STATE OF CALIFORNIA

WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

TO: USFS/Deer Creek Campground
1600 Tollhouse Road
Clovis, CA 93611-0532

Water System No. 1000147

Attn: Susan Burkindine

CITATION FOR VIOLATION OF CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64426.1 (b) (2) - TOTAL COLIFORM MAXIUMUM CONTAMINANT LEVEL

September 2014

C I T A T I O N NO. 03-23-14C-081

Issued on December 16, 2014

Section 116650 of the California Health and Safety Code authorizes the issuance of a citation to a public water system for violation the California Safe Drinking Water Act (Health and Safety Code, Division 104, Part 12, Chapter 4, commencing with Section 116270) (hereinafter "California SDWA"), or any regulation, standard, permit or order issued or adopted thereunder.

The State Water Resources Control Board, acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division (hereinafter "Deputy Director"), hereby issues a citation to the USFS/Deer Creek Campground Water System (hereinafter, Water System) (mailing address: 1600 Tollhouse Road, Clovis CA 93611) for violation of California Code of Regulations (CCR), Title 22, Section 64426.1 subsections (b)(2).

APPLICABLE AUTHORITIES

Section 116650 of California Health and Safety Code provides:

(a) If the Division determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the Division may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.

(b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.

(c) A citation may specify a date for elimination or correction of the condition constituting the violation.

(d) A citation may include the assessment of a penalty as specified in subdivision (e).

(e) The Division may assess a penalty in an amount not to exceed one thousand dollars ($1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

California Code of Regulations, Title 22, Section 64426.1, subsections (a) and (b) provide, in relevant part:

§64426.1. Total Coliform Maximum Contaminant Level (MCL).

(a) Results of all samples collected in a calendar month pursuant to Sections 64423, 64424, and 64425 that are not invalidated by the Division or the laboratory shall be included in determining compliance with the total coliform MCL. Special purpose samples such as those listed in §64421(b) and samples collected by the water supplier during special investigations shall not be used to determine compliance with the total coliform MCL.

(b) A public water system is in violation of the total coliform MCL when any of the following occurs:

(1) For a public water system which collects at least 40 samples per month, more than 5.0 percent of the samples collected during any month are total coliform-positive; or

(2) For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive

§ 64424. Repeat Sampling

Specifies that for systems collecting only one sample per month or quarter, a repeat sample set shall consist of four (4) samples as follows: one (1) from the routine sample site at which the positive occurred, one (1) from the upstream

repeat sample site, one (1) from the downstream repeat sample site and one (1) from the operating well or another location within the system that would best help to identify the source or area of contamination.

If a public water system for which fewer than five routine samples per month are collected has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month. If the supplier stops supplying water during the month after the total coliform-positive(s), at least five samples shall be collected during the first month the system resumes operation.

The Groundwater Rule

Adopted by the Division, effective August 18, 2011, the rule requires the collection of a sample for bacteriological evaluation from wells serving the system in response to a coliform positive distribution sample.

STATEMENT OF FACTS

The Water System is operated under Water Supply Permit No. 03-23-11P-007, issued on February 18, 2011. USFS/Deer Creek Campground Water System is a seasonal, transient non-community water system serving a population of approximately one hundred seventy-five (175) that varies seasonally through approximately forty-five (45) service connections. The Water System operates from May through October.

The Water System is served by one well. Each year, the Water System is required to collect the bacteriological samples required in the Division's seasonal reactivation protocol as well as collecting a minimum of one (1) distribution system bacteriological samples per quarter during its operating season. The bacteriological water analysis results submitted by the Water System reported the presence of total coliform bacteria in two (2) of two (2) samples in September of 2014. None of the positive samples showed the presence of fecal coliform or *E. coli* bacteria.

The following table summarizes the bacteriological monitoring conducted during the 2014 season:

Collection Date	Number of Samples	Sample Labeled	Number TC positive	Number E. Coli positive
5/13/2014	1	Routine	0	0
6/2/2014	1	Routine	0	0
7/1/2014	1	Routine	0	0
9/2/14	1	Routine	1	0
9/3/14	1	Repeat	1	0

Due to the above-mentioned total coliform positive samples, the Water System failed the total coliform MCL for the month of September of 2014. Results for water samples tested for coliform bacteria during 2014 are summarized in Attachment A. The source of contamination is unknown.

The five routine distribution samples required the month following September 2014, which had two total coliform-positive samples were not collected.

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

VIOLATIONS

The Drinking Water Field Operations Branch of the State Water Resources Control Board – Division of Drinking Water (hereinafter 'Division') hereby issues a Citation to USFS/Deer Creek Campground Water System (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: 1600 Tollhouse Road, Clovis, CA 93611) failed to comply with the total coliform Maximum Contaminant Level (MCL) for the month of September 2014. **Additionally, the Water System failed to**

conduct the required repeat sampling and follow up sampling during September and October 2014.

NOTIFICATION REQUIREMENTS

Section 64426.1(c) requires a public water system to notify the Division and the consumers of the water system, when a violation of Section 64426.1(b)(1) through (4) the total coliform MCL occurs. Notification to the Division shall be by the end of the business day on which the violation has been determined. If the Division is closed, notification shall be within 24 hours of the determination. **The Division was not notified**.

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

The Water System shall post the public notice in conspicuous locations within the water system at the beginning of its 2015 operating season. Section 116450(g) requires that upon receipt of notification from a public water system, 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 their tenants and business property owners, managers or operators must notify employees of businesses located on the property.

Proof of Notification is required. The Water System shall complete Attachment C and return it to the Division by **June 30, 2015**.

DIRECTIVES

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

1. By **June 15, 2015,** the USFS/Deer Creek Campground water system shall provide public notification of the total coliform Maximum Contaminant Level failure for September 2014 by posting the notice provided as Attachment B in conspicuous locations throughout the area served by the water system.

By **June 30, 2015,** the Water System shall provide proof of public notification of the total coliform MCL violation for September 2014 by completing Attachment C and returning it to:

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

2. By **June 30, 2015**, the Water System shall complete and submit the enclosed "Positive Total Coliform Investigation" form to the Division that describes the incident and all corrective actions taken, and the results of the investigation. The appropriate investigation report is provided as Attachment D.

3. The Water System shall collect a set of four repeat samples as required by Section 64424 and as identified under "Applicable Authorities" in this Citation whenever a routine sample is positive for total coliform bacteria.

4. 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.

5. Whenever the Water System has one or more total coliform-positive samples in a given month, at least five (5) routine samples shall be collected the following month as required by Section 64424(d) and as discussed in this Citation.

6. Prior to providing water to consumers during the 2015 operating season and every season thereafter, the Water System shall follow the "Protocol for Reactivation of Seasonal Water Systems" provided as Attachment E which outlines requirements for disinfection and bacteriological monitoring of the source and distribution system.

7. The Water System will be required to maintain an approved Cross-Connection Control Program which shall include the following elements (as applied from Title 17, California Code of Regulations, Section 7584), and as outlined in Attachment F:

   a. The conducting of surveys to identify water user premises or locations where cross connections are likely to occur,
   b. The provisions of backflow protection by the Water user at the user's connection or within the user's premises or both,
   c. The provision of at least one person trained in cross-connection control to carry out the cross-connection program,
   d. The establishment of a procedure or system for annual testing of backflow preventers, and
   e. The maintenance of records of locations, tests, and repairs of backflow preventers.

   The survey and documentation of a valid Cross Connection Control Program shall be submitted to the Division by June 30, 2015. You may contact the SWRCB-DDW Fresno District for guidance in identifying a cross-connection specialist to conduct the survey.

PARTIES BOUND

This Citation shall apply to and be binding upon USFS/Deer Creek Campground Water System, its officers, directors, shareholders, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The Directives of this Citation are severable, and USFS/Deer Creek Campground Water System shall comply with each and every provision thereof, notwithstanding the effectiveness of any other provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the Division to: issue citation with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any permit, regulation, permit or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the Division to take action to suspend or revoke a permit that has been issued to a public water system if the system has violated applicable law or regulations or has failed to comply with an order of the Division; and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with violates an order of the Division. The Division does not waive any further enforcement action by issuance of this citation.

12/16/14
Date

Betsy S. Lichti, P.E.,
District Engineer
Division of Drinking Water
State Water Resources Control Board

Attachments:

A. Bacteriological Distribution and Source Monitoring Reports
B. Public Notice Template
C. Proof of Notification
D. Positive Total Coliform Investigation Form
E. Seasonal Reactivation Protocol
F. Cross Connection Control Guidance

Bacteriological Distribution Monitoring Report

1000147 USFS/Deer Creek Campground

Distribution System Freq: 1/Q

Sample Date	*Time*	*Location*	*T Coli*	*E Coli*	*F Coli*	*Type*	*Cl2*	*Violation*	*Comment*
5/13/2014	12:00	Deer Creek	A	A		Routine			
6/2/2014	16:10	9 Deer Creek	A	A		Routine			
7/1/2014	17:32	13 Deer Creek	A	A		Routine			
9/2/2014	8:30	Deer Creek	P	A		Routine			
9/3/2014	16:40	Deer Creek	P	A		Repeat		MCL	

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

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.

USFS Deer Creek Campground Water System Has 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 took two (2) samples to test for the presence of coliform bacteria in September 2014. Two of these 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.

This notice is being sent to you by USFS Deer Creek Campground Water System

Date distributed: _____

State Water Resources Control Board
Division of Drinking Water

ATTACHMENT C

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 **USFS/Deer Creek Campground** of the failure to meet the **total coliform bacteria MCL** for the month of **September 2014** as directed by the Division.

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: June 30, 2015
Total Coliform MCL Failure: September 2014
System Number: 1000147
Citation No.: 03-23-14C-081

POSITIVE TOTAL COLIFORM INVESTIGATION

Attachment D

Simple Well with Pressure Tank Systems

This form is intended to assist public water systems in completing the investigation required by the SWRCB Drinking Water Division (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**	**Telephone #**
Operator in Responsible Charge (ORC)			
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 D

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 **ext**erior location or is it protected by an **enc**losure?				
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 D

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 Division.
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:** _____

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

PROTOCOL FOR REACTIVATION OF SEASONAL WATER SYSTEMS
DRINKING WATER FIELD OPERATIONS BRANCH
August 2014

1. Disinfection of the Well and Distribution System

The well shall be disinfected with enough chlorine to provide a chlorine residual of 5 mg/L in all parts of the distribution system. Swimming pool chlorine is not considered acceptable for disinfection purposes. Chlorine must be certified under NSF Standard 60 for use in drinking water systems. Use the following chart for determining how much chlorine to use to achieve a 5 mg/L residual:

Volume to be treated (gallons):	1,000	2,000	5,000	10,000	25,000	50,000	100,000	250,000
Amount of Chlorine Solution to Use Based on Solution Strength								
5% Chlorine solution	I pint	1 quart	0.5 gal	1 gal	2.5 gal	5 gal	10 gal	25 gal
12.5% Chlorine solution	1 cup	1 pint	1 quart	0.5 gal	1 gal	2 gal	4 gal	10 gal

The chlorine shall be held in the distribution system for at least 24 hours. The system should then be flushed till no chlorine is detectable in the system.

2. Bacteriological Monitoring

Following the disinfection process and flushing of the distribution system, water samples shall be collected directly from each well discharge and from the distribution system at the five routine sample sites to be analyzed for total coliform bacteria. The samples should be labeled as "special" samples. The disinfection and sampling process shall be repeated until samples from both the well and distribution system are negative for total coliform bacteria. Any distribution sample shall be collected at locations identified as "routine" sample sites on the system's approved Bacteriological Sample Siting Plan.

3. Ongoing Bacteriological Monitoring

The first routine samples to be collected for compliance with the monitoring requirements of the Total Coliform Rule ***shall be collected one week after the facility is open to the public.*** This monitoring shall continue either monthly or quarterly as specified in the approved Bacteriological Sample Siting Plan. All results shall be reported to the Division at the following address by the 10th day of the month following sample collection:

Betsy S. Lichti, P.E.
Senior Sanitary Engineer, Fresno District
State Water Resources Control Board
265 W. Bullard Avenue, Suite 101
Fresno, CA 93704

If the water system has any questions regarding the procedure outlined above with regards to the activation of their seasonal water systems, they may contact the SWRCB Drinking Water Field Operations Branch, Fresno District staff at (559) 447-3300.

CROSS-CONNECTION CONTROL
NON-COMMUNITY WATER SYSTEMS
SWRCB DDW - 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 Division 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
SWRCB DDW - 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:

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-connect1ons 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 SWRCB website at the following address:

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publications.shtml.

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 verifyling 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.

CROSS-CONNECTION SURVEY SUMMARY FORM
NON-COMMUNITY WATER SYSTEMS

System Name _____ Number_____

Date of Survey _____

Name of person performing survey _____

Qualifications of person performing survey _____

Description of Survey (Elements of survey, how conducted, hazards identified):

Actions taken (Include description of corrections, backflow prevention assemblies installed):

Long-term (Include description of who will ensure ongoing protection of the system from cross-connections and testing of backflow prevention assemblies):

Other (Include other elements of program):

Name of person completing this report_____ Date _____

Signature _____