

**2018 Consumer Confidence Report
MORO MUTUAL WATER COMPANY**

Report Date: February 14, 2019

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2018 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Favor de comunicarse Moro Mutual Water Co. a 831-663-2871 para asistirlo en español.

Moro Road Water System #9 System #: 270-1926

Type of water source in use: Wells - ground water

Name & Location of wells: #2 -south side of Fallenleaf Lane

#4 - north side of Fallenleaf Lane

#3 -on tank/well easement site at 7610 Fallenleaf Lane

Drinking Water Source Assessment Information: Completed by Monterey County June 2017 on entire system.

Annual Water meeting will be held Tuesday April 16, 2019 at 7pm at Prunedale Library

For more information contact Debbie Stowe at 663-2871

TERMS USED IN THIS REPORT:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variations and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (complete if bacteria detected)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	0	0	(a)	0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .					

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. Sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) test 2018 <i>Next testing: 2021</i>	5	.009 mg/L	0	15	.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm) test 2018 <i>Next testing: 2021</i>	5	0.652 mg/L	0	1.3	.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	4/3/2018	58/53/150		none	none	Salt present in the water and is generally naturally occurring.
Hardness (ppm)	4/3/2018	123/96.9/127		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring.

*Any violation of an MCL or AL is marked with an asterisk. Additional information regarding the violation is provided later in this report.

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
<u>Nitrates</u> **	Listed Below			45 ppm		Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
<u>Arsenic</u> ***	Listed Below			10 ^(b) ppb		Erosion of natural deposits; runoff from orchards; glass and electronics production wastes Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.

(b) Effective 1/23/2006, the federal arsenic MCL is 0.010 mg/L. The new state MCL has not yet been adopted and remains as 0.5 mg/L (or 50 ppb).

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Manganese –well 2	4/3/2018	ND		50 ppb		Leaching from natural deposits
well 3	4/3/2018	ND				
well 4	4/3/2018	302				

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS					
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	Health Effects Language

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA’s Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language for Community Water Systems: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and

components associated with service lines and home plumbing. Moro Mutual Water Company is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or a <http://www.epa.gov/lead>.

Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment or Monitoring and Reporting Requirements

**Nitrates

test results through out year:

well #2: 42,44,43,39 well#3: 18 WELLS #4: ND

blended tap at lower tank: 14,15,14,15,14,15,14,14,15,14,15,15

Nitrate levels are being testing at the blended tap at the lower tank that collects water from well #4 & #2. This is being done to insure that the water collected has the lowest possible nitrate level before going into the system. It then blends with the water from well #3.

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. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

***Arsenic:

test results through out year:

Well #2 ND,ND,

Well #3 9,5,19,14

Well #4: 6,40,55,32

Arsenic levels are being testing at all wells and at a residence quarterly. The water from Well #2 and #4 is blended with the blended water from wells #3. This is being done to insure that the water collected has the lowest possible arsenic level before going into the system. Additional measures to decrease the arsenic levels are being investigated.

Major chemical testing schedule :

Primary Organics - well #2 & #3 - test again in 2027 well #4 next test 2021

Secondary organics - well #2 & #3 - next test 2027; well #4 next test 2021

VOC's -next test 2023

SOC's -next test 2019

Asbestos; Distribution next test 2020

Lead & Copper - next testing July 2021

Gross Alpha Radiological - next test 2022

Perchlorate next testing 2020

Radium 228 - no further testing required at this time

Hexavalent Chromium -next test undetermined

1,2,3 TriChlorpropane - next test 2021