally occurring organic material during the disinfection process. When chlorine is given time to react with organic material, it leads to a higher concentration of total trihalomethanes (TTHM) in the water. The TTHM detected occurred only at the testing

site which was at the Sanford Anderson Water Treatment Plant. This water containing detectable levels of TTHM was blended with imported Metropolitan Water District (MWD) water in a ratio of 1:14.5. This blending resulted in TTHM at a level of 48 ppb in the water actually delivered to customers, which was well below the Maximum Contaminant Level (MCL) of 80 ppb. Therefore, the water delivered to customers was safe for drinking and there is no need for additional concern.

### **What is being done?**

1. Well 6 has been returned to service, bringing the groundwater production to normal level.
2. The City has taken one contact tank and one filter offline to speed up the treatment process by 60%, thereby significantly reducing the contact time chlorine has in reacting with naturally occurring organic material in the water creating DBPs.
3. The City has also installed two aeration systems before and after ammonia injection to help remove TTHMs in the clear well. The water from the clear well is then blended with MWD water before being served to the customers.

### **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.
- Drinking as much as two liters of water per day containing these byproducts, namely trihalomethanes, in excess of the Maximum Contaminant Level (MCL) over as many as seventy years may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer. *The TTHM level in the water supplied to the customers was never higher than allowed MCL.*
- If you have other health issues concerning the consumption of this water, you may wish to consult with your doctor.

For more information, please contact Ismael Perez, Acting Water Treatment Plant Supervisor at (310) 412-8890.

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 public notice in a public place or distributing copies by hand or mail.

State Water System ID#: 1910051. Date distributed: June through August 2013.

**PROOF OF NOTIFICATION**

Name of Water System: **City of Inglewood**

System Number: 1910051

**Certification of Notification for  
TTHM MCL Violation**

As required by *California Code of Regulations*, Title 22, Section 64463.4, *Tier 2 Public Notice*, I notified the users of the water supplied by the City of Inglewood of the violation of Section 64533, Title 22, *California Code of Regulations*. I complied with the requirement to conduct public notification as indicated below:

<u>Required Action (indicate all that were used)</u>	<u>Date Completed</u>
Public Notification – Hand Delivery	<input type="text"/>
Public Notification - Mail Delivery	<input type="text"/>
Public Notification – Continuous Posting	<input type="text"/>
Public Notification - Consumer Confidence Report	<input type="text"/>
Public Notification - Other method Specify other method used:	<input type="text"/>

\_\_\_\_\_  
Signature of Water System Representative

\_\_\_\_\_  
Date

**ATTACH A COPY OF THE NOTICE USED.**

**THIS FORM MUST BE COMPLETED AND RETURNED TO THE DEPARTMENT**