Water Quality Report 2015

PWS ID#: 4010016



Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

LOS OSOS COMMUNITY SERVICES DISTRICT

WHERE DOES OUR WATER COME FROM?

The Los Osos Community Services District (LOCSD) water system uses six source wells. Water delivered to the LOCSD water customers is groundwater that originates from the Los Osos Valley Basin. The six water well sites are known as the 8th Street Well, 3rd Street Well, 10th Street Well, Palisades Well, South Bay Lower Aquifer Well and South Bay Upper Aquifer Well. The groundwater basin is a collection of local drainage basins, streams, creeks, and natural percolation from rain, agricultural, and domestic use. Water is cleaned through a natural filtration process as it trickles down through the ground. During this process, water may also pick up contaminants found in the soil, both naturally occurring minerals, and substances resulting from animal or human activity. Groundwater is normally very clean and is simply disinfected to help minimize the chance of any viral and bacterial contamination.

Each well is equipped with online devices for operation and monitoring purposes. An alarm system is integrated in the monitoring process to notify operators if there is a problem at any well site or facility. The South Bay lower aquifer well and 8th Street well have additional filtration equipment designed to remove iron and manganese found in these two wells to aesthetically acceptable levels. Additionally, in February 2015, the South Bay Upper Aquifer well was placed in service along with a nitrate removal/ion exchange system. The water is filtered and nitrates are removed through the ion exchange system prior to being blended with the water from the South Bay Lower Aquifer well. Then this water is filtered through the iron and manganese filtration prior to being released into the distribution system. This new well extracts from the upper aquifer to alleviate pumping from the lower aquifer. As you may know our lower aquifer is subject to seawater intrusion. Remember that Los Osos relies entirely on groundwater. There are no other feasible sources.

Utilities Department Water Resource Operators are responsible for treatment of these wells. They are also responsible for water quality monitoring, sampling, distribution system repair and maintenance, meter reading, and regulatory reporting compliance. The delivery of water to the District's water customers is conveyed through a network of over 27 miles of water mainlines connected to approximately 2,760 water service lines and meters serving residences, commercial business, and two schools. Included in the infrastructure are three water storage tanks, a booster pump station, 162 fire hydrants and 558 valves which require maintenance and inspection. These services provided by the Utilities Department personnel not only assure delivery of pure, wholesome potable drinking water but, also provide the water essential for firefighting.

SUPERIOR COURT JUDGE SIGNS OFF ON LOS OSOS BASIN PLAN

San Luis Obispo County Superior Court Judge Martin J. Tangeman approved the Stipulated Judgment and the accompanying Los Osos Basin Plan on Wednesday, October 14, 2015, before a courtroom of Los Osos community members. The Court's approval is the culmination of a multi-year planning process that began in 2004.

Water purveyors in the Los Osos Groundwater Basin (Los Osos Community Services District, Golden State Water Company and S&T Mutual Water Company) and the County of San Luis Obispo worked together to develop the draft Basin Plan. The Basin Plan draft was first released in 2013 for public comment. Incorporation of public comments and additional technical peer review resulted in an improved final Basin Plan released in January 2015. The Basin Plan provides comprehensive strategies intended to restore the long-term integrity of the Basin water supplies for benefit of the entire community.

The Los Osos Basin Plan establishes goals, timeframes, and milestones to implement the Plan elements, and metrics against which the progress in restoring the health of the Basin will be measured. It also defines fiscal and management authority to finance Basin Plan projects. The water purveyors and the county will share the responsibility to bring the Basin Plan to fruition.

The Basin Plan Goals are to reverse seawater intrusion in the Basin, promote water conservation and ultimately, to ensure the Basin will provide a reliable, sustainable water supply for the benefit of the Los Osos community.

To view the entire plan, visit http://www.slocountywater.org/site/Water%20Resources/Reports/.

As a requirement of the stipulated judgement a Basin Management Committee has been formed. All water customers residing in Los Osos are welcome to monthly meetings of this committee. They are held the third Wednesday of each month at the South Bay Community Center, 2180 Palisades Avenue, Los Osos, CA 93402 at 1:30 pm. The Basin Plan projects will be implemented and progress reported to San Luis Obispo County Superior Court. Register at the following web site in order to receive notifications of meetings and agendas: http://www.slocountywater.org/site/Water%20Resources/LosOsos/

INFORMATION FOR THE LOS OSOS COMMUNITY SERVICES DISTRICT (LOCSD) CONSUMER CONFIDENCE REPORT (2015 REPORTING YEAR)

Last year, the Los Osos Community Services District (LOCSD) conducted more than 1034 tests for over **50** contaminants. We only detected **1** of these contaminants, and found only **1** at a level higher than the State allows. The detected contaminant was Hexavalent Chromium also known as Chromium-6.

Once again we proudly present our annual water quality report for the 2015 Calendar year. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies. The LOCSD safeguards its water supplies. We are vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

For more information about this report, or for any questions relating to your drinking water, please contact Margaret Falkner, Utility Compliance Technician III, at (805)528-9376. You may also contact an engineer at the State Division of Drinking Water District Office in Carpinteria at (805)566-1326.

STATISTICS 2015

LOCSD Water Production for the Calendar year	**164.7** Million Gallons (MG).
The Average Daily Demand	**451,324** gallons
Maximum Month Production	**16.5** Million Gallons in March
The District's total well capacity	**1,760** gallons per minute
The District's total storage capacity	**1.3** Million Gallons

Los Osos Water Quality

The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Source Water Quality Samples (Well Sites)

Primary Standards - Health Based (units)	Primary MCL	PHG (MCLG) [MRDL]	Range of Detection	Average Level	Most Recent Sampling Year	Violation	Typical Source of Constituent
Barium (ppm) [5]	1	2	0.033 - 0.160	0.087	2013	NO	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	[4.0 (as Cl2)]	[4.0 (as Cl2)]	0.08 - 2.04	0.85	2015	NO	Drinking water disinfectant added for treatment
Hexavalent Chromium (ppb)[1]	10	0.02	1.02 - 10.52	5.07	2015	YES	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Nitrate [NO3] (ppm)[2]	45	45	ND - 37.20	18.77	2015	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate as Nitrogen [NO3-N] (ppm)[3]	10	10	ND - 8.40	4.52	2015	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Secondary Standards - Aesthetics Based (Units)	Secondary MCL	Range of Detection	Average Level	Most Recent Sampling Year		Violation	Typical Source of Constituent
Chloride (ppm)	500	34.0 - 130.0	69.36	2015		NO	Runoff/leaching from natural deposits; seawater influence
Color (Units)	15	<1 - 1	1	2014		NO	Naturally-occurring organic materials
Iron [Fe] (ppb)	300	ND - 210	25.96	2015		NO	Leaching from natural deposits; industrial wastes
Manganese (ppb)	50	ND - 110	16.83	2015		NO	Leaching from natural deposits
Specific Conductance (µS/cm)	1,600	270 - 810	561	2013		NO	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	10.6 - 47.3	25.2	2014		NO	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved solids (ppm)	1,000	260 - 510	355	2015		NO	Runoff/leaching from natural deposits
Turbidity (NTU)	5	0.05 - 0.22	0.9	2014		NO	Soil runoff
OTHER SUBSTANCES WITH NO MCLS OR PHG (unit of measure)	Amount Detected	Range	Year Sampled				Typical Source of Constituent
Hardness as CaCO3 (ppm)	198	198-310	2015				"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
Sodium [Na] (ppm)	35	23-53	2014				"Sodium" refers to the salt present in the water and is generally naturally occurring.

LOCSD WATER DISTRIBUTION SYSTEM SAMPLES

Primary Standards - Health Based (units)	Primary MCL	PHG (MCLG) [MRDL]	Range of Detection	Average Level	Most Recent Sampling Year	Violation	Typical Source of Constituent
Chlorine (ppm)	[4.0 (as Cl2)]	[4.0 (as Cl2)]	0.27 - 1.75	0.78	2015	NO	Drinking water disinfectant added for treatment
Fecal Coliform and E. coli [Total Coliform Rule]	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. coli positive	0	0	0	2015	NO	Human and animal fecal waste
Total Coliform Bacteria [Total Coliform Rule] (# positive samples)	No more than 1 positive monthly sample	0	0	0	2015	NO	Naturally present in the environment
HAA5 [Haloacetic Acids] (ppb)	60	NA	NA	1.4	2015	NO	Byproduct of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	80	NA	NA	7.6	2015	NO	Byproduct of drinking water disinfection
Reactive Phosphates [PO4] (ppm)	NS	NS	0.43 - 1.61	0.83	2015	NA	Corrosion control

TAP WATER SAMPLES (23 HOMES)

Substance (Unit of Measure)	AL	PHG (MCGL)	Amount Detected (90th Percentile)	Sites Above AL/ Total Sites	Year Sampled	Violation	Typical Source of Constituent
Copper (ppm)[4]	1.3	0.3	0.91	1/23	2013	NO	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood presertives
Lead (ppb)	15	0.2	ND	0/23	2013	NO	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

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.

2 Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

3 Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

4 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.

5 Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.

Definitions

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

Maximum Contaminant Level or 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 or 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."

Public Health Goal or 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."

Primary Drinking Water Standard or PDWS: "MCLs, MRDLs, and treatment techniques for contaminants that affect health, along with their monitoring and reporting requirements."

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

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

Maximum Residual Disinfectant Level or 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 or 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."

MicroSiemens per centimeter (µS/cm); A measurement of a solution's ability to conduct electricity.

NA = Non-Applicable.

ND = Not Detected; indicates the substance was not found by laboratory analysis.

NS = No Standard.

NTU = Nephelometric Turbidity Units; measurement of clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

PPB = Parts per Billion; one part substance per billion parts water (or micrograms per liter).

PPM = Parts per Million; one part substance per million parts water (or milligrams per liter).

PicoCuries per liter (pCi/L); a measurement of radioactivity in water.

If it is difficult to imagine measurements, think about these comparisons:

Parts per million:
1 second in 12 days
1 inch in 16 miles
1 drop in 14 gallons

Parts per billion:
1 second in 32 years
1 inch in 16,000 miles
1 drop in 14,000 gallons

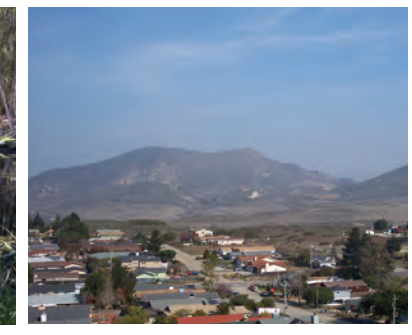
Hexavalent Chromium Information

Under new state regulations in 2014, hexavalent chromium (also referred to as chromium-6) is tested as a separate constituent. The 0.010 milligram per liter Maximum Contaminant Level (MCL) for hexavalent chromium, equivalent to 10 micrograms per liter (µg/L), became effective on July 1, 2014.

The LOCSD tested all their active wells in August 2014 for hexavalent chromium. The 3rd Street well exceeded the MCL by 1 part per billion (ppb). Under guidance of the State Water Resources Control Board (SWRCB) Division of Drinking Water Programs (DDWP), more samples were taken at this site. Results hovered around the MCL. The water distribution system of the LOCSD blends water from all active wells so, once the water entered the system the hexavalent chromium was diluted. A result from a December 7, 2015 sample at the 3rd Street well once again exceeded the MCL by 1 ppb. Crews were notified of the result from laboratory staff on December 17, 2015 and the 3rd Street well was shut off. The state was required to issue a violation. The Utilities Department issued a required notification to the public within the parameters set by the state.

Prior to the 2014 hexavalent chromium regulations, chromium was tested in the form of total chromium. Total chromium contains both chromium-3 and chromium-6. Chromium is a metal found in natural deposits of ores containing other elements, mostly as chrome-iron ore. It is also widely present in soil and plants. Under most conditions, natural chromium in the environment occurs as chromium-3. Under oxidizing conditions, alkaline pH range, presence of MnO2 and minerals containing chromium, part of it may occur as hexavalent chromium dissolved in groundwater. Recent sampling of drinking water sources throughout California suggests that hexavalent chromium may occur naturally in groundwater at many locations. Naturally occurring hexavalent chromium may be associated with serpentinite-containing rock or chromium containing geologic formations.

More information is available here:
http://www.waterboards.ca.gov/drinking_water/programs/



LEAD

There has been considerable attention regarding lead levels found in drinking water supply serving customers in Flint, Michigan. The LOCSD is subject to the Lead and Copper Rule (LCR) and has roughly 20 homes that participate in first-draw sampling every three years. Results of these tests indicated no homes that exceeded the action level for lead in their drinking water. The LOCSD water service area has no service lines made of lead. The LOCSD is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Consumers should be aware of the type of internal plumbing in their homes. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).

SOURCE WATER ASSESSMENT

An assessment of the drinking water source(s) was completed in June 2001. All wells are considered most vulnerable to possible contaminating activities associated with high-density housing and associated septic systems, nearby storm water drainage, and some agricultural activities. Contaminants associated with these activities have not been detected in the water supply.

A copy of the complete assessment is available at the State Water Resources Control Board, Division of Drinking Water District Office, 1180 Eugenia Place, Suite 200, Carpinteria, CA 93013 or the Los Osos Community Services District, 2122 9th Street, Suite 102, Los Osos, CA 93402.

YOUR PARTICIPATION IS WELCOMED!

We invite the public to participate in our Board of Directors meetings and voice your concerns about your drinking water. The LOCSD Board of Directors Meetings are generally held on the first Thursday of each month at the South Bay Community Center, 2180 Palisades Avenue, Los Osos, CA 93402. Closed Session meetings begin at 6:00 p.m. and Open Session meetings begin at 7:00 p.m., unless otherwise noticed. Special Meetings, if needed, are held on the third Thursday of the month. In addition, the public is invited to attend monthly meetings of the Utilities Advisory Committee (UAC) held at 5:30 pm at the District office, 2122 9th Street, Suite 102, Los Osos, CA 93402. The UAC is a committee of five volunteers with one Director as the non-voting Chairperson along with another Director as a non-voting alternate Chairperson. The committees are advisory to the Board of Directors considering District-related issues assigned by the Board. The committee meeting schedule is set in December for the following year.

GET YOUR FREE WATER CONSERVATION ITEMS TO SAVE MONEY AND WATER!

The Los Osos Community Services District provides water conservation fixtures to the District's water customers. Stop by the office and pick up a 1.5 gallons per minute (gpm) high efficiency showerhead with on/off valve; a 1.5 gpm kitchen sink swivel aerator; packets of leak detection dye tablets for toilet tanks; a drip gauge cylinder to measure small drips; and a water saving garden hose nozzle.

Pick up these items at the office on 2122 9th Street, Suite #102. The lobby is open from 9:00 am until 3:00 pm Monday through Friday.