1 North Davis Meadows PWS 5700788 2 Compliance Order No 12-09 3 **County of Yolo** Health Department 4 5 **Environmental Health Division** 6 7 Compliance Order No: 12-09 8 9 RE: North Davis Meadows, Water System No: 5700788 10 To: Regina Espinosa, CSA Coordinator 11 County of Yolo 12 292 West Beamer Street Woodland, Ca 95695 13 Issued: December 1, 2009 14 15 16 COMPLIANCE ORDER FOR NONCOMPLIANCE WITH NITRATE DRINKING 17 WATER STANDARDS 18 19 The California Health and Safety code (CHSC), Division 104, Part 12, Chapter 4, Article 9, 20 Section 116655, authorizes the issuance of a Compliance Order for failure to comply with 21 requirements of chapter 4 (California Safe Drinking Water Act), or any regulation, standard, 22 permit, or order issued hereunder. This Compliance Order is being issued to the North Davis 23 Meadows Public Water System (hereinafter Water System) for failing to comply with regulations 24 and standards described hereunder. 25

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The County of Yolo, Health Department, Environmental Health Division, herein referred as the

Department is the Local Enforcement Agency charged with enforcing the Compliance Order.

#### FINDINGS

The Water System is a community water system serving an approximately population of 250 people through 95 service connections.

The Water System has two active groundwater sources and one storage tank providing 30,000 gallons of total water storage. The newer of the two wells, North Davis Meadows 2 (NDM2) has been subjected to at least monthly nitrate test for the past few years due to the nitrates levels approaching the Maximum Contaminate Level (MCL). The MCL allowable is 45 milligrams per liter (ppm). A packer was temporarily installed on NDM2 in June 2009 to reduce the levels of nitrates. Nitrate results since the packer installed have been reduced and have ranged between 32 and 45 ppm. This well remains connected to the water system. NDM2 meets the current domestic water demand but is not adequate by itself for fire protection for the community.

The older well North Davis Meadows 1 (NDM1) has been subjected to at least quarterly nitrate testing for the past few years until in September 2009 the nitrate level exceeded the MCL, requiring the Water System to notify users of the unsafe water condition. This well was taken off line on September 11, 2009 and periodically tested with the prospect of the levels of nitrate dropping to below the MCL. On September 16, 2009, NDM1 was reconnected to the system in order to meet public safety capacity for fire protection. The Water System thus issued a second unsafe drinking water notification to its users.

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NDM1 has shown levels of nitrates above 45 ppm through October 19, 2009. NDM1 nitrate levels have been below 45 ppm since October 26, 2009.

## **CONCLUSIONS OF LAW**

Based on the above findings, the Department has determined the Water System has violated provisions contained in the California Health and Safety Code (CHSC) and Title 22, California Code of Regulations (CCR)

- 1. CHSC, Section 116555 (a): Any person who owns a public water system shall ensure that the system does all of the following:...(3) Provides a reliable and adequate supply of pure, wholesome, healthful and potable water.
- 2. CCR, Section 64554 (a): At all times, a public water system's water source(s) shall have the capacity to meet the system's maximum day demand (MDD).

#### **ORDER**

To ensure that the water supplied by the Water System is at all times safe, wholesome, healthful, and potable, and pursuant to Section 116555 of the CHSC, the system is ordered to take the following actions:

1. The Water System shall provide public notification in accordance with Section 64463.1 of the CCR of its inability to reliably meet the nitrate MCL. Notification shall be repeated monthly for as long as the NDM1 is connected to the system. The public notification

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wording shall highlight the population at risk should use water from other approved sources. See attachment A.

- 2. Proof of public notification shall be provided to the Department following each monthly notification by the 10<sup>th</sup> day of the month following notification, using the form provided as attachment B.
- 3. The system is to be operated to minimize water with excessive nitrates from being delivered to customers. To remain the lead well, NDM1 must remain below the MCL. To verify this, sampling for nitrates must be done twice weekly. Should the nitrate levels exceed the MCL, NDM2 must be placed into the lead for providing water that meets the standards.
- 4. In accordance with Section 64558 (a) of the CCR the Department directs the water system to submit a Source Capacity Planning Study (Study). By June 1, 2010, the Water System shall submit to the Department for review and approval the Study, Plans and Specifications to correct the water source capacity and water quality problem, and a time schedule to complete the improvements and return the water system to compliance. The Study is to include the options of: (a) drilling new well(s); (b) rehabilitating existing well(s); (c) installing treatment to existing water sources and (d) connecting to other community water system(s).
- 5. By December 1, 2010, the Water System shall complete all improvements to the water system to correct the water source capacity and water quality problem and return it to compliance with the Sections 116555 of the H&SC, Section 64431 and 64554 of the CCR by ensuring that the system is provided with a reliable and adequate supply of pure

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wholesome, healthful, and potable water, which is in compliance with all primary and secondary drinking water standards.

- 6. Beginning by no later than January 1, 2010, and continuing until the Water System has achieved compliance with item # 4 above, the Water System shall submit a quarterly Report of Compliance to the Department describing the following:
  - a. Operational summary of NDM1 and NDM2 and corresponding nitrate results including dates the well(s) served the water system.
  - b. Compliance milestones achieved.
  - c. Proposed revisions of the Compliance Report, if any.
  - d. Any new information relative to achieving compliance, if any.
- 7. The Water System shall submit a written response to the Department by December 21, 2009, indicating its willingness to comply with the directives of this Compliance Order.

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

Wayne Taniguchi, REHS

Supervising Environmental Health Specialist

Yolo County Environmental Health

137 N. Cottonwood, Suite 2400

Woodland, Ca 95695

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the schedule and other requirements of this Order.

employees, contractors, successors, and assignees.

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5 reason, whether within or beyond its control, and if the Water System notifies the Department in

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actions.

PARTIES BOUND

**SEVERABILITY** 

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**PENALTIES** 

every provision thereof notwithstanding the effectives of any provisions.

If the Water System is unable to perform the tasks specified in this Compliance Order for any

writing no less than thirty days in advance of the due date, the Department may extend the time

for performance if the Water System demonstrates that it has used its best efforts to comply with

The County of Yolo shall not be liable for any injuries or damages to persons or property

resulting from acts of omissions by the Water System, its employees, agents, or contractors in

carrying out activities pursuant to this order, nor shall the County of Yolo be held as a party to

any contract entered into by the Water System or its agents in carrying out activities pursuant to

This order shall apply to and be binding upon to the Water System, its officers, directors, agents,

The requirements of this order are severable, and the Water System shall comply with each and

this order. By issuance of this order, the Department does not waive any future enforcement

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4	Failure to comply with any provision or compliance schedule of this Compliance Order may		
5	result in the Department taking additional enforcement actions and imposing penalties of up to		
6	\$200 per day on the Water System.		
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8			
9	12-2-09	Wayn D. Dringsol	
10	Date	Wayne Y. Taniguchi, R.E.H.S.	
11		Supervising Environmental Health Specialist	
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13	Attachments:		
14	Attachment A: Tier 1 Nitrate Notice template		
15	Attachment B: Proof of Notification		
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18	cc: Water File W2037		
19	David Lancaster, P.E., Sacramento District Engineering;		
20	Dianna Jensen, City of Davis		
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# **Instructions for Tier 1 Nitrate Notice Template**

## **Template Attached**

Since exceeding the nitrate maximum contaminant level is a Tier 1 violation, you must provide public notice to persons served as soon as practical but within 24 hours after you learn of the violation [California Code of Regulations, Title 22, Chapter 15, Section 64463.1(b)]. During this time period, you must also contact the Department. Each water system required to give public notice must submit the notice to the Department for approval prior to distribution or posting, unless otherwise directed by the Department [64463(b)]. You should also coordinate with your local health department.

### **Notification Methods**

You must use one or more of the following methods to deliver the notice to consumers [64463.1(c)]:

- Radio or television
- Posting in conspicuous locations throughout the area served by the water system
- Hand delivery to persons served by the water system

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since notice must be provided in a manner reasonably calculated to reach all persons served. If you post or hand-deliver, print your notice on letterhead, if available.

The notice attached is appropriate for hand delivery or a newspaper notice. However, you may wish to modify it before using it for radio, TV, or posting. If you do, you must still include all required elements and leave the health effects and notification language in italics unchanged. This language is mandatory [64465].

## Multilingual Requirement

<u>Spanish.</u> Each public notice must contain information in Spanish regarding (1) the importance of the notice or (2) contain a telephone number or address where Spanish-speaking residents may contact the water system to obtain a translated copy of the public notice or assistance in Spanish.

Non-English Speaking Groups Other than Spanish-Speaking. For each group that exceeds 1,000 residents or 10% of the residents in the community served, whichever is less, the public notice must (1) contain information in the appropriate language(s) regarding the importance of the notice or (2) contain a telephone number or address where such residents may contact the water system to obtain a translated copy of the notice or assistance in the appropriate language.

## **Population Served**

Make sure it is clear who is served by your water system -- you may need to list the areas you serve.

#### **Alternative Sources of Water**

If you are providing alternative sources of water for infants or pregnant women, your notice should say where to obtain it. If you choose to provide bottled water, remember that bottled water can also be contaminated or high in nitrates if the bottler uses water from your system. If you are providing bottled water, make sure it meets standards by contacting the bottler and asking for the most recent test results.

#### **Corrective Action**

In your notice, describe corrective actions you are taking. The bullet below describes one action commonly taken by water systems with nitrate/nitrite violations. Use this language, if appropriate, or develop your own:

• "We are investigating water treatment and other options. These may include drilling a new well, mixing the water with low-nitrate water from another source, or buying water from another water system."

## After Issuing the Notice

Send a copy of each type of notice and a certification that you have met all the public notice requirements to the Department within ten days after issuing the notice [64469(d)]. You should also issue a follow-up notice in addition to meeting any repeat notice requirements the Department sets.

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions, and the doctors should have the information they need to respond appropriately. They also need to make sure the water is not provided to infants and pregnant women in their care.

It is a good idea to issue a "problem corrected" notice when the violation is resolved.

## 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.

# DRINKING WATER WARNING

[System] water has high levels of nitrate

# DO NOT GIVE THE WATER TO INFANTS UNDER 6 MONTHS OLD OR PREGNANT WOMEN OR USE IT TO MAKE INFANT FORMULA

Water sample results received [date] showed nitrate levels of [level and units]. This is above the nitrate standard, or maximum contaminant level (MCL), of 45 milligrams per liter. Nitrate in drinking water is a serious health concern for infants less than six months old.

### What should I do?

- DO NOT GIVE THE WATER TO INFANTS. Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur, seek medical attention immediately.
- PREGNANT WOMEN SHOULD NOT CONSUME THE WATER. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.
- Water, juice, and formula for children <u>under six months of age</u> should not be prepared with tap water. Bottled water or other water low in nitrates should be used for infants until further notice.
- **DO NOT BOIL THE WATER.** Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.
- 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?

Nitrate in drinking water can come from natural, industrial, or agricultural sources (including septic systems, storm water run-off, and fertilizers). Levels of nitrate in drinking water can vary throughout the year. We will let you know if the amount of nitrate is again below the limit.

[Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.]

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 [syste	m].
State Water System ID#:	Date distributed:

## PROOF OF NOTIFICATION

Name of Water System: North Davis Meadows System number: 5700788

### Certification

As required by Section 64463.4 of the California Code of Regulations, I notified the users of the water supplied by North Davis Meadows Water System of the potential Nitrate violation of Section 64431 of the California Code of Regulations for the compliance period of [date] through [date]. I complied with the directives of this Order as indicated below:

Date Completed
Date

Attach a copy of the delivered and newspaper notice

THIS FORM MUST BE COMPLETED AND RETURNED TO THE DEPARTMENT