

# ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019



*Presented By*  
**City of Livingston**

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

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਣ ਹੈ।  
ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ।

PWS ID#: 2410004

## Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2019. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

## Lead in Home 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. We are responsible for providing high-quality drinking water, but we 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 at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Where Does My Water Come From?

The City of Livingston currently utilizes local groundwater as its sole source of supply. The City's municipal water system extracts its water supply from underground aquifers via groundwater wells located throughout the City. The City's water system facilities include nine active groundwater wells, a 1.0 (one) million gallon (MG) potable water storage tank, and the distribution system. Water is conveyed from the wells to our customers via the distribution system, which consists of nearly 40 miles of pressurized pipes, ranging in size from 2 to 16 inches in diameter. For 2019, the City of Livingston delivered 2,394,994,181 gallons of water, with up to 256,024,390 gallons in a single month, or over 8,416,177 gallons per day to approximately 3,377 residential, commercial, and industrial customers.

## Important Health Information

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

## Community Participation

You are invited to participate in our public forum and address the City Council about your concerns about drinking water. The City Council meets every first and third Tuesday of the month beginning at 7:00 p.m. in the City Council Chambers at 1416 "C" Street, Livingston, CA 95334. You may also visit the City of Livingston on the Internet at [www.livingstoncity.com](http://www.livingstoncity.com) for more information or contact City staff directly by phone at (209) 394-8044, ext. 129.

## Information on the Internet

The U.S. EPA (<https://goo.gl/TFAMKc>) and the Centers for Disease Control and Prevention (<https://www.cdc.gov/healthywater/drinking/>) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the Division of Drinking Water and Environmental Management has a Web site (<https://goo.gl/kGepu4>) that provides complete and current information on water issues in California, including valuable information about our watershed.

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call the City of Livingston Water Division: Mr. Tommy Mejia, Water/Wastewater Operator III, at (209) 394-8044, or Tony Avina, Superintendent, at (209) 394-8044, ext. 130.

## Source Water Assessment

A Drinking Water Source Assessment was completed for the City of Livingston's wells by the California Department of Public Health--Merced District in September 2002. The City's sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: parks, chemical/petroleum pipelines, lagoons/liquid wastes, machine shops, wastewater treatment plants, hardware/lumber/parts stores, crops, irrigated (berries, hops, mint, orchards, sod, greenhouses), fertilizer/pesticide/herbicide application, housing - high density (>1 house/0.5 acres), septic systems - high density (>1/acre), apartments and condominiums, crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay), sewer collection systems, automobile - body shops, automobile - repair shops, fleet/truck/bus terminals, RV/mini storage, schools. The sources are also considered most vulnerable to the following activities not associated with any detected contaminants: automobiles - gas stations, historic gas stations, dry cleaners, injection wells/dry wells/sumps, septic systems - low density (<1/acre), wells - agricultural/irrigation, agricultural drainage.

A Drinking Water Source Assessment document is available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and determination of the water supply's susceptibility to contamination by the identified potential sources.

If you would like to review the Drinking Water Source Assessment, please feel free to contact our office at 1416 "C" Street, Livingston, California 95334, or by phone at (209) 394-8044 during regular business hours.

## Variations and Exemptions

### Compliance order No. 03-11-18R-013

**1** 23-Trichloropropane (123-TCP) Maximum Contaminant Level Violation was issued on April 20, 2018 due to samples received on March 12, 2018 that exceeded the maximum contaminant level for 1,2,3-trichloropropane (123 TCP). 123-TCP contamination is widespread in the Central Valley of California because of a banned fumigant, DBCP, which was used to kill nematodes (small worms that live in the soil). The City is working diligently on

the construction of treatment systems that will remove 123-TCP from the water supply. We anticipate resolving the 123-TCP violation by the end of year 2021 or early 2022. Some people who drink water containing 1,2,3-trichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.



## 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) 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. 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. 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.

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 can 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 by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only those substances that were detected in our water. (A complete list of all our analytical results is available upon request.) Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases the most recent sampling data are included, along with the year in which the sample was taken.

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
1,2,3-Trichloropropane [1,2,3-TCP] (ppt)	2019	5'	0.7	210	0-610	Yes	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; cleaning and maintenance solvent, paint and varnish remover, and degreasing agent; by-product from production of other compounds and pesticides
Arsenic (ppb)	2019	10	0.004	5.25	0-35	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2019	1	2	0.0288	0-0.14	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2019	[4.0 (as Cl <sub>2</sub> )]	[4 (as Cl <sub>2</sub> )]	0.63	0.21-1.49	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2019	2.0	1	0.13	0.11-0.17	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2018	15	(0)	1.73	0-6.04	No	Erosion of natural deposits
Nitrate [as nitrogen] (ppm)	2019	10	10	3.12	0.40-7.9	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2019	80	NA	6.125	3-11	No	By-product of drinking water disinfection
Uranium (pCi/L)	2017	20	0.43	6.45	4-8.9	No	Erosion of natural deposits



## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

### AL (Regulatory Action Level):

The concentration of a contaminant that, 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 PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) 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. PHGs are set by the California EPA.

### 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).

### ppt (parts per trillion):

One part substance per trillion parts water (or nanograms per liter).

### Variances and Exemptions:

State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

### µS/cm (microsiemens per centimeter):

A unit expressing the amount of electrical conductivity of a solution.

NA: Not applicable

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

NS: No standard

**pCi/L (picocuries per liter):** A measure of radioactivity.

**PDWS (Primary Drinking Water Standard):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**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 EPA.

**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).

**ppt (parts per trillion):** One part substance per trillion parts water (or nanograms per liter).

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

**µS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2019	1.3	0.3	0.057	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**SECONDARY SUBSTANCES**

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2019	500	NS	38.03	7.1–80.8	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2019	15	NS	4.8	0–35	No	Naturally occurring organic materials
Manganese (ppb)	2019	50	NS	37.22	0–170	Yes	Leaching from natural deposits
Specific Conductance (µS/cm)	2019	1,600	NS	401.11	290–510	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2019	500	NS	23.51	8.5–45	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2019	1,000	NS	280.7	220–340	No	Runoff/leaching from natural deposits

**UNREGULATED SUBSTANCES<sup>2</sup>**

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Hardness, Total [as CaCO <sub>3</sub> ] (ppm)	2019	112.08	50–248.2	Naturally occurring
Sodium (ppm)	2017–2019	57	31–90	Naturally occurring

<sup>1</sup>This substance had a notification level (NL) of 5 ppt until December 14, 2017, when the MCL of 5 ppt became effective.

<sup>2</sup>Unregulated contaminant monitoring helps the U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

