City of LOMPOC

2018 Water Quality Report

The City of Lompoc Water Division is proud to present this information on drinking water quality testing performed in 2018. As in past years, our tap water met all United States Environmental Protection Agency and California state drinking water health standards. Detailed results are in the tables on the last page.

Additional testing in 2018 included Chromium six and 1,2,3-Trichloropropane. All samples were negative (Non-Detect) for both contaminants.

In an effort to safeguard California's most vulnerable population, water systems were required to test for lead at all K-12 schools. Sixty samples were collected at drinking fountains and cafeteria faucets at eleven schools in Lompoc. All tests came back negative (Non-Detect) for lead.

Every five years the EPA formulates a new list of possible water contaminants through the Unregulated Contaminants Monitoring Rule (UCMR). In 2018, UCMR4 began with testing for Cyanotoxins. All of our samples were negative (Non-Detect) for Cyanotoxins. UCMR4 continues in 2019 with testing for metals, pesticides, semi-volatile organics, alcohols and haloacetic acids.

Para Información en Español

Este informe contiene información muy importante sobre su agua potable. Está disponible en el Ayuntamiento de Lompoc y www.cityoflompoc.com/home/showdocument?id=24946

Lompoc's Water Sources and Treatment

The City of Lompoc's source of supply is from ten groundwater wells. The annual production of clean drinking water for the City in 2018 was 1.4 billion gallons or 3.5 million gallons per day (MGD). The Lompoc Water Treatment Plant uses a conventional treatment process that includes disinfection, coagulation, flocculation, sedimentation, and filtration. Originally constructed in 1964, with some enhancements and additions of filters, our production capability is approximately 10 MGD.

A few customers in Miguelito Canyon, including Santa Barbara County Miguelito Park, receive treated surface water from the Frick Springs treatment plant operated by the City of Lompoc. The water is collected from seven springs located in the upper hills of Miguelito Canyon and is treated using diatomaceous earth (DE) filtration and chlorine disinfection. Frick Springs water treatment plant must comply with the Surface Water Treatment Rule (SWTR). The annual production for Frick Springs was 2.7 million gallons, with a daily average of 7,500 gallons.

Water Management and Planning

The 2015 Urban Water Management plan outlines objectives to maintain a sustainable, reliable, high-quality water supply for the long term. It is available on the City website at:

http://www1.cityoflompoc.com/utilities/water/UWMP2015.pdf

A sanitary survey was completed in 2016 to identify any health concerns related to the water system and to assess the overall construction, operation, maintenance, and management of the water system. The State Water Resources Control Board conducted a site inspection of the water sources, treatment facilities, storage reservoirs and pump stations. A review was also conducted of the distribution system, routine monitoring and reporting to the Department of Drinking Water, water system management and operations and operator compliance with state requirements.

Source water assessments for wells one through nine and Frick Springs were completed in 2002 and well eleven in 2012. The City's water sources are considered most vulnerable to the following: sewer collection systems, storm water drainage points, high density housing, gas stations, auto-body and boat repair shops, dry cleaners, agricultural runoff, agricultural wells and low density septic systems.

Frick Springs is most vulnerable to animal grazing, feeding and manure piles, low density septic systems, wild animals and insects.

Information from the sanitary survey and source water assessments can be obtained by calling the Water Treatment Plant at (805) 736-1617.

Protecting our Ground Water

You can help protect our ground water by bringing oil, paint, cleaners, pesticides, batteries and medicines to Lompoc's Household Hazardous Waste Collection Facility at 1585 North V Street. Appointments are available Monday through Saturday by calling (805) 875-8024.

Community Participation

Included in the oversight of the Water Division are the City Council and Utility Commission.

The Lompoc City Council meets the first and third Tuesdays of each month, where public communication is available. Meetings are held at 6:30 p.m. in the Council Chambers at City Hall, 100 Civic Center Plaza.

You are also invited to participate in the monthly Utility Commission meetings, held on the second Monday of the month, starting at 6:00 p.m. in the Council Chambers at City Hall, 100 Civic Center Plaza. Public comment is scheduled at the beginning of the meeting.

We're on the Web!

To view this Consumer Confidence Report (CCR) online, please visit the following web sites:
English version:
www.cityoflompoc.com/home/showdocument?id=23811
Spanish version:
www.cityoflompoc.com/home/showdocument?id=24946

Hard copies will be available in English and Spanish at Lompoc City Hall, the Lompoc Library, Dick DeWees Community and Senior Center, Aquatic Center, Anderson Recreation Center and Lompoc Water Treatment Plant. If you would like a copy mailed to your address, or have questions about the report, please call Mimi Erland, Water Treatment Plant Chemist, at (805) 736-1617.

Water Conservation

Lompoc's well levels are in good condition due to careful management by the Water Division and diligent conservation efforts by residents. In 2013 the average residential gallons per capita per day (R-GPCD) was 81.6. During the drought, Lompoc residents reduced water use by 20%, to 65.5 R-GPCD.

In years to come, we need to continue to learn new ways to save water. The 2022 goal is 55 R-GPCD. Conservation rebates are listed at https://www.cityoflompoc.com/government/departments/utilities/conservation. For conservation tips, please visit www.epa.gov/watersense.

Copper and Lead

Every three years, the Water Division tests for copper and lead from homes determined to be at a higher risk. All of the homes tested below action levels for both copper and lead in the 2016 study. The next testing will be July, 2019.

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. The Water Division 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 thirty seconds to two minutes before using water for drinking or cooking. [Optional: 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.

Meter Maintenance and Upgrades

The meter shop averages 50 to 60 check reads from utility billing a month. Some of those calls include meters or ERT (Encoder Radio Transmission) not working or wires damaged by gophers. The meter shop also tests various sizes of meters on the test bench, per state regulations.

The City of Lompoc has over 10,000 meters with ERTs that send data to the various collectors and repeaters located around the city, and then to City Hall for billing. In 2018, the meter shop started a project to upgrade the city to 100-watt meters. This gives us the ability to see water use trends on customer meters every hour instead of once every 24 hours, which can aid in leak detection.

Important Notice for Sensitive Populations

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 US Environmental Protection Agency (USEPA) 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 for 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).

Substances That Could be in Water

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 storm water 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 storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

Radioactive contaminants can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulated Limits

In order to ensure that tap water is safe to drink, the USEPA and the California State Water Resources Control 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.

2018 Sampling Results

PWS ID# CA4210006

During the past year we have taken hundreds of water samples in order to determine the presence of any biological, inorganic, volatile organic, synthetic organic or radioactive contaminants. The tables below show only those contaminants that were detected in the water. The State Water Board allows us to monitor for certain contaminants less than once per year because their concentrations do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

Terms Used in this Report

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

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Public Health Goals (or MCLGs) as is economically and technologically feasible. Secondary MCLs (**SMCL**) 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 the United States Environmental Protection Agency (USEPA).

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.

NA: not applicable

ND: not detectable at testing limit

NS: no standard is set at this time

NTU: Nephelometric Turbidity Units. A measure of the clarity of water.

pCi/L: picocuries per liter. A measure of radiation.

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.

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

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

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

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

µs/cm: micro Siemens per centimeter. A measure of the electrical conductivity of a solution.

Primary Drinking Water Standards	Unit	MCL	PHG	City of Lompoc Average	City of Lompoc Range	Frick Springs Average	Frick Springs Range	Typical Source
Arsenic	ppb	10	0.004	2.3	ND — 4	4	NA	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Cadmium	ppb	5	0.04	ND	NA	0.4	NA	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Chlorine (as CL2)	ppm	MRDL = 4.0	MRDLG = 4	1.6	1.24— 1.73	1.53	0.97—2.0	Drinking water disinfectant added for treatment
Chromium (Total)	ppb	50		ND	NA	5	NA	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride	ppm	2.0		0.1	NA	0.2	NA	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particles	pCi/L	15	0	2.58	1.25 —6.17	3.22	NA	Erosion of natural deposits (testing performed on wells and spring influent 2008-2017)
Nickle	ppb	100	12	ND	NA	4	NA	Erosion of natural deposits; discharge from metal factories
Nitrate (as Nitrogen)	ppm	10	10	ND	NA	ND	NA	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium	ppb	50	30	10	NA	8	NA	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Total Coliform Bacteria	% positive samples	More than 5% positive monthly	0	1	NA	0	NA	Naturally present in the environment
Uranium	pCi/L	20	0.43	3.1	ND —3.1	NA	NA	Erosion of natural deposits (testing performed on wells and spring influent 2008-2017)

Stage 2 Disinfection By-Products	Unit	MCL	PHG	City of Lompoc Average	City of Lompoc Range	Frick Springs Average	Frick Springs Range	Typical Source
Haloacetic Acids (HAAs)	ppb	60	NA	2	1 — 3	3	NA	By-product of drinking water disinfection
Trihalomethanes (TTHMs)	ppb	80	NA	5.5	4 — 7	21	NA	By-product of drinking water disinfection

Secondary Drinking Water Standards	Unit	SMCL	PHG	City of Lompoc Average	City of Lompoc Range	Frick Springs Average	Frick Springs Range	Typical Source
Chloride	ppm	500	NS	105	95—112	55	NA	Runoff/leaching from natural deposits; seawater influence
Manganese	ppb	50	NS	ND	NA	ND	NA	Leaching from natural deposits
Specific Conductance	µs/cm	1600	NS	1251	1015—1677	932	NA	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	NS	444	388—488	77.5	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	1,000	NS	825	737—885	550	NA	Runoff/leaching from natural deposits
Turbidity	NTU	5	NS	0.07	0.04—0.23	0.053	0.03—0.08	Soil runoff. A measure of the cloudiness of the water. High turbidity can hinder disinfection.

Unregulated Substances	Unit	Notification level	PHG	City of Lompoc Average	City of Lompoc Range	Frick Springs Average	Frick Springs Range	Typical Source, Health Effects
pH	units	NS	NS	8.42	8.19—8.70	7.50	7.30—7.60	pH is raised to aid in treatment and help prevent pipe corrosion
Sodium	ppm	NS	NS	142	124—159	38	NA	Leaching from natural deposits; disinfection and softening processes add sodium to the water. Consumers on sodium-restricted diets may wish to consult with their physicians.
Total Hardness as $CaCO_3$	ppm	NS	NS	300	264—318	397	NA	Leaching from natural deposits
Vanadium	ppb	50	NS	ND	NA	17	NA	Naturally occurring. The babies of some pregnant women who drink water containing Vanadium in excess of the 50 ppb notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

2016 Copper and Lead Study - 35 Samples were collected from homeowners in July of 2016. Testing is every 3 years, so next testing is summer of 2019.

	Unit	Action Level	PHG	90 %	Sites Exceeding Action Level	Typical Source
Copper	ppm	1.3	0.3	0.163	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	ppb	15	.02	1.5	0	Internal corrosion of household plumbing systems; industrial manufacturing discharges; erosion of natural deposits

2018 Lead in Schools Study - 60 Samples were collected from eleven schools served by the City of Lompoc water system. None of the schools had lead in their water.

	Unit	Action Level	PHG	90 %	Sites Exceeding Action Level	Typical Source
Lead	ppb	15	.02	NA	0	Internal corrosion of household plumbing systems; industrial manufacturing discharges; erosion of natural deposits

2018 Unregulated Contaminant Monitoring Rule Part 4 Study (UCMR4) (metals, pesticides, semi-volatile organics, alcohols and haloacetic acids are scheduled for 2019)

	Unit	Minimum Reporting Level	Frick Springs Average	Frick Springs Range	Typical Source
Cyanotoxins	ppb	0.3	ND	NA	Cyanobacteria are naturally occurring in surface waters. Under warm conditions they can produce algal blooms that can release toxins called Cyanotoxins.