

2019 Consumer Confidence Report

Water System Name: Los Osos Community Services District

Report Date: May 14, 2020

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 to December 31, 2019 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Los Osos CSD a 2122 9th Street, Suite 110, Los Osos, CA 93402, (805) 528-9370 para asistirlo en español.

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Los Osos CSD 以获得中文的帮助: 2122 9th Street, Suite 110, Los Osos, CA 93402, (805) 528-9370.

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Los Osos CSD, 2122 9th Street, Suite 110, Los Osos, CA 93402 o tumawag sa (805) 528-9370 para matulungan sa wikang Tagalog.

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Los Osos CSD tại 2122 9th Street, Suite 110, Los Osos, CA 93402, (805) 528-9370 để được hỗ trợ giúp bằng tiếng Việt.

Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Los Osos CSD ntawm 2122 9th Street, Suite 110, Los Osos, CA 93402, (805) 528-9370 rau kev pab hauv lus Askiv.

Type of water source(s) in use: Groundwater Wells

Name & general location of source(s): Los Osos CSD uses six source wells: 8th Street Well, 3rd Street Well, South Bay Lower Aquifer Well, South Bay Upper Aquifer Well, 10th Street Well, and Palisades Well.

Drinking Water Source Assessment information: A source assessment was completed in June 2001. Wells are considered most vulnerable to activities associated with high-density housing, septic systems, storm water drainage, and agricultural activities. A complete copy of the source assessment is available at the Los Osos CSD office at 2122 9th Street, Suite 110, Los Osos, CA 93402 or by contacting the office at (805) 528-9370.

Time and place of regularly scheduled board meetings for public participation: Public meetings are held at the Los Osos CSD office at 2122 9th Street, Suite 106 on the first Thursday of each month at 6:00 pm.

For more information, contact: Los Osos Community Services District Phone: (805) 528-9370

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: Permissions from the State Water Resources Control Board (State Board) 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 U.S. EPA and the State 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.

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

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 month)	0	1 positive monthly sample ^(a)	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	(In the year)	0	(b)	0	Human and animal fecal waste

(a) Two or more positive monthly samples is a violation of the MCL

(b) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	10/16/2018	5	1.69	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10/16/2018	5	0.83	0	1.3	0.3	Not applicable	Internal corrosion of household 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) (Raw Well)	3/11/2019	24	24	None	None	Salt present in the water and is generally naturally occurring
Hardness (mg/L) (Raw Well)	2019 (various)	86.25	85 – 88	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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 [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum (mg/L) (Raw Well)	2019 (various)	0.11	<0.02 – 0.59	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes.
Arsenic (µg/L) (Raw Well)	5/6/2019 11/4/2019	<1	<1 – 1.0	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm) (Raw Well)	2019 (various)	0.12	0.04 – 0.19	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Barium (ppm) (Well After Treatment)	4/1/2019	0.13	N/A	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm) (Distribution)	2019 (various)	0.67	0.40 – 1.11	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	Drinking water disinfectant added for treatment
Chlorine (ppm) (Well After Treatment)	2019 (various)	0.75	0.32 – 1.02	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	Drinking water disinfectant added for treatment
Total Chromium (ppb) (Raw Well)	3/4/2019 5/6/2019 11/4/2019	8.7	<5 – 36	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Copper (mg/L) (Well After Treatment)	4/7/2019 7/8/2019	0.007	<0.01 – 0.01	(AL=1.3)	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (mg/L) (Well After Treatment)	2019 (various)	0.05	<0.10 – 0.14	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2019 (various)	0.9	0.67 ± 0.487 – 1.9 ± 1.56	15	(0)	Erosion of natural deposits
Haloacetic Acids (ppb) (Distribution)	8/5/2019	1.1	N/A	60	N/A	Byproduct of drinking water disinfection
Heterotrophic Plate Count – HPC (CFU/mL) (Distribution)	2019 (various)	2.3	<1 – 280	TT	N/A	Naturally present in the environment
Heterotrophic Plate Count – HPC (CFU/mL) (Well After Treatment)	2019 (various)	0.79	<1 – 12	TT	N/A	Naturally present in the environment
Heterotrophic Plate Count – HPC (CFU/mL) (Raw Well)	2019 (various)	0.73	<1 – 8	TT	N/A	Naturally present in the environment
Lead (ppb) (Raw Well)	5/6/2019 11/4/2019	1.57	<0.5 – 1.3	AL=15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Nickel (µg/L) (Raw Well)	3/4/2019 5/6/2019 11/4/2019	<5	<5 – <10	100	12	Erosion of natural deposits; discharge from metal factories

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD CONTINUED						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate as Nitrogen, N (ppm) (Raw Well)*	2019 (various)	8.7	<0.1 – 15	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate as Nitrogen, N (ppm) (Well After Treatment)*	2019 (various)	5.9	4.3 – 13	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Reactive Phosphates (mg/L) (Raw Well)	2019 (various)	0.28	<0.02 – 0.46	N/A	N/A	Corrosion Control
Reactive Phosphates (mg/L) (Well After Treatment)	2019 (various)	0.57	0.06 – 1.1	N/A	N/A	Corrosion Control
Reactive Phosphates (mg/L) (Distribution)	2019 (various)	0.66	0.24 – 6.70	N/A	N/A	Corrosion Control
TTHMs – Total Trihalomethanes (ppb) (Distribution)	8/5/2019	7.3	N/A	80	N/A	Byproduct of drinking water disinfection

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm) (Raw Well)	4/1/2019 5/6/2019	70.5	32 – 110	500	N/A	Runoff/leaching from natural deposits; seawater influence
Chloride (ppm) (Well After Treatment)	2019 (various)	62.7	41 – 100	500	N/A	Runoff/leaching from natural deposits; seawater influence
Iron (ppb) (Raw Well)*	2019 (various)	625.7	<5 – 5,600	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb) (Raw Well)*	2019 (various)	27.4	<5 – 76	50	N/A	Leaching from natural deposits
Odor – Threshold (units) (Raw Well)	5/1/2017 5/22/2017	0.96	ND – 2.5	3	N/A	Naturally-occurring organic materials
Specific Conductance (µS/cm) (Raw Well)	2019 (various)	503.5	18 – 840	1,600	N/A	Substances that form ions when in water; seawater influence
Sulfate (mg/L) (Raw Well)	5/6/2019	38.5	29 – 48	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Sulfate (mg/L) (Treated Well)	2019 (various)	7.5	<0.5 – 14	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids – TDS (mg/L) (Raw Well)	4/1/2019	311.7	190 – 460	1,000	N/A	Runoff/leaching from natural deposits
Turbidity (Units) (Raw Well)	5/1/2017 5/22/2017	0.16	0.07 – 0.24	5	N/A	Soil runoff
Zinc (ppm) (Raw Well)	3/4/2019 5/6/2019 11/4/2019	55.8	<5 – 260	5	N/A	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS					
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Bromoform (ppb) (Distribution)	8/5/2019	4.9	N/A	N/A	N/A
Dibromoacetic Acid (ppb) (Distribution)	8/5/2019	1.1	N/A	N/A	N/A

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS CONTINUED

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Dibromochloromethane (ppb) (Distribution)	8/5/2019	2.4	N/A	N/A	N/A
Hexavalent Chromium (ppb) (Raw Well)	2018 (various)	7.26	7 – 7.5	¹	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.

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

¹There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

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 U.S. EPA'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. U.S. EPA/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).

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. Los Osos CSD 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

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.

Iron and Manganese were found at levels that exceeded the secondary MCL (Maximum Contaminant Level) standards in the samples collected at the wells prior to treatment; results of all iron and manganese samples collected after treatment during 2019 were non-detect. Secondary MCLs were established to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. The high levels are most likely due to the leaching of natural deposits and industrial wastes. High levels of manganese in people have been shown to affect the nervous system. The notification level for manganese is 500 ppb.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
Missed Lead and Copper Sampling	<p>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 will do to correct this situation.</p> <p>We are required to monitor your drinking water for specific contaminants on a regular basis. Results of monitoring are an indicator of whether or not our drinking water meets health standards. During the period of June 1, 2019 to September 30, 2019, we did not complete all testing for lead and copper, and therefore cannot be sure of the quality of our drinking water during that time.</p>	<p style="text-align: center;">Between June 1, 2019 and September 30, 2019</p>	<p style="text-align: center;">Samples will be collected between June 1, 2020 and September 30, 2020.</p>	<p>Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.</p> <p>Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.</p>
Nitrate as Nitrogen, N	<p>Due to well and aquifer conditions beyond our control and suspected pollution from septic systems, groundwater nitrate levels periodically exceeded the MCL during 2019.</p>	<p style="text-align: center;">Results from samples collected at one well prior to treatment exceeded the MCL for all samples collected during 2019. Results from samples collected after treatment only exceeded the MCL on 1/28/2019 and 7/15/2019.</p>	<p style="text-align: center;">Los Osos CSD discontinued use of the well upon notification of the violation and performed a resin regeneration to properly treat the water. The treated water was resampled and the well was put back into service after satisfactory sample results were obtained.</p>	<p>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.</p>