City of LOMPOC

2017 Water Quality Report

Our Continuing Commitment to You

The City of Lompoc Water Division is proud to present this information on drinking water quality testing performed in 2017. As in past years, our tap water met all United States Environmental Protection Agency (USEPA) and California state drinking water health standards.

In-line monitoring as well as around the clock sampling and testing performed by state certified treatment operators insures that the drinking water provided by the Lompoc Water Treatment Plant is safe and enjoyable to drink.

State certified distribution operators install meters at homes and businesses, exercise fire hydrants and replace aging pipe on a regular maintenance schedule.

Water samples are collected from throughout the city every week and tested by state certified water quality analysts to ensure the water reaching your tap is carefully monitored.

Para Información en Español

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

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 2017 was 1.4 billion gallons or 3.7 million gallons per day (MGD). The City uses a conventional treatment process to ensure the safety and quality of our drinking water. Constructed in 1964, the treatment consists of disinfection, coagulation, flocculation, sedimentation, and filtration. With some enhancements and additions of filters, our production capability is approximately ten 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 3.1 million gallons, with a daily average of 8,466 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. The purpose of a sanitary survey is 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, parks, 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.

You can help protect our aquifer 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. at 100 Civic Center Plaza, Lompoc City Hall Council Chambers.

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. at 100 Civic Center Plaza, Lompoc City Hall Council Chambers. Time for public communications is scheduled at the beginning of the meeting agenda.

We're on the Web!

To view this Consumer Confidence Report (CCR) online, please visit the following web site:

http://www1.cityoflompoc.com/departments/utilities/2017ccr.pdf

Hard copies will be at Lompoc City Hall, the Lompoc Library, the Dick DeWees Community and Senior Center and the 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.

Ongoing Maintenance and Upgrades

In November of 2017 the Water Division began upgrading six alleys with older four inch water mains to new six inch lines. The larger pipe will improve flow for domestic use as well as fire fighting. This project will continue through March of 2018.

Another project has been to upgrade the treatment control room with modern equipment. Treatment operators can monitor flow from wells, check status of pumps, valves, water levels and filter operation in a variety of formats.

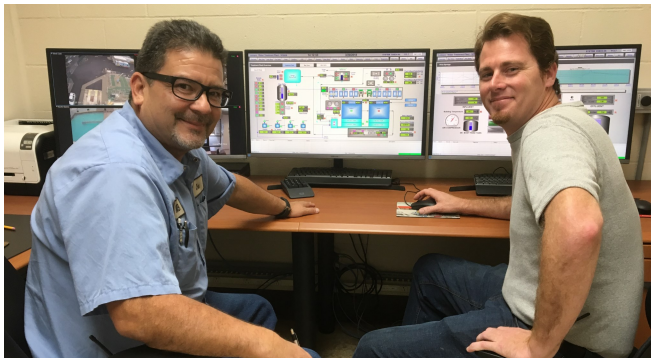
Copper and Lead

Every three years, the Water Division tests copper and lead from homes determined to be at higher risk. All of the homes tested below action levels for both copper and lead. Please see the table on the reverse side of this page for 2016 results.

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.

Federal Revised Total Coliform Rule

All water systems in California are required to comply with the state Total Coliform Rule. Since April 1, 2016, all water systems have also been required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and *E. coli* bacteria). The United States Environmental Protection Agency (USEPA) anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.



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 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 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).

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 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.

2017 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): 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.

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

Primary Drinking Water Standards

				City of Lompoc		Frick Springs		
	Unit	MCL	PHG	Average	Range	Average	Range	Typical Source
Arsenic	ppb	10	0.004	3	ND — 7	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	1.0	<0.1— 1.7	1.2	0.7—1.4	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		ND	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	2.50	ND —5.59	3.22	NA	Erosion of natural deposits (testing performed on wells and spring influent 2008-2017)
Nickle	ppb	100	12	ND	NA	5	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	7	NA	9	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	0	NA	0	NA	Naturally present in the environment
Uranium	pCi/L	20	0.43	1.23	ND —1.71	NA	NA	Erosion of natural deposits (testing performed on wells and spring influent 2008-2017)

Stage 2 Disinfection By-Products

				City of Lompoc		Frick Springs		
	Unit	MCL	PHG	Average	Range	Average	Range	Typical Source
Haloacetic Acids (HAAs)	ppb	60	NA	ND	NA	4	NA	By-product of drinking water disinfection
Trihalomethanes (TTHMs)	ppb	80	NA	2	NA	20.0	NA	By-product of drinking water disinfection

Secondary Drinking Water Standards

				City of Lompoc		Frick Springs		
	Unit	SMCL	PHG	Average	Range	Average	Range	Typical Source
Chloride	ppm	500	NS	108	95—135	60	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	1232	1035—1494	941	NA	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	NS	427	371—525	79.6	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	1,000	NS	827	728—994	600	NA	Runoff/leaching from natural deposits
Turbidity	NTU	5	NS	0.07	0.04—0.23	0.06	0.02—0.20	Soil runoff

Unregulated Substances

				City of Lompoc		Frick Springs		
	Unit	Notification level	PHG	Average	Range	Average	Range	Typical Source, Health Effects
pH	units	NS	NS	8.36	7.60—8.70	7.37	7.26—7.54	pH is raised to aid in treatment and help prevent pipe corrosion
Sodium	ppm	NS	NS	148	115—174	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	304	264—331	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 (Lead in Schools testing begins in 2018)

	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

2013 Unregulated Contaminant Monitoring Rule Part 3 Study (UCMR3) (UCMR4 testing begins in 2018)

			City of Lompoc		Frick Springs		Lompoc Station 3		Frick Station 1		
	Unit	Notification Level	Average	Range	Average	Range	Average	Range	Average	Range	Typical Source
Chlorate	ppb	800	295	250- 340	155	130 - 190	300	260 - 340	168	130 - 200	By-product of drinking water disinfection
Chromium (total)	ppb	50	0.43	0.32 - 0.53	1	ND - 1	0.36	0.27 - 0.45	ND	NA	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Chromium-6	ppb	10	0.36	0.30 - 0.41	0.027	ND - 0.044	0.32	0.31 - 0.32	0.04	0.032 - 0.051	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, textile manufacturing facilities; erosion of natural deposits.
Molybdenum	ppb	NS	19	18 - 20	39	36 - 42	19	18 - 19	42	39 - 43	Leaching from natural deposits
Strontium	ppb	NS	525	510 - 540	148	140 - 160	490	440 - 540	160	150 - 170	Leaching from natural deposits
Vanadium	ppb	50	0.41	0.36 - 0.46	14	12 - 17	0.41	0.34 - 0.47	14	12 - 15	Leaching from natural deposits