

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

IN RE: **BAKER COMMODITIES**
Water System No. 1000602

TO: Mr. Steve Dessauer
Baker Commodities, Inc.
P.O. Box 416
Kerman, CA 93630

CITATION FOR NONCOMPLIANCE
TOTAL COLIFORM MAXIMUM CONTAMINANT LEVEL VIOLATION

June, July and August 2013

Issued on October 10, 2013

Section 116650, Chapter 4, Part 12, Division 104 of the California Health and Safety Code (CHSC), 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 hereunder.

VIOLATION

The Drinking Water Field Operations Branch of the California Department of Public Health (hereinafter 'Department') hereby issues a Citation to Baker Commodities (hereinafter 'Water System'), for failure to comply with Section 116555(a)(1) of the CHSC and Section 64426.1(b)(2) of Title 22, California Code of Regulations (CCR). Specifically, the Water System (mailing address: P.O. Box 416, Kerman, CA 93630) failed to comply with the total coliform Maximum Contaminant Level (MCL) during the months of June, July and August of 2013.

1 The Water System operates under a domestic water supply permit issued by the Department
2 in June 2013. Baker Commodities is a Nontransient Noncommunity water system serving a
3 population of approximately sixty (60) people through six (6) service connections in Fresno
4 County. The old wells, Well 01 and Well 02 have had water quality issues, including
5 elevated levels of radiological constituents at both wells, coliform issues at Well 01 and
6 sanding issues at Well 02. Citation No. 03-23-12C-035, issued on June 4, 2012, required the
7 Water System to install continuous chlorination at the discharge of Well 01. The Water
8 System drilled a new well, Well 03, destroyed Well 02 and proposed to classify Well 01 as
9 a standby source. The Water System completed construction of Well 03 in December 2012
10 and approval to activate it was granted on February 13, 2013. Additionally, Citation 03-23-
11 13C-029 was issued on June 26, 2013 for failure to comply with the total coliform
12 Maximum Contaminant Level during the months of April and May of 2013. Well 03 was
13 the only well operating at the time of the coliform MCL violations.

14
15 Section 64426.1(b)(2) specifies that a public water system collecting fewer than 40 samples
16 per month is in violation of the total coliform MCL when more than one sample collected
17 during any month is total coliform-positive.

18
19 The Water System is required to collect a minimum of one (1) distribution system
20 bacteriological sample per month. The bacteriological water analysis results submitted by
21 the Water System reported the presence of total coliform bacteria in two (2) of seven (7)
22 samples collected by the Water System in June of 2013, in three (3) of eight (8) samples
23 collected during July of 2013, and in three (3) of eight (8) samples collected during August
24 of 2013. None of the positive samples showed the presence of fecal coliform or *E. coli*
25 bacteria.

26
27

1 The following table summarizes the bacteriological monitoring conducted during the
 2 months of June, July, August and September of 2013.

3	4	5	6	7
Collection	Number of	Sample Labeled	Number TC	Number E. Coli
Date	Samples		positive	positive
6/11/13	5	Routine	2	0
7/2/13	5	Routine (no source)	2	0
7/24/13	3	Routine	1	0
8/9/13	5	Routine	3	0
8/16/13	3	Routine (+ Well 3?)	0	0
9/4/13	5	Routine	0	0

12
 13 Due to the above-mentioned total coliform positive samples, the Water System failed the
 14 total coliform MCL for the months of June, July and August 2013. Results for water
 15 samples tested for coliform bacteria during 2013 are summarized in Attachments A and B.
 16 The source of the coliform contamination is unknown. A Cross Connection Control Survey
 17 was conducted on May 23, 2013 by Michael McKeever. Domestic Water Supply Permit 03-
 18 23-13P-010, issued on June 21, 2013, required the submission of a Cross Connection
 19 Control Program by August 31, 2013. It is unknown whether the findings of the Cross
 20 Connection Control Survey have been implemented as of the date of this citation.

21
 22 **The five routine distribution samples required the month following August 2013,**
 23 **which had three total coliform-positive samples, were collected on September 4, 2013.**

24
 25 The Groundwater Rule adopted by the Department, effective August 18, 2011, requires the
 26 collection of a sample for bacteriological evaluation from wells serving the system in
 27 response to a coliform positive distribution sample. **This requirement was not met with**

1 the repeat sampling collected during June and July 2013, however it does appear that
2 Sample "2REP3" may have been from Well 03 in August 2013.

3
4 **ASSOCIATED VIOLATIONS**

5 Additionally, the Water System has failed to comply with the following Section 64424 of
6 Title 22, CCR:

7
8 Section 64424(a) specifies that if a routine sample is total coliform-positive, the water
9 supplier shall collect a repeat sample set as described in Sections 64424(a)1 and 64424(b)
10 within 24 hours of being notified of the positive result. The repeat samples shall all be
11 collected within the same 24 hour period.

12
13 Sections 64424(a)1 and 64424(b) specifies that for systems collecting only one sample per
14 month, a repeat sample set shall consist of four (4) samples as follows: one (1) from the
15 routine sample site at which the positive occurred, one (1) from the upstream repeat sample
16 site, one (1) from the downstream repeat sample site and one (1) from the operating well or
17 another location within the system that would best help to identify the source or area of
18 contamination. In each round of sampling conducted in June, July and August 2013, it
19 appears only three samples were collected from the distribution.

20
21 Section 64424(c) specifies that if one or more samples in the repeat sample set are total
22 coliform-positive, the water supplier shall collect and have analyzed an additional set of
23 repeat samples. The supplier shall repeat this process until either no coliform are detected
24 in one complete repeat sample set or the supplier determines that the MCL for total
25 coliform specified in Section 64426.1 has been exceeded and notifies the Department.

26 Section 64422(a) specifies that each water supplier shall develop and submit to the
27 Department a siting plan for the routine collection of samples for total coliform analysis.

1 Although the Water System has submitted an approved sample siting plan dated May 15,
2 2013, it was noted that the routine and repeat sampling conducted in July and August did
3 not closely adhere to that sampling plan.

4
5 Section 64423.1(a) specifies that the water supplier shall designate (label) each sample as
6 routine, repeat, replacement, or “other” pursuant to Section 64421(b).

7
8 The Water System failed to properly label the repeat sampling conducted in June, July and
9 August 2013. Although the sample location indicated a “repeat” sample ID, the sample type
10 reported by the laboratory indicated that those were “routine” samples.

11 12 **NOTIFICATION REQUIREMENTS**

13 Section 64426.1(c) requires a public water system to notify the Department and the
14 consumers of the water system, when a violation of Section 64426.1(b)(1) through (4) the
15 total coliform MCL occurs. Notification to the Department shall be by the end of the
16 business day on which the violation has been determined. If the Department is closed,
17 notification shall be within 24 hours of the determination. **The Department was not**
18 **notified in accordance with the above-referenced section for the violations in June,**
19 **July or August 2013.**

20
21 A Tier 2 Public Notice for violation of paragraph 64426.1(b)(2) shall be given pursuant to
22 Section 64463.4 and 64465. The Tier 2 Public Notice shall include the mandatory health
23 effects language from Appendix 64465-A for a total coliform MCL failure.

24
25 Section 64463.4 allows non-transient non-community water systems to give public notice
26 by posting the notice in conspicuous locations throughout the area served by the water
27 system and by the use of one or more of the following methods in order to reach persons not

1 likely to be reached by a public posting: publication in a local newspaper or newsletter
2 distributed to customers, e-mailing the public notice to water system customers, posting the
3 public notice on the internet, or by delivery to each customer. **The Tier 2 notification**
4 **template (Attachment C) is included here for the TCR MCL violations in June, July**
5 **and August of 2013.**

6
7 Section 116450(g) requires that upon receipt of notification from a public water system,
8 schools must notify school employees, students, and parents (if the students are minors),
9 residential rental property owners or managers (including nursing homes and care facilities)
10 must notify their tenants and business property owners, managers or operators must notify
11 employees of businesses located on the property. These secondary notification requirements
12 are also included in the public notice.

13
14 Proof of notification is required for the months of June, July and August of 2013. The
15 Water System shall complete Attachment D and return it to the Department by **October 31,**
16 **2013.**

17
18 **DIRECTIVES**

19 The Water System is hereby directed to take the following actions:

- 20
21 1. By **October 20, 2013,** the Baker Commodities water system shall provide public
22 notification of the total coliform Maximum Contaminant Level failure by posting
23 the notice provided as Attachment C in conspicuous locations throughout the area
24 served by the water system.

25
26 By **October 31, 2013,** the Water System shall provide proof of public notification of
27 the total coliform MCL violation by completing Attachment D and returning it to:

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Betsy S. Lichti, Senior Sanitary Engineer
Department of Public Health
Drinking Water Field Operations Branch
265 W. Bullard Avenue, Suite 101
Fresno, CA 93704

2. The Water System shall implement a Cross-Connection Control Program per CCR Section 116800, elements (a) through (e) as provided as guidance in Attachment E. Documentation of a Cross-Connection Control Program shall be submitted to the Department by October 31, 2013.
3. The Water System shall collect a repeat sample from each active source as required by the Groundwater Rule and as discussed in this Citation whenever a routine sample is positive for total coliform bacteria.
4. By **October 31, 2013**, the Water System shall complete and submit the enclosed “Positive Total Coliform Investigation” form to the Department that describes the incident and all corrective actions taken, and the results of the investigation. The appropriate investigation report is provided as Attachment F.
5. The Water System shall designate (label) each routine, repeat, replacement, or other sample as ‘Routine’, ‘Repeat’ or ‘Other’ as required by Section 64423.1(a) and as discussed in this Citation whenever a repeat sample is collected in follow-up to a positive coliform bacteria sample.
6. If the Water System has an additional violation of the total coliform MCL within twelve (12) months of the date of this citation, continuous chlorination treatment will be required.

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CIVIL PENALTIES

Sections 116650(d) and 116650(e) of the CHSC allow for the assessment of a civil penalty for failure to comply with requirements of the California Safe Drinking Water Act. Failure to comply with any provision of this Citation may result in the Department imposing an administrative penalty of not less than \$100 (one hundred dollars) per day as of the date of violation of any provision of this Citation.

10/10/13
Date

Betsy S. Lichti
Betsy S. Lichti, P.E.
Senior Sanitary Engineer, Fresno District
DRINKING WATER FIELD OPERATIONS BRANCH



BSL/EL

- Attachments:
- Attachment A: Bacteriological Distribution Monitoring Report for 2013
 - Attachment B: Source Bacteriological Monitoring Report for 2013
 - Attachment C: Public Notice Template for June, July and August 2013
 - Attachment D: Proof of Notification for June, July and August 2013
 - Attachment E: Cross Connection Control Program Guidance
 - Attachment F: Positive Total Coliform Investigation

Bacteriological Distribution Monitoring Report

1000602 Baker Commodities
Distribution System Freq: 1/M

Sample Date	Time	Location	T Coli	E Coli	F Coli	Type	Cl2	Violation	Comment
1/1/2013		No Distribution Sample						MR1	4/8/13 Issued 03-23-13E-05 one from well 3, positive in w
2/27/2013	9:54	5-ROU	<1.0	<1.0		Routine			
3/31/2013		No Distribution Sample						MR1	5/22/13 Issued 03-23-13E-01
4/19/2013	8:45	5-ROU	P	A		Routine		MCL	6/26/13 Issued 03-23-13C-0;
4/24/2013	11:45	5REP3-Well 3	<1.1		<1.1	Source Repeat			
4/24/2013	11:50	5REP2-Truck Garage/Maint	9.2	<1.1		Repeat			
4/24/2013	12:10	5REP1-Processing Plant	6.9	<1.1		Repeat			
4/24/2013	12:15	5ROU Office Plant Admin	3.6	<1.1		Repeat			
4/30/2013	11:38	5 ROU-Girls RR	<1.1	<1.1		Repeat			
4/30/2013	11:45	Men's RR	<1.1	<1.1		Repeat			
4/30/2013	12:00	5 ROU Breakroom 5 min	<1.1	<1.1		Repeat			
4/30/2013	12:04	Locker Room - 5 min	<1.1	<1.1		Repeat			
4/30/2013	12:19	5REP3 Well 3	<1.1		<1.1	Source Repeat			
5/21/2013	9:35	1 ROU Men's Restroom	2.2	<1.1		Routine			
5/21/2013	9:40	2 ROU Women's Restroom	<1.1	<1.1		Routine			
5/21/2013	9:50	3 ROU Kitchen Faucet	<1.1	<1.1		Routine			
5/21/2013	9:55	4 ROU Locker Room Restroom	<1.1	<1.1		Routine			
5/21/2013	10:00	5 ROU Locker Room Kitchen Sink	1.1	<1.1		Routine		MCL	6/26/13 Issued 03-23-13C-0;
5/30/2013	11:10	Main Well #3	<1.1		<1.1	Source Repeat			
5/30/2013	11:15	1 REP2 Locker Room Restroom	<1.1	<1.1		Repeat	0.0		
5/30/2013	11:30	1 ROU Men's Restroom	<1.1	<1.1		Repeat	0.0		
5/30/2013	11:45	1 REP1 Women's Restroom	<1.1	<1.1		Repeat	0.0		
6/11/2013	12:50	Locker Room Kitchen Sink	1.1	<1.1		Routine			
6/11/2013	12:55	Locker Room Restroom	<1.1	<1.1		Routine			
6/11/2013	13:00	Womens Restroom	1.1	<1.1		Routine		MCL	
6/11/2013	13:05	Kitchen Faucet	<1.1	<1.1		Routine			
6/11/2013	13:10	Mens Restroom	<1.1	<1.1		Routine			
6/18/2013	14:00	2ROU	<1	<1		Routine			
6/18/2013	14:10	5ROU	<1	<1		Routine			
7/2/2013	9:00	1ROU	<1	<1		Routine			
7/2/2013	9:05	2ROU	<1	<1		Routine			
7/2/2013	9:15	3ROU	2	<1		Routine			
7/2/2013	9:40	4ROU	2	<1		Routine		MCL	
7/2/2013	9:50	5ROU	<1	<1		Routine			
7/24/2013	10:05	MB 1	3.1	<1		Routine			
7/24/2013	10:15	MB 2	<1	<1		Routine			
7/24/2013	10:32	MB3	<1	<1		Routine			
8/9/2013	9:10	1-ROU	<1.0	<1.0		Routine			
8/9/2013	9:25	1 ROU	<1.0	<1.0		Routine			
8/9/2013	9:30	2-ROU	1.0	<1.0		Routine			
8/9/2013	9:45	2-ROU	1.0	<1.0		Routine		MCL	
8/9/2013	10:00	2-ROU	2.0	<1.0		Routine			
8/16/2013	10:02	2 REP1	<1.0	<1.0		Repeat			
8/16/2013	10:30	2 REP3	<1.0	<1.0		Repeat			

<i>Sample Date</i>	<i>Time</i>	<i>Location</i>	<i>T Coli</i>	<i>E Coli</i>	<i>F Coli</i>	<i>Type</i>	<i>Cl2</i>	<i>Violation</i>	<i>Comment</i>
8/16/2013	10:46	2-ROU	<1.0	<1.0		Repeat			
9/4/2013	8:45	1-ROU	<1.0	<1.0		Routine			
9/4/2013	9:00	1-ROU	<1.0	<1.0		Routine			
9/4/2013	9:08	2-ROU	<1.0	<1.0		Routine			
9/4/2013	9:25	2-ROU	<1.0	<1.0		Routine			
9/4/2013	9:40	2-ROU	<1.0	<1.0		Routine			

Violation Key

MCL	Exceeds the maximum contaminant level	MR5	Incorrect number of repeat samples as follow-up to a positive sample
MR1	No monthly sample for the report month	MR6	No source sample
MR2	No quarterly sample for the report month	MR7	No summary report submitted
MR3	Incorrect number of routine samples for the report month	MR8	Other comments and/or info
MR4	Did not collect 5 routine samples for previous month's positive sample	MR9	Cl2 not reported

Source Bacteriological Monitoring Report

1000602 Baker Commodities

<i>Sample Date</i>	<i>Time</i>	<i>Source</i>	<i>Sample Type</i>	<i>Test Method</i>	<i>T Coli</i>	<i>E Coli</i>	<i>F Coli</i>	<i>HPC</i>	<i>Violation</i>	<i>Comments</i>
1/31/2013	10:40	Well 3	Well	MPN	13.7	<1.0				
2/7/2013	10:20	Well 3	Well	MPN	3.1		<1.0			
2/18/2013	11:30	Well 3	Well	MPN	6.4	<1.0				
2/28/2013	8:00	Well 3	Well	MPN	<1.1					
3/7/2013	9:35	Well 003-1	Well	MPN	<1.0		<1.0			<i>well 3-1</i>
3/7/2013	10:10	Well 003-2	Well	MPN	1.0		<1.0			
3/15/2013	11:00	Well 003	Well	MPN	<1.0		<1.0			

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.

**Baker Commodities Had Levels of Coliform Bacteria
Above the Drinking Water Standard**

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

We routinely monitor for drinking water contaminants. We tested five samples for the presence of coliform bacteria during June 2013, two of these samples showed the presence of total coliform bacteria. We tested eight samples during July 2013, three samples showed the presence of total coliform bacteria. We tested eight samples during August 2013, three samples showed the presence of total coliform bacteria. The standard is that no more than one sample per month may show the presence of coliform bacteria.

What should I do?

- **You do not need to boil your water or take other corrective actions.**
- This is not an emergency. If it had been, you would have been notified immediately. Total coliform bacteria are generally not harmful themselves. *Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.*
- Usually, coliforms are a sign that there could be a problem with the treatment or distribution system (pipes). Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as fecal coliform or *E. coli*, are present. **We did not find any of these bacteria in our subsequent testing.**
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1(800) 426-4791.
- If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

What happened? What is being done?

[Describe corrective action]. _____

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

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

Secondary Notification Requirements

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

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



RON CHAPMAN, MD, MPH
Health Officer & Director

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



EDMUND G. BROWN JR.
Governor

ATTACHMENT D

PROOF OF NOTIFICATION

(Return with copy of notice)

As required by Section 116450 of the California Health and Safety Code, I notified all users of water supplied by the **Baker Commodities** of the failure to meet the **total coliform bacteria MCL** for the months of **June, July and August** as directed by the Department.

Notification was made on _____ by
(date)

hand delivered and/or mailed and/or posted written notice.
(circle all that apply)

Signature of Water System Representative

Printed Name

Date

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

Due: October 31, 2013
Total Coliform MCL Failure: May 2013
System Number: 1000602
Citation No.: 03-23-13C-043



Do your part to help California save energy. To learn more about saving energy, visit the following web site:
<http://www.fypower.org>

Southern California Drinking Water Field Operations Branch
265 W. Bullard Avenue, Suite 101, Fresno, CA 93704
(559) 447-3300; Fax (559) 447-3304
Internet Address: <http://www.dhs.ca.gov/ps/ddwem/>

CROSS-CONNECTION CONTROL NON-COMMUNITY WATER SYSTEMS CDPH-FRESNO DISTRICT

Purpose of Cross-Connection Control Program

Water provided by a public water system may be contaminated via cross-connections within the user's distribution system. The purpose of the cross-connection control program is to eliminate actual cross-connections and to reduce the hazard of potential cross-connections. This is accomplished by identifying actual and potential cross-connections and either installing appropriate backflow prevention assemblies or ensuring that water-using equipment is installed in accordance with plumbing code requirements and good practice.

What are cross-connections?

Cross-connections are unprotected connections between a potable water system and any source or system containing unapproved water or a substance, which is not safe. Examples of cross-connections include:

1. Improperly installed irrigation systems (which may allow back siphoning of stagnant, bacterially contaminated water into the piping system) or premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are or can be injected.
2. Improperly plumbed water-using devices such as hot tubs, boilers or commercial dishwashers.
3. Irrigation systems served by an auxiliary source, such as an unapproved well or a creek. Such systems, if connected to the drinking water system, create a potential for contamination via cross-connections.
4. Interconnections between the potable system and a non-potable system.

How to Comply

For Non-community water systems, the program consists of identification of hazards and protection of the system from these hazards. The program is to be adapted to the size and complexity of the system. The following are the required elements and necessary actions:

1. Identification of Hazards -This consists of a review of the system facilities to identify areas of potential contamination via cross-connections. A survey of the system is to be conducted with documentation of the findings. Any facilities that handle wastewater or hazardous liquids require special evaluation to ensure protection of the potable system from contamination.
2. Protection of System -Taking action to abate the potential cross-connection by ensuring compliance with plumbing codes, installing and maintaining appropriate backflow prevention assemblies and other means. This includes annual testing and repair or replacement as needed.

Completion and Documentation

Attached is additional information and forms that you can use to help guide you through this program. A survey of the system is to be conducted by a qualified person. Documentation of the survey findings is to be maintained and submitted to the Department when requested.

Attachments - Information and forms for surveys

- Notes:*
1. Regulatory Authority: Pursuant to Section 7584 of the California Code of Regulations, which states, "The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program".
 2. Applicability: Non-community water systems

ELEMENTS OF A CROSS-CONNECTION CONTROL PROGRAM CDPH Fresno District

When implementing a Cross-Connection Control Program, the water supplier or health agency should follow an organized plan. The following items should be included as a minimum. The items **explain the Department of Health Services' policy regarding the regulations.**

7584. Responsibility and Scope of Program

The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program. The program, or any portion thereof, may be implemented directly by the water supplier or by means of a contract with the local health agency, or with another agency approved by the health agency. The water supplier's cross-connection control program shall for the purpose of addressing the requirements of Sections 7585 through 7605 include, but not limited to, the following elements:

(a) *The adoption of operating rules or ordinances to implement the cross-connection program.*

A public water supplier shall enact an ordinance or rule of service outlining the cross-connection control program and providing enforcement authority.

(b) *The conducting of surveys to identify places where cross-connections are likely to occur.*

Water utilities do not have any responsibility for controlling or abating cross-connections on a user's premises. All existing facilities where potential cross-connections are suspected, however, shall be listed and inspected or reinspected on a priority basis, where feasible. All applications for new services or for enlarging existing services or changing of occupant shall be reviewed or screened for cross-connections hazards. Surveys are intended to be conducted by a person certified by AWWA or ABPA as a cross-connection specialist. A list of persons that have this certification may be obtained by contacting AWWA at (909) 481-7200, ABPA at <http://www.abpa.org/>, or by contacting the CDPH-Fresno District office.

(c) *The provision of backflow protection at the user's connection or within the user's premises or both.*

Adequate provisions for implementation and enforcement of backflow protection where needed including the shutting off service when necessary

(d) *The provision of at least one person trained in cross-connection control to carry out the cross-connection program.*

Specific units of the health agency and/or water supplier should be designated to organize and carry out the cross-connection control program. The personnel in those units should be trained as to the causes and hazards of unprotected cross-connections.

(e) *The establishment of a procedure or system for testing backflow preventers.*

A list of approved backflow preventers and list of certified testers should be made available to each water user required to provide backflow protection.

The list may include backflow devices approved by University of Southern California, Foundation for Cross-Connection Control and IAPMO, which may be found on the CDPH website at the following address:

The List of certified testers may be lists developed by the American Water Works Association and local county health agencies.

Backflow preventers should be tested at least yearly or more often as required by the health agency or water supplier.

(f) *The maintenance of records of locations, tests and repairs of backflow preventers*

Adequate records should be kept and filed for reference. These records should include, in addition to the name of the owner of the premises, the:

- a) Date of inspection
- b) Results of inspection
- c) Required protection
- d) List of all backflow preventer devices in the system
- e) Test and maintenance reports
- f) All correspondence between the water supplier, the local health authority, and the consumer
- g) Records must be maintained for a minimum of three years

Records of inspection and testing should be evaluated to determine if:

- a) Devices are frequently or sufficiently reviewed to detect failure.
- b) There are unusual feature of a particular model of device or component.
- c) Cause of failure can be eliminated.

A program should be established to notify the water user when his backflow preventer must be tested. (A minimum of once each year is required.) After installation or repair, a backflow preventer should be tested and approved before it is accepted.

7605. Testing and Maintenance of Backflow Preventers

Regulations require the following regarding testing and maintenance of backflow prevention devices:

- (a) The water supplier shall assure that adequate maintenance and periodic testing are provided by the water user to ensure their proper operation.
- (b) Backflow preventers shall be tested by persons who have demonstrated their competency in testing of these devices to the water supplier or health agency.
- (c) Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are found to be defective, they shall be repaired or replaced in accordance with the provisions of this Chapter.
- (d) Backflow preventers shall be tested immediately after they are installed, relocated or repaired and not placed in service unless they are functioning as required.
- (e) The water supplier shall notify the water user when testing of backflow preventers is needed. The notice shall contain the date when the test must be completed.
- (f) Reports of testing and maintenance shall be maintained by the water supplier for a minimum of three years.

GUIDELINES FOR CROSS-CONNECTION CONTROL FOR IRRIGATION SYSTEMS

Summary: Public water systems must be protected from actual and potential cross-connections between irrigation systems and domestic water systems. This is accomplished by ensuring that the irrigation system is installed in accordance with the requirements of the Uniform Plumbing Code with appropriate backflow prevention devices.

Special Conditions: For systems with an unapproved auxiliary source serving the irrigation system, additional protective action is necessary to guard against introduction of water from the auxiliary source into drinking water system. The following actions must be taken to guard against this hazard:

1. Identify all interties between the domestic system and the irrigation system.
2. Either disconnect these interties or install approved backflow prevention devices at each intertie. A Reduced Pressure Principle backflow prevention device is the type of device, which is to be installed.
3. Verify that there are no other interconnections between the domestic and irrigation systems. This is accomplished by draining the irrigation system and verifying that it does not refill with water from the domestic system through an undetected cross-connection. This procedure should be repeated on a period basis (once every three months).

Records: Maintain written records of dates of tests, procedures, results and corrective actions taken.

POSITIVE TOTAL COLIFORM INVESTIGATION

Simple Well with Pressure Tank Systems

Attachment F

This form is intended to assist public water systems in completing the investigation required by the California Department of Public Health (Section 64426(b) of Title 22, California Code of Regulations) and may be modified to take into account conditions unique to the system.

ADMINISTRATIVE INFORMATION

PWS Name:		PWS ID NUMBER:	
Name		Address	
Operator in Responsible Charge (ORC)		Telephone #	
Person that collected TC samples if different than ORC			
Owner			
Certified Laboratory for Microbiological Analyses			
Date Investigation Completed:			
Month(s) of Total Coliform MCL Failure:			

INVESTIGATION DETAILS

SOURCE	WELL (name)	WELL (name)	WELL (name)	WELL (name)	COMMENTS
1. Inspect each well head for physical defects and report					
a. Is raw water sample tap upstream from point of disinfection?					
b. Is wellhead vent pipe screened?					
c. Is wellhead seal watertight?					
d. Is well head located in pit or is any piping from the wellhead submerged?					
e. Does the ground surface slope towards well head?					
f. Is there evidence of standing water near the wellhead?					
g. Is there a check valve on the well discharge line? Is the check valve seating properly?					
h. Are there any connections to the raw water piping that could be cross connections? (describe all connections in comments)					
i. Is the wellhead secured to prevent unauthorized access?					
j. To what treatment plant (name) does this well pump?					
k. How often do you take a raw water total coliform (TC) test?					
l. Provide the date and result of the last TC test at this location					

POSITIVE TOTAL COLIFORM INVESTIGATION

Attachment F

DISTRIBUTION SYSTEM	SYSTEM RESPONSES
1. What is the minimum pressure you are maintaining in the distribution system?	
2. Did pressure in the distribution system drop to less than 5 psi prior to experiencing the TCR positive finding?	
3. Has the distribution system been worked on within the last week? (service taps, hydrant flushing, main breaks, main extensions, etc.) If yes, provide details.	
4. Are there any signs of excavations near your distribution system not under the direct control of your maintenance staff?	
5. Did you inspect your distribution system to check for mainline leaks? Do you or did you have a mainline leak?	
6. If there was a mainline leak, when was it repaired?	
7. On what date was the distribution system last flushed?	
8. Is there a written flushing procedure you can provide for our review?	
9. Do you have an active cross connection control program?	
10. What is name and phone number of your Cross-Connection Control Program Coordinator?	
11. Is the review and testing of backflow prevention devices current?	
12. On what date was the last physical survey of the system done to identify cross-connections?	

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify)
1. What is the height of the sample tap above grade? (inches)				
2. Is the sample tap located in an exterior location or is it protected by an enclosure ?				
3. Is the sample tap threaded, have a swing arm (kitchen sink) or aerator (sinks)?				
4. Is the sample tap in good condition, free of leaks around the stem or packing?				
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?				
6. Is the sample tap and area around the sample tap clean and dry (free of animal droppings, other contaminants or spray irrigation systems)				
7. Is the area around the sample tap free of excessive vegetation or other impediments to sample collection				
8. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.)				
9. Is this sample tap designated on the sampling plan submitted with this information request?				
10. What were weather conditions at the time of positive sample (rainy, windy, sunny)?				

POSITIVE TOTAL COLIFORM INVESTIGATION

Attachment F

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GENERAL OPERATIONS:	Response
1. Where there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC + findings?	
2. Where there any main breaks, water outages, or low pressure reported in the service area where TC+ or EC+ samples were located.	
3. Does the system have backup power or elevated storage?	
4. During or soon after bacteriological quality problems, did you receive any complaints of any customers' illness suspected of being waterborne? How many?	
5. What were the symptoms of illness if you received complaints about customers being sick?	

ADDITIONAL INFORMATION TO BE SUBMITTED WITH RESPONSES TO THE ABOVE QUESTIONS

1. **Sketch** of System showing all sources, treatment locations, storage tanks, microbiological sampling sites and general layout of the distribution system including the location of all hazardous connections such as the wastewater treatment facility.
2. A set of photographs of the well, pressure tanks, and storage tanks in the system may be submitted if they would show that the contamination is directly related and changes have been made since the last inspection by our Department
3. Name, certification level and certificate number of the Operator in Responsible Charge.
4. Copy of the last cross connection survey performed that identifies the location of all unprotected cross connections.

SUMMARY: BASED ON THE RESULTS OF YOUR INVESTIGATION AND ANY OTHER INFORMATION AT YOUR DISPOSAL, WHAT DO YOU BELIEVE TO BE THE CAUSE OF THE POSITIVE TOTAL COLIFORM SAMPLES FROM YOUR PUBLIC WATER SYSTEM?

CERTIFICATION: I CERTIFY THAT THE INFORMATION SUBMITTED IN RESPONSE TO THE QUESTIONS ABOVE IS ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE

NAME: _____ TITLE: _____ DATE: _____