## O'Connor Tract Co-Operative Water Co.

System 4110019
P.O. Box 1375
Palo Alto, California 94302
650-321-2723

January 25, 2016

### **Report on Water Quality Measurements**

Este informe contiene información muy importante sobre su agua potable.

Tradúzcalo o hable con alguien que lo entienda bien. Versión en español encontrada en www.oconnorwater.org

The U.S. Environmental Protection Agency (USEPA) requires that all water users be given a report on water quality measurements. Your Board hopes that this report helps you to understand water quality issues as they apply to our drinking water. If you have any questions about this report or concerning your water company, please contact the Secretary Ana Pedreiro at 650-321-2723. As always, you are invited to the Annual Meeting the last Thursday in January if you would like further information. Further information may also be obtained at Board meetings on the second Thursday of each month at 7:30 PM at the Company office at 211 Oak Court.

Our water is pumped from two wells on Oak Court into a large tank for pumping into the distribution system. We have a connection with East Palo Alto's water district that is used as an emergency supply, and that water is treated surface water.

The O'Connor Tract Co-Operative Water Co. routinely monitors for contaminants in your drinking water according to Federal and State laws. Water quality is regulated under two types of standards: 1) Primary Drinking Water Standards set maximum contaminant levels for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements. 2) Secondary standards are for substances affecting qualities such as taste and odor. Bacteriological tests are run on three samples a month, and sodium hypochlorite is added for disinfection twice a month. The accompanying tables show the results of our monitoring for the period of January 1 to December 31, 2015, and give values for drinking water standards and measurements made from samples from the two wells. Values reported as ND indicate that the substance could not be detected with the testing procedure used or was below the detection limit for reporting purposes. 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 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).

The water from each well was tested for 27 organic chemicals in 2015, and none were found at the detection limits for reporting purposes. The water from each well was tested for 17 metals, and some were detected (see table).

A requirement from USEPA was to test for lead and copper in the water in people's homes as it comes out of the tap. The supply water has no lead or copper at the detection limit, but these constituents can be leached from lead solder and copper pipe. Samples were tested from 10 homes with copper pipe installed between 1983 and 1988 (lead solder for water pipes was banned in 1988). The lead Action Level (the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow) is 15 ppb, and the copper action level is 1.3 ppm. All of the samples met the standard in two sets of 20 tests conducted in 1993 and 1994, and 8 sets of 10 tests in 1995, 1996, 1997, 2000, 2004, 2007, 2010, and 2013. For the 2013 tests, the 90th percentile (ninth highest) value for lead was ND, and for copper was 0.27 ppm.

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. O'Connor Water Co. 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 at http://www.epa.gov/lead.

A note to parents: Some neighboring districts fluoridate their water, but the O'Connor Water Company does not. Please discuss this with your pediatrician or your child's dentist. More information about fluoridation, oral health, and current issues can be obtained at http://www.waterboards.ca.gov/drinking\_water/certlic/drinkingwater/Fluoridation.shtml.

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, 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

#### **Monitoring Requirements Not Met**

Our water system failed to monitor as required for drinking water standards during the past year and, therefore, was in violation of the regulations. Even though this failure was not an emergency, as our customers, you have the right to know what you should do, what happened, and what we did to correct this situation. Positive coliform results were found in October, but

disinfecting and retesting 2 days later yielded no positives out of 6 samples. 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 our drinking water meets health standards. During November 2015 we did not complete all bacteriological sampling and therefore cannot be sure of the quality of our drinking water during that time. In the month of November, only 3 samples were tested instead of the required 5 samples in the month following a coliform positive, and we cannot be sure of the quality of our drinking water during that time. If you have health issues concerning the consumption of this water, you may wish to consult your doctor.

## **Bacteriological Testing**

Contaminant	Required Sampling Frequency	No. Samples	When Samples Should Have Been Taken	When Were Taken
Total Coliform	Monthly	5	November	December

#### Manganese Above the Secondary Drinking Water Standard

Our water system is in violation of a secondary drinking water standard. Violation of a secondary standard does not pose an immediate threat to health. Water sample results for monitoring in 2015 had manganese levels of 51(49-53) ppb in well #1 and 145(130-160) ppb in well #2. This is above the secondary drinking water standard, or secondary maximum contaminant level of 50 ppb. Manganese concentrations above the standard may have an effect on taste and tend to leave black deposits in some plumbing systems. There is no health risk. The State Water Resources Control Board has issued a citation for noncompliance with the secondary standard resulting in quarterly public notices mailed to members. The company has received a report from an engineering company detailing the best available technologies for either manganese removal or sequestration (adding a chemical so that the manganese does not precipitate from the water) and have started additional communication with all water consumers about the water quality.

### O'Connor Tract Co-Operative Water Co.

2015 Annual Water Quality Report Results from 2015 except where noted **PRIMARY STANDARDS** 

Drinking water disinfectant							
and byproducts		Uni	t MRD	L M	RDLG	Amount in sys	stem
Chlorine (Cl <sub>2</sub> )	ppn	n 4.0		4.0	0.24 (0.08-0.4	2) Disinfectant	
added for treatment							
Total trihalomethanes		ppb	MC MC	L 80		ND	Byproduct of
water disinfection							
Haloacetic acids	ppb	MC MC	L 60		ND	Byproduct of	
water disinfection							
Substance tested	Unit	MCL	MCLG	PHG	Well 1	Well 2	Source
Inorganic constituents							
Fluoride	ppm	2		1	0.19	0.16	Erosion of natural deposits
Nitrate	ppm	45		45	3.6	2.2	Erosion of natural deposits
Selenium	ppb	50	50	30	ND	6.9	Erosion of natural deposits
Radionuclides							
Gross Alpha (2009)			0		ND	4.4	Erosion of natural deposits
Uranium (2002)	pCi/L	20		0.43	ND	2.1(ND-2.6	<ul><li>Erosion of natural deposits</li></ul>
Radium-226	pCi/L	5	0	1	.2(ND-2	2.2) ND(ND-1.5	<ul><li>Erosion of natural deposits</li></ul>
& -228 (2000)							

# SECONDARY STANDARDS

Substance tested	Unit	MCL	Well 1	Well 2	Source	
Manganese	ppb	50	<b>51</b> (49-53)	<b>145</b> (130-16	(50) Erosion of natural deposits	
Chloride	ppm	500	98	54	Erosion of natural deposits	
Sulfate	ppm	500	62	55	Erosion of natural deposits	
Zinc	ppm	5	ND	0.33	Erosion of natural deposits	
Total dissolved solids	ppm	1000	510	460	Erosion of natural deposits	
Color	Units	15	< 5.0	< 5.0	Erosion of natural deposits	
Odor	TON	3	ND	ND	Erosion of natural deposits	
Turbidity	NTU	5	0.18	0.16	Erosion of natural deposits	
Foaming agents (MBAS)	ppb	500	< 50	< 50	Erosion of natural deposits	
OTHER CONSTITUENTS (with no standards)						
Total hardness	ppm		215	228	Erosion of natural deposits	
G 1 :			- 1			

Total hardness	ppm	215	228	Erosion of natural deposits
Calcium	ppm	61	66	Erosion of natural deposits
Magnesium	ppm	15	15	Erosion of natural deposits
Sodium	ppm	79	59	Erosion of natural deposits
Bicarbonate	ppm	270	300	Erosion of natural deposits
pH (Laboratory)	pH Units	7.96	7.86	_

#### Abbreviations:

MRDL = Maximum Residual Disinfectant Level. 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.

MRDLG = Maximum Residual Disinfectant Level Goal. 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.

MCL = Maximum Contaminant Level. 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.

MCLG = Maximum Contaminant Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by USEPA.

PHG = Public Health Goal. 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.

AL = Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ppm = parts per million (mg/L)

NTU = Nephelometric turbidity unit TON = threshold odor number

ppb = parts per billion ( $\mu$ g/L) TON = threshold pCi/L = pico Curies per liter (a measure of radioactivity in water)

< = less than the amount given. May not be present.

ND = not detected or below detection limit for reporting purposes