



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

Division of Drinking Water

Water System No. 4901404

May 28, 2015

April Xie
Ektimo Vineyards
4950 Ross Road
Sebastopol, CA 95472

CITATION NO. 02_18_15C_028

Enclosed is a Citation issued to the Ektimo Vineyards (System) public water system.

Ektimo Vineyards will be billed at the State Water Resources Control Board Division of Drinking Water's (Division) hourly rate (currently estimated at \$128.00) for the time spent on issuing this Citation. Health and Safety Code Section 116577 provides that a public water system must reimburse the Division for actual costs incurred by the Division for specified enforcement actions, including, but not limited to, preparing, issuing, and monitoring compliance with a citation. At this time, the Division has spent approximately one hour on enforcement activities associated with this violation.

Ektimo Vineyards will receive a bill from the Water Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on Ektimo Vineyards for the current fiscal year.

If you have any questions regarding this matter, please contact George Chien of my staff at (707) 576-2971 or me at (707) 576-2006.

Sincerely,

Janice M. Thomas, P.E., Sonoma District Engineer
Division of Drinking Water
STATE WATER RESOURCES CONTROL BOARD

Enclosure: Citation No. 02_18_15C_028

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STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER

Name of Public Water System: Ektimo Vineyards

Water System No: 4901404

To: Ektimo Vineyards
4950 Ross Road
Sebastopol, CA 95472

Issued: May 28, 2015

**CITATION FOR NONCOMPLIANCE
WITH
FECAL COLIFORM MAXIMUM CONTAMINANT LEVEL
MARCH 2015
TOTAL COLIFORM RULE MONITORING AND REPORTING
MARCH 2015
AND
PUBLIC NOTIFICATION**

The Division of Drinking Water of the State of California Water Resources Control Board (Division) hereby issues a citation to the Ektimo Vineyards (hereinafter System) for failure to comply with California Health and Safety Code (CHSC) Division 104 Section 116555(a)(1) and Title 22, California

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Code of Regulations (CCR) Section 64424, 64426, 64426.1, 64463, and 64463.1.

Section 116650 of the CHSC, authorizes the issuance of a citation for failure to comply with a requirement of California Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit or order issued thereunder. A copy of the *Applicable Statues and Regulations* is located in Appendix 1, which is attached hereto and incorporated by reference.

STATEMENT OF FACTS

Ektimo Vineyards is classified as a transient noncommunity water system with 3 connections serving a population of 50. The System collected one routine bacteriological sample and two repeat samples during March 2015. All samples were analyzed for the presence of coliform bacteria and *E. coli* where all three samples tested positive for coliform bacteria and one of the repeats tested positive for *E. coli*. The Division was not notified of the positive *E. coli* result within 24 hours when the System was notified of the test result. The System collected a triggered source sample and analyzed for the presence of coliform bacteria and *E. coli*. The triggered source sample tested positive for coliform bacteria. The System collected one routine bacteriological sample in April 2015 and was analyzed for the presence of coliform bacteria and *E. coli*. The result was positive for coliform bacteria and absent of *E. coli*. Four repeat samples were collected and analyzed for the presence of coliform bacteria and *E. coli* and all were tested

1 absent. On May 26, 2015, the System collected four routine bacteriological
2 samples and one bacteriological sample from the source. All samples were
3 analyzed for the presence of coliform bacteria and *E. coli* where all routine
4 samples were tested absent but the source sample was tested positive for
5 coliform bacteria.
6

7 8 **DETERMINATION**

9 The Division has determined that the System is in violation of Title 22, CCR,
10 Section 64424, 64426, 64426.1, 64463, and 64463.1. Section 64424 defines
11 a violation of insufficient number of repeat samples. Section 64426 defines
12 criteria of significant rise in bacterial count and the notification procedure.
13 Section 64426.1(b)(3) defines a violation of the fecal coliform maximum
14 contaminant level (MCL) as more than one sample collected during any
15 month is total coliform-positive and any repeat sample is fecal coliform-
16 positive or *E. coli* positive.
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19 The System collected one routine bacteriological sample per month and was
20 required to collect at least four repeat samples for each total coliform-
21 positive sample. The System did not collect sufficient number of repeat
22 samples. Therefore, the System violated the repeat sampling contained in
23 Section 64424.
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26 The System took three bacteriological samples during March 2015 and the
27 results of all three were total coliform positive. Furthermore, the result of all
the repeats were total coliform positive and one of the repeats was fecal



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coliform positive. Therefore, the System violated the fecal coliform MCL and public notification contained in Section 64426.1.

The System received the positive *E. coli* sample result but failed to notify the Division within 24 hours of being notified of the test result. Thus, the System violated the Section 64426.

The System was required to submit a public notice to the Division for approval prior to distribute the notice within 24 hours after being notified of the positive fecal coliform result. As the date of this Citation, the Division has not received a notice or a certification that a public notification has been conducted. Therefore, the System violated the public notification contained in Section 64463 and 64463.1.

DIRECTIVES

Ektimo Vineyards is hereby directed to take the following actions:

- 1. Comply with Section 64424, 64426, 64426.1, and 64463, Title 22, CCR in all future monitoring periods.
- 2. Pursuant to Title 22, CCR, Section 64424(d), submit all the results of bacteriological samples collected in **May 2015**.
- 3. On or before **June 29, 2015**, notify all persons served by the System of the MCL violation in conformance with Title 22, CCR, Sections

1 64463.4 and 64465. Appendix 2: Public Notification Template may
2 be used to fulfill this directive.

3
4 4. The System shall complete Appendix 3: Compliance Certification.
5 Submit it together with a copy of the public notification and the
6 laboratory results from sampling required in Directive 3 to the Division
7 on or before **July 6, 2015**.

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10 5. The System shall submit to the Division the information described in
11 Title 22, CCR, Section 64426(b)(2) on or before **July 6, 2015**.
12 Appendix 4: Positive Total Coliform Investigation, which is attached
13 to this document, may be used to fulfill this directive.

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16 The Division reserves the right to make such modifications to this Citation,
17 as it may deem necessary to protect public health and safety. Such
18 modifications may be issued as amendments to this Citation and shall be
19 effective upon issuance.

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21 Nothing in this Citation relieves the System of its obligation to meet the
22 requirements of the California Safe Drinking Water Act (CHSC, Division 104,
23 Part 12, Chapter 4, commencing with Section 116270), or any regulation,
24 standard, permit or order issued thereunder.
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1 All submittals required by this Citation shall be submitted to the Division
 2 at the following address: Janice M. Thomas, P.E.
 3 State Water Resources Control Board
 4 Division of Drinking Water
 5 50 D Street, Suite 200
 6 Santa Rosa, CA 95404

PARTIES BOUND

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 8 This Citation shall apply to and be binding upon the System, its owners,
 9 officers, directors, agents, employees, contractors, successors, and
 10 assignees.

SEVERABILITY

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 13 The directives of this Citation are severable, and the System shall comply
 14 with each provision thereof notwithstanding the effectiveness of any
 15 provision.
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FURTHER ENFORCEMENT ACTION

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 19 Division 104, Part 12, Chapter 4, (commencing with Section 116270) of the
 20 California Health and Safety Code authorizes the Division to: issue
 21 additional citations with assessment of penalties if the System continues to
 22 fail to correct a violation identified in a citation; take action to suspend or
 23 revoke a permit that has been issued to a public water system if the System
 24 has violated applicable law or regulations or has failed to comply with orders
 25 of the Division; and petition the superior court to take various enforcement
 26 measures against a public water system that has failed to comply with
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orders of the Division. The Division does not waive any further enforcement action by issuance of this citation.

Janice M. Thomas May 28, 2015
Janice M. Thomas, P.E., Sonoma District Engineer Date
Division of Drinking Water
STATE WATER RESOURCES CONTROL BOARD

Appendices (4):

- 1. Applicable Statutes and Regulations
- 2. Public Notification Template
- 3. Compliance Certification
- 4. Positive Total Coliform Investigation



Certified Mail No. 70141200 0001 1167 6559

**APPENDIX 1. APPLICABLE STATUTES AND REGULATIONS
FOR CITATION NO. 02_18_15C_028**

Section 116555 of the CHSC states in relevant part:

- (a) Any person who owns a public water system shall ensure that the system does all of the following:
- (1) Complies with primary and secondary drinking water standards.

Section 116650 of the CHSC states in relevant part:

- (a) If the department 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 department 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 department 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 (CCR), Section 64424 states in relevant part:

- (a) If a routine sample is total coliform-positive, the water supplier shall collect a repeat sample set as described in paragraph (a)(1) within 24 hours of being notified of the positive result. The repeat samples shall all be collected within the same 24 hour time period. A single service connection system may request that the Department allow the collection of the repeat sample set over a four-day period.
 - (1) For a water supplier that normally collects more than one routine sample a month, a repeat sample set shall be at least three samples for each total coliform-positive sample. For a water supplier that normally collects one or fewer samples per month, a repeat sample set shall be at least four samples for each total coliform-positive sample.
 - (2) If the water supplier is unable to collect the samples within the 24-hour time period specified in subsection (a) or deliver the samples to the laboratory within 24 hours after collection because of circumstances beyond its control, the water supplier shall notify the Department within 24 hours. The Department will then determine how much time the supplier will have to collect the repeat samples.
- (b) When collecting the repeat sample set, the water supplier shall collect at least one repeat sample from the sampling tap where the original total coliform-positive sample was taken. Other repeat samples shall be collected within five service connections upstream or downstream of the original site. At least one sample shall be from upstream and one from downstream unless there is no upstream and/or downstream service connection.
- (c) If one or more samples in the repeat sample set is total coliform-positive, the water supplier shall collect and have analyzed an additional set of repeat samples as specified in subsections (a) and (b). The supplier shall repeat this process until either no coliforms are detected in one complete repeat sample set or the supplier determines that the MCL for total coliforms specified in §64426.1 has been exceeded and notifies the Department.
- (d) If a public water system for which fewer than five routine samples/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. A water supplier may request the Department waive the requirement to collect at least five routine samples the following month, but a waiver will not be granted solely on the basis that all repeat samples are total coliform-negative. To request a waiver, one of the following conditions shall be met:

- (1) The Department conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect public health.
- (2) The Department determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with §64426.1.

California Code of Regulations (CCR), Section 64426 states in relevant part:

- (a) Any of the following criteria shall indicate a possible significant rise in bacterial count:
 - (1) A system collecting at least 40 samples per month has a total coliform-positive routine sample followed by two total coliform-positive repeat samples in the repeat sample set;
 - (2) A system has a sample which is positive for fecal coliform or E. coli; or
 - (3) A system fails the total coliform Maximum Contaminant Level (MCL) as defined in §64426.1.
- (b) When the coliform levels specified in subsection (a) are reached or exceeded, the water supplier shall:
 - (1) Contact the Department by the end of the day on which the system is notified of the test result or the system determines that it has exceeded the MCL, unless the notification or determination occurs after the Department office is closed, in which case the supplier shall notify the Department within 24 hours; and
 - (2) Submit to the Department information on the current status of physical works and operating procedures which may have caused the elevated bacteriological findings, or any information on community illness suspected of being waterborne. This shall include, but not be limited to:
 - (A) Current operating procedures that are or could potentially be related to the increase in bacterial count;
 - (B) Any interruptions in the treatment process;
 - (C) System pressure loss to less than 5 psi;
 - (D) Vandalism and/or unauthorized access to facilities;
 - (E) Physical evidence indicating bacteriological contamination of facilities;
 - (F) Analytical results of any additional samples collected, including source samples;
 - (G) Community illness suspected of being waterborne; and
 - (H) Records of the investigation and any action taken.

California Code of Regulations (CCR), Section 64426.1 states in relevant part:

- (b) A public water system is in violation of the total coliform MCL {maximum contaminant level} 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; or
 - (3) Any repeat sample is fecal coliform-positive or E. coli-positive; or
 - (4) Any repeat sample following a fecal coliform-positive or E. coli-positive routine sample is total coliform-positive.
- (c) If a public water system is not in compliance with paragraphs (b)(1) through (4), during any month in which it supplies water to the public, the water supplier shall notify the Department by the end of the

business day on which this is determined, unless the determination occurs after the Department office is closed, in which case the supplier shall notify the Department within 24 hours of the determination. The water supplier shall also notify the consumers served by the water system. A Tier 2 Public Notice shall be given for violations of paragraphs (b)(1) or (2), pursuant to section 64463.4. A Tier 1 Public Notice shall be given for violations of paragraphs (b)(3) or (4), pursuant to section 64463.1.

California Code of Regulations (CCR), Section 64463 states in relevant part:

- (a) Each public (community, nontransient-noncommunity and transient-noncommunity) water system shall give public notice to persons served by the water system pursuant to this article.
- (b) Each water system required to give public notice shall submit the notice to the Department, in English, for approval prior to distribution or posting, unless otherwise directed by the Department.

California Code of Regulations (CCR), Section 64463.1 states in relevant part:

- (a) A water system shall give public notice pursuant to this section and 64465 if any of the following occurs:
 - (1) Violation of the total coliform MCL when:
 - (A) Fecal coliform or E. coli are present in the distribution system; or
 - (B) When any repeat sample tests positive for coliform and the water system fails to test for fecal coliforms or E. coli in the repeat sample.
- (b) As soon as possible within 24 hours after learning of any of the violations in subsection (a) or being notified by the Department that it has determined there is a potential for adverse effects on human health [pursuant to paragraph (a)(4), (5), or (6)], the water system shall:
 - (1) Give public notice pursuant to this section;
 - (2) Initiate consultation with the Department within the same timeframe; and
 - (3) Comply with any additional public notice requirements that are determined by the consultation to be necessary to protect public health.

California Code of Regulations (CCR), Section 64463.4 states in relevant part:

- (a) A water system shall give public notice pursuant to this section if any of the following occurs:
 - (1) Any violation of the MCL, MRDL, and treatment technique requirements, except:
 - (A) Where a Tier 1 public notice is required under section 64463.1; or
 - (B) Where the Department determines that a Tier 1 public notice is required, based on potential health impacts and persistence of the violations;
- (b) A water system shall give the notice as soon as possible within 30 days after it learns of a violation or occurrence specified in subsection (a), except that the water system may request an extension of up to 60 days for providing the notice. This extension would be subject to the Department's written approval based on the violation or occurrence having been resolved and the Department's determination that public health and welfare would in no way be adversely affected. In addition, the water system shall:
 - (1) Maintain posted notices in place for as long as the violation or occurrence continues, but in no case less than seven days;
 - (2) Repeat the notice every three months as long as the violation or occurrence continues. Subject to the Department's written approval based on its determination that public health would in no way be adversely affected, the water system may be allowed to notice less frequently but in no case less than once per year. No allowance for reduced frequency of notice shall be given in the case of a total coliform MCL violation or violation of a Chapter 17 treatment technique requirement;
- (c) A water system shall deliver the notice, in a manner designed to reach persons served, within the required time period as follows:
 - (2) Unless otherwise directed by the Department in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, noncommunity water systems shall give the public notice by:
 - (A) Posting in conspicuous locations throughout the area served by the water system; and

- (B) Using one or more of the following methods to reach persons not likely to be reached by a public posting:
1. Publication in a local newspaper or newsletter distributed to customers;
 2. E-mail message to employees or students;
 3. Posting on the Internet or intranet; or
 4. Direct delivery to each customer.

California Code of Regulations (CCR), Section 64465 states in relevant part:

- (a) Each public notice given pursuant to this article, except Tier 3 public notices for variances and exemptions pursuant to subsection (b), shall contain the following:
- (1) A description of the violation or occurrence, including the contaminant(s) of concern, and (as applicable) the contaminant level(s);
 - (2) The date(s) of the violation or occurrence;
 - (3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through G;
 - (4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in drinking water;
 - (5) Whether alternative water supplies should be used;
 - (6) What actions consumers should take, including when they should seek medical help, if known;
 - (7) What the water system is doing to correct the violation or occurrence;
 - (8) When the water system expects to return to compliance or resolve the occurrence;
 - (9) The name, business address, and phone number of the water system owner, operator, or designee of the water system as a source of additional information concerning the public notice;
 - (10) A statement to encourage the public notice recipient to distribute the public notice to other persons served, using the following standard language: —Please share this information with all the other people who drink this water, especially those who may not have received this public 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; and
 - (11) For a water system with a monitoring and testing procedure violation, this language shall be included: —We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [*compliance period dates*], we [*did not monitor or test*' or *did not complete all monitoring or testing*] for [*contaminant(s)*], and therefore, cannot be sure of the quality of your drinking water during that time.
- (c) A public water system providing notice pursuant to this article shall comply with the following multilingual-related requirements:
- (1) For a Tier 1 public notice:
 - (A) The notice shall be provided in English, Spanish, and the language spoken by any non-English-speaking group exceeding 10 percent of the persons served by the public water system, and the notice shall include a telephone number or address where such individuals may contact the public water system for assistance; and
 - (B) If any non-English-speaking group exceeds 1,000 persons served by the public water system, but does not exceed 10 percent served, the notice shall include information in the appropriate language(s) regarding the importance of the notice, and the telephone number or address where such individuals may contact the public water system to obtain a translated copy of the notice from the public water system or assistance in the appropriate language;
 - (2) For a Tier 2 or Tier 3 public notice:
 - (A) The notice shall contain information in Spanish regarding the importance of the notice, or contain a telephone number or address where Spanish-speaking residents may contact the public water system to obtain a translated copy of the notice or assistance in Spanish; and
 - (B) When a non-English speaking group other than Spanish-speaking exceeds 1,000 residents or 10 percent of the residents served by the public water system, the notice shall include:
 1. Information in the appropriate language(s) regarding the importance of the notice; or
 2. A telephone number or address where such residents may contact the public water system to obtain a translated copy of the notice or assistance in the appropriate language; and

- (3) For a public water system subject to the Dymally-Alatorre Bilingual Services Act, Chapter 17.5, Division 7, of the Government Code (commencing with section 7290), meeting the requirements of this Article may not ensure compliance with the Dymally-Alatorre Bilingual Services Act.
- (d) Each public notice given pursuant to this article shall:
- (1) Be displayed such that it catches people's attention when printed or posted and be formatted in such a way that the message in the public notice can be understood at the eighth-grade level;
 - (2) Not contain technical language beyond an eighth-grade level or print smaller than 12 point; and
 - (3) Not contain language that minimizes or contradicts the information being given in the public notice.

**Appendix 64465-A. Health Effects Language
Microbiological Contaminants.**

<i>Contaminant</i>	<i>Health Effects Language</i>
Fecal coliform/E. coli	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

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.

**Ektimo Vineyards DRINKING WATER IS CONTAMINATED
WITH FECAL COLIFORM OR *E. COLI* BACTERIA**

Fecal coliform or *E. coli* bacteria were found in the drinking water supply on March 13, 2015. Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. 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, businesses, and schools). You can do this by posting this notice in a public place or giving out copies by hand or mail.

What should I do?

DO NOT DRINK THE WATER. USE BOTTLED WATER OR BOIL YOUR TAP WATER BEFORE USING. Bring water to a boil and let it continue to boil for one minute. Use boiled or bottled water for drinking, cooking, making ice, brushing teeth, and washing dishes until further notice.

An alternative method of purification for residents who do not have gas or electricity available is to use fresh liquid household bleach (Clorox, Purex, etc.). To do so, add 8 drops (or 1/4 teaspoon) of bleach per gallon of clear water or 16 drops (1/2 teaspoon) per gallon of cloudy water. Mix thoroughly and allow to stand for 30 minutes before using. A chlorine-like taste and odor will result from this purification procedure and is an indication that adequate disinfection has taken place. Water purification tablets may also be used by following the manufacturer's instructions.

Drinking contaminated water poses a special risk for infants, young children, the elderly, and people with compromised immune systems. 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 the EPA's Safe Drinking Water Hotline at (800) 426-4791.

What happened?

Has the problem been resolved? What corrective actions have been taken to prevent this violation from occurring in the future?

APPENDIX 2. PUBLIC NOTIFICATION TEMPLATE (TIER 1)

We will inform you when tests show there is no bacteria in the water supply. We anticipate resolving this problem by _____.

Persons wishing more information should contact:

(name)

(address)

(phone number)

APPENDIX 3. COMPLIANCE CERTIFICATION

Citation Number 02_18_15C_028

Name of Water System: **Ektimo Vineyards**

System Number: **4901404**

I certify that the users of the water supplied by this water system were notified of the bacteriological violations of Title 22, California Code of Regulations, Section 64426.1 and 64463.1 for the compliance period of March 2015 and that the following actions, as directed in 02_18_15C_028 have been completed:

<u>Required Action</u>	<u>Date Completed</u>
(Citation Directive 2) Submit Laboratory Results of Bacteriological Samples Collected and Analyzed in May 2015	
(Citation Directive 3) Public Notification – Post and Other Notification Methods completed.	
(Citation Directive 5) Complete and Submit <i>Positive Total Coliform Investigation</i>	

Signature of Water System Representative

Date

Attach a copy of the Public Notification posted and the laboratory results from the water samples.

THIS FORM MUST BE COMPLETED AND RETURNED TO THE DIVISION NO LATER THAN JULY 6, 2015

Disclosure: Be advised that Section 116725 and 116730 of the California Health and Safety Code states 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 each 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 county jail not to exceed one year, or by both the fine and imprisonment.

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

This form is intended to assist public water systems in completing the investigation required by the State of California Water Resources Control Board – Division of Drinking Water (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

Entity Name:	Name	System Address & Email	Telephone Number
PWSID NUMBER:	System Type:		
Operator in Responsible Charge (ORC)			
Person that collected TC samples if different than ORC			
System Owner			
Certified Laboratory for Microbiological Analyses			
Date Investigation Completed:			
Month(s) of Total Coliform MCL Failure:			

INVESTIGATION DETAILS

SOURCE	WELL (name)	COMMENTS <small>(attach additional pages if needed)</small>				
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. Are there any connections to the raw water piping that could be cross connections? (describe all connections in comments)						
h. Is the wellhead secured to prevent unauthorized access?						
i. To what treatment plant (name) does this well pump?						
j. How often does the System take a raw water total coliform (TC) test?						
k. Provide the date and result of the last TC test at this location						
2. Inspect and review records for surface water source (if applicable)						
a. Have there been any events in the watershed or near the intake that might have contributed to TC+ or EC+ results? (Describe)						

TREATMENT

TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
1. If continuous chlorination treatment is provided, was there any equipment failure?					
a. Did the distribution system maintain chlorine residual?					
b. Was emergency chlorination initiated? If yes, for how long?					
c. Did the distribution system lose chlorine residual?					

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TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
2. If routine chlorination is not provided, was emergency chlorination initiated? If Yes, when?					
3. Inspect each point where disinfectant is added and report					
a. Is the disinfectant feed pump feeding disinfectant?					
b. What is the feed rate of disinfectant in ml/minute?					
c. What is the concentration of the disinfectant solution being fed? (percent or mg/l of chlorine as HOCl)					
d. By what method was the concentration of solution determined? (ex: measured, manufacturer's literature)					
e. What is the age (days) of the disinfectant solution currently being used at this treatment location?					
f. What is the raw water flow rate at the point where disinfectant is added in gallons per minute?					
g. What is the total chlorine residual measured immediately downstream from the point of application?					
h. What is the free chlorine residual measured immediately downstream from the point of application?					
i. What is the contact time in minutes from the point of disinfectant application to the first customer?					

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 an 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 areas 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 the weather conditions at the time of the positive sample (rainy, windy,				

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SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify)
and sunny)?				

STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
1. Is each tank locked to prevent unauthorized access?					
2. Are all vents of each tank screened down-turned to prevent dust and dirt from entering the tank?					
3. Is the overflow on each tank screened?					
4. Are there any unsealed openings in the tank such as access doors, water level indicators hatches, etc.?					
5. Is the roof/cover of the tank sealed and free of any leaks?					
6. Is the tank above ground or buried?					
a. If buried or partially buried, are there provisions to direct surface water away from the site.					
b. Has the interior of the tank been inspected to identify any sanitary defects, such as root intrusion?					
8. Does the tank "float" on the distribution system or are there separate inlet and outlet lines?					
9. What is the measured chlorine residual (total/free) of the water exiting the storage tank today ?					
10. What is the volume of the storage tank in gallons?					
11. Is the tank baffled?					
12. Prior to the TC+ or EC+, what was the previous date item #1-7 were checked and documented?					

DISTRIBUTION SYSTEM	SYSTEM RESPONSES
1. What is the minimum pressure maintained in the distribution system?	
2. Did pressure in the distribution system drop to less than 5 psi prior to positive bacti?	
3. Has the distribution system been worked on within the last week? (taps, hydrant flushing, main breaks, mainline extensions, etc.) If yes, provide details.	
4. Are there any signs of excavations near the distribution system not under the direct control of maintenance staff?	
5. Was the distribution system inspected for mainline leaks? Was there 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. Does the system have a written flushing procedure?	

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DISTRIBUTION SYSTEM	SYSTEM RESPONSES
9. Does the system have an active cross-connection control program?	
10. What is name & phone number of the 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?	
BOOSTER STATION	Response
1. Does the system have a booster pump? How many?	
2. Does the system have a standby booster pump if the main pump fails?	
3. Prior to bacteriological quality problems, did a booster pump fail?	
4. Was there standing water, leakage at the booster station?	
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, were any complaints received of any customers' illness suspected of being waterborne? How many?	
5. What were the symptoms of illness if complaints were received 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.
5. Updated source water assessment(s) (DWSAP) if there have been changes to well construction or potentially contaminating activities (PCA list) since last inspection.

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

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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:** _____