O'Connor Tract Co-Operative Water Co.

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

January 25, 2022

Report on Water Quality Measurements

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Version 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 about 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. You may also obtain information at Board meetings on the second Thursday of each month at 7:30 PM at the Company office at 211 Oak Court. (Because of COVID-19 protocols, all meetings are taking place remotely using Zoom. Requests to attend should be directed to the company e-mail above.)

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. In 2021, we used water from East Palo Alto for a few minutes to a few hours on five days. For information on water quality for water from East Palo Alto, call or email O'Connor 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. The accompanying tables show the results of our monitoring for the period of January 1 to December 31, 2021, 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).

Levels of Coliform Bacteria Above Drinking Water Standard

Our water system recently violated a drinking water standard. We took 12 samples to test for the presence of coliform bacteria during June 2021. Two of those samples showed the presence of total coliform bacteria. The standard is that no more than 1 may do so. After chlorine was added to the water system, further testing showed that this total coliform problem was resolved. Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Usually, coliforms are a sign that there could be a problem with the system's treatment or distribution system (pipes). Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as fecal coliform or E. coli, are present. We did not find any of these bacteria in our subsequent testing, and further testing shows that this problem has been resolved.

Bacteriological Testing

Total Coliform Bacteria	Unit	No. Tested	No. Present	MCL	MCLG
June 2021	absent or present	12	2	no more than 1	0

A routine sample for coliform bacteria was taken on June 23 from a sampling station, and the sample tested positive for total coliform. Chlorine was added to the system, and retesting on June 25 of 4 samples showed a sample from a near-by hose bib to be coliform positive whereas the sample from the sampling station was coliform negative. Chlorine was added to the system on June 27 and June 28, and retesting of 5 samples were all negative. The sampling station that was positive with total coliform was near where a new valve was installed on a main, and that work is the likely cause of the positive total coliform.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct one Level 1 assessment, and that Level 1 assessment was completed. In addition, we were required to take one corrective action, and we completed that corrective action.

The water from each well was tested for 27 organic chemicals in 2021, 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).

Lead and Copper Testing

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. For tests conducted in 2019, the 90th percentile (ninth highest) value for lead was ND (not detected or below detection limit for reporting purposes) ppb, and for copper was 0.36 ppm. One sample for lead from a home being remodeled tested at 46 ppb, above the 15 ppb action level.

Results for samples from homes taken in 2019

Substance	No. of samples	90th percentile value	No. exceeding AL	Action Level	PHG	Source
Lead	10	ND ppb	1	15 ppb	0.2 ppb	Internal corrosion of household plumbing
Copper	10	0.36 ppm	0	1.3 ppm	0.3 ppm	Internal corrosion of household plumbing

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.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).

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 Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California Law 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).

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 2021 had average manganese levels of 56(range 49-65) ppb in well #1 and 140(130-150) 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 is working with State agencies and the City of Menlo Park to complete the planning of a manganese treatment facility that will then be installed and operational on the company's property.

O'Connor Tract Co-Operative Water Co.

2021 Annual Water Quality Report
Results from 2021 except where noted.

PRIMARY STANDARDS

Substance tested	Unit	MCL	MCLG	PHG	Well 1	Well 2	Source
Inorganic constituents							
Fluoride	ppm	2		1	0.18	0.14	Erosion of natural deposits
Nitrate as N	ppm	10	--	10	0.78	0.52	Erosion of natural deposits
Arsenic	ppb	10		0.04	ND	3.0	Erosion of natural deposits
Nickel	ppb	100		12	ND	11	Erosion of natural deposits
Selenium	ppb	50	50	30	ND	7.2	Erosion of natural deposits
Radionuclides							
Gross Alpha (2018)	pCi/L	15	0	--	ND	3.07	Erosion of natural deposits

SECONDARY STANDARDS

Substance tested	Unit	MCL	Well 1	Well 2	Source
Manganese	**ppb**	**50**	**56**(49-65)	**140**(130-150)	Erosion of natural deposits
Iron	ppb	300	ND	150	Erosion of natural deposits
Chloride	ppm	500	84	50	Erosion of natural deposits
Sulfate	ppm	500	55	49	Erosion of natural deposits
Total dissolved solids	ppm	1000	520	540	Erosion of natural deposits
Color	Units	15	ND	5	Erosion of natural deposits
Odor	TON	3	ND	ND	Erosion of natural deposits
Turbidity	NTU	5	ND	0.25	Erosion of natural deposits
Foaming agents (MBAS)	ppb	500	ND	ND	Erosion of natural deposits

OTHER CONSTITUENTS (with no standards)

Total hardness	ppm		246	260	Erosion of natural deposits
Calcium	ppm		70	77	Erosion of natural deposits
Magnesium	ppm		17	17	Erosion of natural deposits
Sodium	ppm		94	72	Erosion of natural deposits
Bicarbonate	ppm		270	290	Erosion of natural deposits
pH (Laboratory)	pH Units		7.99	8.00	

Abbreviations:

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)
ppb = parts per billion (µg/L)
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
NTU = Nephelometric turbidity unit
TON = threshold odor number