



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

DRINKING WATER FIELD OPERATIONS BRANCH
50 D STREET, SUITE 200, SANTA ROSA, CA 95404
PHONE: (707) 576-2145 / FAX: (707) 576-2722
INTERNET ADDRESS: www.cdph.ca.gov



ARNOLD SCHWARZENEGGER
Governor

June 27, 2013

Mr. Stanley Hudson
Westlake SDA School
Board President
6585 Westlake Rd.
Lakeport, CA 95453

**Re: Westlake SDA School (System No. 1700621)
Compliance Order #02-03-13R-003-1700621-42**

Dear Mr. Hudson,

Sections 64650 through 64665 of Title 22 of the California Code of Regulations require that multi-barrier treatment sufficient to obtain 3-log *Giardia* reduction and 4-log virus reduction be installed on surface water sources and groundwater sources under the direct influence of surface water. The enclosed Compliance Order #02-03-13R-003-1700621-42 has been issued to Westlake SDA School (System) for failure to provide appropriate treatment for a source which has been identified by the California Department of Public Health (Department) as groundwater under the direct influence of surface water.

Please review the compliance order carefully as it contains legally binding provisions to which the School must adhere. Non-compliance with the order may result in the Department taking further enforcement actions.

Please be aware that the Department does have a State Revolving Fund (SRF) program that may be applicable to your water system for either low interest loans and/or grant funds for water treatment facility planning and/or construction improvements. Each year the funding program has a pre-application period, called the "Universal Pre-Application Process", when water systems can put in an initial request for funding, without obligation to take funding if it is offered. This year, the pre-application period for 2013 is from May 8, 2013 to July 8, 2013. If the July 8th deadline is missed, the water system would likely need to wait for a year to have the opportunity for funding again. The Department highly recommends that you investigate this option.

More funding information is available on our website at:

<http://www.cdph.ca.gov/certlic/drinkingwater/Pages/UniversalPreapplication.aspx>

With you or your water treatment operator's help, we will be happy to help you fill in the "Universal Pre-application" on our website to ensure that it meets the July 8th deadline. If you have any questions regarding this compliance order or the funding process, please contact Yan Nusinovich at 707-576-2729 or yan.nusinovich@cdph.ca.gov.

Sincerely,



Michelle F. Frederick, P.E.
District Engineer, Mendocino District

Enclosures: Compliance Order 02-03-13R-003-1700621-42
Chemical Monitoring Schedule

c: Ray Ruminski, Environmental Health Director
Lake County Environmental Health
922 Bevins Court
Lakeport, CA 95453

Richard Thibodeaux, Operator
Dunken Pumps
2615 South Main Street
Lakeport, CA 95453

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Compliance Order No. 02-03-13R-003-1700621-42

**STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH**

IN RE: Westlake SDA School
Water System No. 1700621
6585 Westlake Rd.
Lakeport, CA 95453

TO: Mr. Stanley Hudson
Board President, Westlake SDA School

Date Issued: June 27, 2013

**COMPLIANCE ORDER FOR VIOLATION OF HEALTH AND SAFETY CODE
SECTION 116555(a)(3) AND TITLE 22, CALIFORNIA CODE OF
REGULATIONS
SECTIONS 64652(a) AND 64653(a)**

Section 116655 of the California Health and Safety Code (CHSC) authorizes the issuance of an order for failure to comply with a requirement of the California Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any permit, regulation, or standard issued thereunder.

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2 The Division of Drinking Water and Environmental Management of the State of
3 California Department of Public Health (Department) hereby issues a
4 compliance order (Order) to Westlake SDA School (System) for failure to comply
5 with Health and Safety Code Section 116555(a)(3) and Title 22, California Code
6 of Regulations (CCR) sections 64652(a) and 64653(a).
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9 **STATEMENT OF FACTS**

10 The System is located approximately 6 miles north of the city of Lakeport in Lake
11 County, California. The System serves approximately 40 students and staff in
12 two school buildings. The System is classified as a nontransient noncommunity
13 public water system.
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16 The domestic water source used by the System is a well. The well has a PVC
17 pipe, surrounded by gravel, within a larger steel casing. The exact construction
18 details of the well are unknown. The well has been monitored for bacteriological
19 data monthly since January 2006 and during portions of 2003. Table 1, on the
20 next page, provides the range of total coliform and *E. coli* bacteriological sample
21 results from the well source and the distribution system by year from 2006
22 through 2013.
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3 **Table 1. Bacteriological Results Summary for Total Coliform and/or *E. coli***

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5 Year	Total Coliform Range (MPN)	Total Coliform Detections	<i>E. coli</i> Range (MPN)	<i>E. coli</i> Detections
6 2006	<1-990	10	<1-90	4
7 2007	<1-200	5	<1-<1	0
8 2008	<1-160	4	<1-<1	0
9 2009	<1->200.5	11	<1-1	1
10 2010	<1->200.5	7	<1-3.1	2
11 2011	<1-23.8	9	<1-<1	0
12 2012	<1->200.5	6	<1-2	2
13 2013 (to date)	<1-38.4	4	<1-<1	0

14 Department staff conducted a field inspection of the System on March 18, 2013.

15 During the inspection, the source and associated treatment facilities were

16 evaluated. A bacteriological sample was collected from the raw water at the well

17 source, the turbidity of the raw water was tested, and the construction and

18 location of the well was discussed with the water system operator. The

19 bacteriological sample showed that the raw water in the well contained a most

20 probable number (MPN) of total coliforms of 4.1 per 100 mL and that *E. coli* were

21 not detected. The raw water had a turbidity of 20.4 NTU, where the secondary

22 standard for groundwater is 5 NTU. Discussion of the source construction

23 revealed that a ¼" PVC lining was installed within the original steel casing and

24 then surrounded by gravel, which is large enough to allow surface water down

25 into the aquifer. The housing of the well is located in an area susceptible to

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2 runoff from rain events, since a ridge in the hill directs storm water straight to the
3 well house area.
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6 In an analysis of the historical bacteriological data, the Department found that
7 the source has a history of frequent total coliforms and *E. coli* present. The
8 Department also found a history of high aluminum and iron in the source.
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11 Based on the historical bacteriological data and poor construction of Well 01, it
12 has been designated by the Department as groundwater under the direct
13 influence of surface water, and it is therefore subject to the filtration and
14 disinfection requirements of Sections 64650 through 64665 of the CCR, Chapter
15 22, Surface Water Treatment Regulations (SWTR). The water system has
16 historically and currently provides bottled water to its students for drinking water
17 purposes. While the Department agrees with this measure given the poor
18 source water quality, it is not an adequate long-term solution nor does it meet
19 the requirements of the regulations.
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23 On April 29, 2013, the Department sent the System correspondence stating that
24 the source water was determined to be groundwater under the direct influence of
25 surface water and required the System to implement interim measures to protect
26 the well source and obtain 4-log virus inactivation through disinfection by June 1,
27 2013.



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3 The existing transmission and treatment facilities are as follows. From Well 01,
4 the raw water is pumped out, receives sodium hypochlorite injection for
5 disinfection, and then flows to a 120-gallon storage tank. After the tank, the
6 water flows through 600 feet of 1.25 inch pipe to the school buildings.
7

8 **AUTHORITIES**

9 California Health and Safety Code section 116555(a)(3) states in relevant part:

10 (a) Any person who owns a public water system shall
11 ensure that the system does all of the following:

12 (3) Provides a reliable and adequate supply of
13 pure, wholesome, healthful, and potable water.

14 California Health and Safety Code section 116655 states in relevant part:

15 (a) Whenever the department determines that any
16 person has violated or is violating this chapter, or any
17 permit, regulation, or standard issued or adopted
18 pursuant to this chapter, the director may issue an
order doing any of the following:

19 (1) Directing compliance forthwith.

20 (2) Directing compliance in accordance with a
21 time schedule set by the department.

22 (3) Directing that appropriate preventive action
23 be taken in the case of a threatened violation.

24 (b) An order issued pursuant to this section may
25 include, but shall not be limited to, any or all of the
following requirements:

26 (1) That the existing plant, works, or system be
repaired, altered, or added to.

27 (2) That purification or treatment works be



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installed.

(3) That the source of the water supply be changed.

(4) That no additional service connection be made to the system.

(5) That the water supply, the plant, or the system be monitored.

(6) That a report on the condition and operation of the plant, works, system, or water supply be submitted to the department.

California Code of Regulations, Title 22, section 64652(a) states in relevant part:

(a) Each supplier using an approved surface water shall provide multibarrier treatment that meets the requirements of this chapter and reliably ensures at least:

(1) A total of 99.9 percent reduction of *Giardia lamblia* cysts through filtration and disinfection; and

(2) A total of 99.99 percent reduction or viruses through filtration and disinfection.

California Code of Regulations, Title 22, section 64653(a) states in relevant part:

(a) All approved surface water utilized by a supplier shall be treated using one of the following filtration technologies unless an alternative process has been approved by the Department pursuant to subsections (f), (g), and (h):

(1) Conventional filtration treatment

(2) Direct filtration treatment

(3) Diatomaceous earth filtration

(4) Slow sand filtration.



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DETERMINATIONS

Based on the above-described Statement of Facts, the Department determines that the System has violated the following:

1. CHSC Section 116555(a)(3) in that the System does not have sufficient treatment to provide a reliable and adequate supply of pure, wholesome, healthful, and potable water.
2. CCR Title 22, Section 64652(a) in that the System's treatment facilities only provide one barrier of treatment for the reduction of *Giardia* cysts and viruses via disinfection.
3. CCR Title 22, Section 64653(a) in that the System does not use any of the listed filtration technologies or an alternative process approved by the Department.

ORDER

Pursuant to Section 116655 of the CHSC, the Department and its Director hereby orders the System to do the following:

Directive 1. By **October 30, 2013**, the System shall submit to the Department for its approval a proposal that either:

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(a) Identifies or proposes the construction of a reliable groundwater source that meets the requirements of Title 22 of the CCR and the California Well Standards Bulletins 74-90 and 74-81 and specifies how the source will be connected to the water system; OR

(b) Proposes a plan and time schedule to bring the water system into compliance with the SWTR found in Chapter 22, Sections 64650 through 64665 of the CCR. If the System chooses to comply with this subdivision by proposing a plan, it must identify the source, and if the System proposes to use its existing source, then the plan shall include, at minimum, a preliminary design and specifications for the proposed surface water treatment plant. If the existing source is used, the treatment plant would also need to remove aluminum and iron; OR

(c) Proposes a plan to connect the System to another public water system that could sell water to the System that meets the requirements Title 22 of the CCR.

The System shall ensure that the Department-approved proposal required by Directive 1 is *operational* by **June 26, 2014**.

Directive 2. Post the Boil Water Notification (Attachment A) for students and staff in conformance with Section 116450 of the CHSC. The notification shall continue quarterly until the System is in compliance with the SWTR for its current source, switches to a new source not under



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2 direct influence of surface water, or connects to a public water system
3 that provides safe water. Specifically, this notice must be given by:
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5 a) Continuous posting of the Boil Water Notification at all sinks,
6 fountains, and kitchens. This posting must commence by
7 **September 1, 2013 or the first day of the 2013-2014 school**
8 **year, whichever occurs first.**
9

10 b) Hand delivery of the Boil Water Notification to all staff, students,
11 and students' parents. This delivery must be completed by
12 **September 1, 2013 or the first day of the 2013-2014 school**
13 **year, whichever occurs first.** This notification must be performed
14 on a quarterly basis until the System has fully complied with
15 Directive 1. New staff or students and their parents must also be
16 informed of the Boil Water Notification until the System is brought
17 into compliance by May 30, 2014, as required by Directive 1.
18

19 **Directive 3.** A representative of the System shall complete the attached
20 Proof of Notification form and return it to the Department by **September**
21 **10, 2013.** A copy of the Boil Water Notification that was posted and hand-
22 delivered to staff, students, and students' parents must be attached to this
23 Proof of Notification.
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25 **Directive 4.** The System shall ensure that its disinfection facilities are
26 functioning properly to obtain 4-log virus inactivation at all times. Pending
27 full compliance with Directive 1, reports of the daily water flow rate, daily



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water temperature, and daily chlorine residual shall be submitted to the Department. Daily entries of this data shall be made in a Department supplied spreadsheet and the spreadsheet shall be submitted on a monthly basis by the tenth day of the following month. The first of such reports shall be submitted to the Department by **September 10, 2013** for any open periods during the month of August 2013.

Directive 5. The System shall notify the Department within 24 hours of any free chlorine measurement that does not meet 4-log virus inactivation, as calculated based on the spreadsheet provided by the Department.

Directive 6. The System shall collect weekly samples for bacteriological analysis from the raw water source at the sample tap between the source and chlorination, and from the finished water in the distribution at the Boy's Room. All samples shall be tested for total coliform bacteria and *E. coli*. The source samples shall be analyzed using a method that allows enumeration of up to 2,400 total coliform organisms per 100 milliliters of sample. The results must be submitted to the Department by the 10th day of the following month.

Directive 7. The System shall contact the Department within 24 hours of being notified that a distribution system sample result is found to be total coliform-positive or a raw water sample is found to be *E. coli* positive.



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Directive 8. The System shall fill any space between the inner PVC casing and the outer steel casing of Well 01 with a grout annular seal, and reroute the storm water drainage away from Well 01 by **September 15, 2013**. The grout utilized shall be National Sanitation Foundation Standard 61 (NSF-61) approved for use in drinking water applications.

Directive 9. The System shall perform source chemical monitoring according to the attached source chemical monitoring schedule, which requires more frequent monitoring for aluminum than previous schedules.

The Department reserves the right to make such modifications to this Order as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Order and shall be effective upon issuance.

Nothing in this Order relieves the System of its obligation to meet the requirements of the California Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any permit, regulation, standard or order issued thereunder.

All submittals required by this Order shall be submitted to:

Ms. Michelle F. Frederick, District Engineer
Mendocino District
California Department of Public Health
50 D Street, Suite 200
Santa Rosa, CA 95404



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PARTIES BOUND

This Order shall apply to and be binding upon the System, its officers, directors, agents, employees, contractors, successors and assignees.

SEVERABILITY

The directives of this Order are severable, and the System shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

FURTHER ENFORCEMENT ACTION

Division 104, Part 12, Chapter 4, (commencing with section 116270) of the H&S Code authorizes the Department to: issue a citation with assessment of penalties for failure to comply with any order, in an amount not to exceed one thousand dollars (\$1,000) per day for each day the violation continues; take action to suspend or revoke a permit that has been issued to a public water system if the system has failed to comply with an order of the Department; and petition the superior court to take various enforcement actions against a public water system that has failed to comply with an order of the Department. The Department does not waive any further enforcement action by issuance of this Order.

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The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by the System, its employees, agents or contractors in carrying out activities pursuant to this Order, nor shall the State of California be held as a party to any contract entered into by the System or its agents in carrying out activities pursuant to the Order.



Stefan Cajina, P.E., Chief
North Coastal Region
Drinking Water Program

June 27, 2013
Date

CERTIFIED MAIL # 7012 2210 0002 1674 0625



COMPLIANCE CERTIFICATION

Compliance Order No. 02-03-13R-003-1700621-42

Name of Water System: Westlake SDA School

System Number: 1700621

Certification

As required by Section 116450 of the California Health and Safety Code, I notified the users of the water supplied by the Westlake SDA School public water system of the violations of Title 22, California Code of Regulations (CCR). I complied with the directives of this compliance order as indicated below:

Required Action	Date Begun
Boil Water Order – Continuous Posting*	<input type="text"/>
Boil Water Order - Hand Delivery to Staff, Students, and Students' Parents*	<input type="text"/>
_____ Signature of Water System Representative	_____ Date

*Attach a copy of the posted and delivered notice.

THIS FORM MUST BE COMPLETED AND RETURNED TO THE DEPARTMENT BY SEPTEMBER 10, 2013

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.

BOIL WATER NOTICE-WESTLAKE SDA SCHOOL

Failure to follow this advisory could result in stomach or intestinal illness.

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

Our water system uses a well that was found to be under the direct influence of surface water by the California Department of Public Health. The well was found to be improperly constructed for a groundwater source, and it has tested positive for bacteriological contamination by *E. coli* multiple times. Surface water has more stringent treatment, monitoring, and reporting requirements than groundwater, so our water system is being required to install surface water treatment or to switch to a new source, such as a properly constructed well or city water. Furthermore, the well has had intermittent high concentrations of aluminum and iron in the past, and is currently undergoing testing to evaluate the need for aluminum and iron removal.

The California Department of Public Health in conjunction with the Lake County Environmental Health Department and the Westlake SDA School water system are advising users of the Westlake SDA School water system to use boiled tap water or bottled water for drinking and cooking purposes as a safety precaution until surface water treatment is installed or a new source of water is hooked up. We will inform you when the water is safe to drink and you no longer need to boil your tap water. It is currently unknown when this boil water notice will be lifted, but the School is evaluating potential options.

DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST. Bring all water to a boil, let it boil for one (1) minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking and food preparation until further notice. Boiling kills bacteria and other organisms in the water. This is the preferred method to assure that the water is safe to drink.

Optional alternatives:

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

For more information call:

Water Utility contact: Mr. Stanley Hudson at 707-263-7931

California Department of Public Health: Mendocino District Office at 707-576-2145

Please share this information with all the other people who may drink this water, especially those who may not have received this notice directly.