



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

October 25, 2013

System No. 0510003

Dave Myers  
Public Works Director  
City of Angels  
P.O. Box 667  
Angels Camp, CA 95222

**LEAD ACTION LEVEL FAILURE - TRANSMITTAL OF CITATION NO. 03-10-13C-006**

Due to the exceedance of the action level for lead in the distribution system during the June 2013 monitoring period, the Department has issued Citation No. 03-10-13C-006. The Citation is being transmitted to the City of Angels under cover of this letter.

Please respond to the Directives by the deadlines established in the Citation. If you have any questions regarding this matter, please contact Tahir Mansoor of this office at (209) 948-3879.

Sincerely,

Carl L. Carlucci, P.E.  
Supervising Sanitary Engineer  
Central California Section  
Southern California Branch  
Drinking Water Field Operations

Enclosure

cc: Calaveras County Environmental Health Department

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3 **STATE OF CALIFORNIA**  
4 **DEPARTMENT OF PUBLIC HEALTH**  
5 **DIVISION OF DRINKING WATER AND ENVIRONMENTAL MANAGEMENT**

6 IN RE: City of Angels  
7 P.O. Box 667  
8 Angels Camp, CA 95222

9 TO: Dave Myers  
10 Public Works Director

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12 **CITATION No. 03-10-13C-006**

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14 **CITATION FOR NONCOMPLIANCE: WATER SYSTEM NO. 0510003**

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16 **Issued October 25, 2013**

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18 The California Health and Safety Code (H&S Code), authorizes the Department of  
19 Public Health, Division of Drinking Water and Environmental Management (hereinafter  
20 Department) to take enforcement actions when a water system is deemed to be in  
21 noncompliance with a requirement of Chapter 4 (California Safe Drinking Water Act),  
22 or any regulation, standard, permit, or order issued thereunder.

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24 **VIOLATION**

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26 The Department hereby issues a citation to City of Angels (hereinafter, City) mailing  
27 address: P. O. Box 667, Angels, CA 95222, for failure to comply with Section 64678 of



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3 Title 22 of the California Code of Regulations. Specifically, the system exceeded the  
4 lead action level as specified in Section 64678(d) of Title 22, California Code of  
5 Regulations (hereinafter 22CCR) for monitoring conducted between June 6, 2013 to  
6 July 2, 2013. Section 64678(d) specifies, "The lead action level is exceeded if the  
7 concentration of lead in more than 10 percent of tap water samples collected during  
8 any period is greater than 0.015 mg/L (i.e., if the "90<sup>th</sup> percentile" lead level is greater  
9 than 0.015 mg/L)."

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11 In accordance with Section 116650 of the Health and Safety Code, the above violation  
12 is classified as a non-continuing violation.

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14 **BACKGROUND**

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16 The City of Angels serves domestic water to the residents of Angels Camp and Altaville  
17 in Calaveras County. The system serves domestic water to a total population of  
18 approximately 3,576 via 1,777 service connections. The water supply is obtained from  
19 the Utica Ditch, which utilizes water originating from the North Fork of the Stanislaus  
20 River.

21  
22 At the Angels Water Treatment Plant, the water receives conventional treatment prior  
23 to delivery to the water distribution system. The water treatment consists of pre-  
24 chlorination, coagulation, flocculation, sedimentation, pressure filtration, and post  
25 chlorination. With all three existing filters in operation, the current treatment plant has  
26 a design capacity of about 3 MGD (2,100 gpm).

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3 The water system is operating under a domestic water supply permit issued by the  
4 Department on June 5, 2003, when the treatment capacity of the plant was last  
5 expanded.

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7 The post chlorination feed rate is set to produce a chlorine residual of 1.0 mg/L in the  
8 clearwell effluent. No chemicals are currently used for the adjustment of the effluent  
9 water pH. Until May 2012, the City used caustic soda for pH adjustment. However,  
10 the City stopped using it when the City switched its coagulant from alum to aluminum  
11 chlorohydrate (ACH) in May 2012. Reportedly, ACH does not affect the pH of the raw  
12 water and the City did not feel the need to continue to add caustic to increase the pH  
13 of the treated water. The City is currently feeding zinc orthophosphate in the treated  
14 water for corrosion control in the distribution system. The average dosage is about 2.5  
15 mg/L. The zinc orthophosphate being used has a zinc-to-orthophosphate ratio of  
16 about one to three.

17  
18 The table below provides a summary of lead and copper monitoring conducted by the  
19 City since 1993.

20 **Summary of Lead and Copper Tap Monitoring**

21

22 <b>Sampling Round</b>	<b>Date Completed</b>	<b>No. of Samples</b>	<b>90% Lead (mg/L)</b>	<b>90% Copper (mg/L)</b>
23 1 <sup>st</sup> Initial	August 93	20	0.012	0.37
24 2 <sup>nd</sup> Initial	May 94	20	0.0061	0.34
25 1 <sup>st</sup> Annual	June 95	10	0.006	0.42
26 2 <sup>nd</sup> Annual	June 96	10	0.0028	0.3
27 1 <sup>st</sup> Triennial	Sept. 99	10	0.005	0.56
2 <sup>nd</sup> Triennial	Sept. 2002	10	0.007	1.41
Special sampling	Oct. 2003	10	0.003	0.26



Special sampling	August 2005	6	0.003	0.225
Special sampling	March 2006	5	0.003	0.25
3 <sup>rd</sup> Triennial	Sept. 2007	20	0.003	0.11
4 <sup>th</sup> Triennial	August 2010	20	0.005	0.18
5 <sup>th</sup> Triennial	June 2013	20	0.026	0.16

Monitoring conducted in June 2013 exceeded the lead action level of 0.015 mg/L. The 90<sup>th</sup> percentile lead concentration was 0.026 mg/L. This is the first time the City has exceeded the lead action level. Previously, in September 2002, the City exceeded the copper action level. The samples collected in June 2013 for lead and copper showed lead detections in 5 out of the 20 samples collected by the City from the designated distribution system taps. The lead was detected at the following levels: 0.0099 mg/L, 0.011 mg/L, 0.026 mg/L, 0.044 mg/L, and 0.060 mg/L. The remaining samples were non-detect for lead.

The 90<sup>th</sup> percentile copper concentration was 0.16 mg/L in the June 2013 sampling round, which complies with the copper action level of 1.3 mg/L.

### DIRECTIVES

Due to the lead violation that has occurred as a result of failing to comply with Section 64678(d), the City is hereby directed to take the following actions:

1. The City must institute the public education for the lead action level exceedance. Enclosed are the regulatory requirements from Title 22, California Code of



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Regulations, Division 4, Chapter 17.5, Article 7, Section 64687. The public education requirements shall be carried out by November 30, 2013.

2. The City must submit to the Department verification of completion of the following public education requirements within 10 days of the completion of each requirement:

- a. Insertion of notices in each customer's water utility bill along with the alert on the water bill itself in accordance with Section 64687(d)(2)(A).
- b. Submittal of information in paragraph (a)(1) to a newspaper circulated throughout the community in accordance with Section 64687(d)(2)(B).
- c. Delivery of pamphlets and/or brochures in accordance with Section 64687(d)(2)(C).
- d. Submittal of the public service announcement in paragraph (c)(1) and (2) in accordance with Section 64687(d)(2)(D).

3. The City shall repeat the tasks contained in subparagraphs (d)(2)(A), (B), and (C) of Section 64687 every 12 months, and the tasks contained in subparagraph (d)(2)(D) every six (6) months for as long as the system exceeds the lead action level in accordance with Article 7, Section 64687(d)(3).

4. The City shall conduct water quality parameter (WQP) monitoring in accordance with the regulatory requirements from Title 22, California Code of Regulations, Division 4, Chapter 17.5, Article 4, Sections 64680, 64681, and 64682 (copies enclosed). Two sample sets shall be collected from each of three (3) sites in the



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distribution system each 6-month period, and the samples shall be monitored for WQP. The first sample set shall be collected November 2013 and the second sample set in February 2014. The samples shall be representative of the treatment practice that was in use when the sampling that revealed the action level exceedance was performed in June 2013 to provide treatment baseline data. The samples shall also be representative of the distribution system water. Subsequent WQP monitoring shall be performed at a frequency of once every three (3) months from the three selected sites. As Corrosion Control Treatment (CCT) is optimized, the WQP monitoring should reflect treated water quality that abates the corrosion problem.

5. The City shall conduct WQP monitoring at each entry point to the distribution system (downstream of treatment) every three months beginning in November 2013. These data will be considered by the Department in ranges of the WQP that are indicative of optimized WQP, that must be maintained to assure the effectiveness of the CCT in abating violations of the lead and copper action levels.

6. The City shall analyze all samples collected in Directives 4 and 5 for total alkalinity, orthophosphate (since a corrosion inhibitor containing phosphate is added), calcium, conductivity, total dissolved solids, temperature, and pH. The temperature and pH shall be measured at the time of sample collection by the City's water personnel.

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3 7. The City shall monitor the source water for lead level in accordance with Article 6,  
4 Section 64685. A water sample from each entry point to the distribution system  
5 shall be analyzed for lead at the time WQP monitoring is conducted.  
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7 8. The City shall submit the results of all monitoring and analyses performed in each  
8 month to the Department within 10 days following the month in which the results  
9 were obtained.  
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11 9. The City shall sample 40 distribution sites for lead and copper from previous sites  
12 used in past lead and copper monitoring and shall include the 20 sites used in  
13 the June 2013 monitoring. Lead monitoring must be conducted once every six  
14 months until the Department is convinced the problem has been resolved. New  
15 sites may be selected and utilized if necessary, provided they meet the site  
16 selection criteria in the rule, and provided that the City files an amended sample  
17 siting plan to the Department and receives approval.  
18

19 The City shall commence the lead monitoring in January 2014 and every six  
20 months thereafter. All lead tap sampling reports shall be submitted on Form 141-  
21 AR along with the worksheet, laboratory results, sampling guidance provided to  
22 each participant, and name of samplers for each household.  
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24 10. The City shall optimize the CCT provided at the entry point to the City's  
25 distribution system to abate the corrosivity of the water distributed to consumers.  
26 The optimization of the CCT shall be accomplished by performing a corrosion  
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control study according to Section 64683, Corrosion Control Study Procedure (copy enclosed).

11. By August 15, 2014, the City shall provide the Department with a written report relevant to the results of the corrosion control study for the City's water system. The report shall conclude with a request for the Department's approval of the CCT that the study recommends for implementation to correct action level violation. After receiving written approval to implement an optimized corrosion control treatment, the City shall operate the treatment in conformance with the provisions of Section 64684 (copy enclosed).

12. The City may request a reduction in the frequency of WQP monitoring and distribution lead monitoring provided two periods (every six months) of lead and copper monitoring from the 40 sites and two periods of WQP monitoring pursuant to Section 64682 are conducted after CCT is installed and compliance is demonstrated. The results of the WQP monitoring along with the lead and copper tap monitoring shall be forwarded to the Department to allow the Department to evaluate the effectiveness of the treatment.

All submittals required by the Citation shall be sent to:

Tahir Mansoor  
California Department of Public Health  
Drinking Water Field Operations Branch  
31 E. Channel St., Room 270  
Stockton, CA 95202



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**CIVIL PENALTIES**

Section 116650(d) and Section 11650(e) of the CHSC allow for the assessment of a civil penalty for failure to comply with the requirements of Chapter 4. Failure to comply with any provision of the Citation may result in the Department imposing an administrative penalty of not less than two hundred fifty dollars (\$250) per day as of the date of violation of any provision of this Citation.

10-25-2013

Date



Carl L. Carlucci, P.E.  
Supervising Sanitary Engineer  
Central California Section  
Southern California Branch  
Drinking Water Field Operations

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