

HEALTH EFFECTS OF ARSENIC

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. 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.

ADDITIONAL HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Those with compromised immune systems such as those with cancer undergoing chemotherapy, persons who have had organ transplants, those with HIV/AIDS or other immune-system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice from their health-care providers about drinking water. EPA/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**.

INPUT AND INFORMATION

For water-quality information, call **702-258-3215**. Submit questions via the "Contact Us" form on lvvwd.com or by mail: Las Vegas Valley Water District, Water Quality Division, 1001 S. Valley View Blvd., Las Vegas, NV 89153. For the EPA Safe Drinking Water Hotline, call **800-426-4791**; for the Nevada Division of Environmental Protection's Bureau of Safe Drinking Water, call **775-687-9520** or visit ndp.nv.gov/bsdw.

Visit the Jean system pages on lvvwd.com for information on scheduled meetings of the Jean Water System Board of Directors. Meetings are open to the public.

BOARD OF DIRECTORS

The Jean Water System falls within the jurisdiction of the Las Vegas Valley Water District (LVVWD). The LVVWD Board of Directors is comprised of the Clark County Commissioners.

Mary Beth Scow, President

Steve Sisolak, Vice President

Susan Brager, Larry Brown, Chris Giunchigliani, Marilyn Kirkpatrick, Lawrence Weekly

John J. Entsminger, General Manager

NOTICIA EN ESPAÑOL

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

JEAN WATER SYSTEM

2017 Water Quality Report

ABOUT YOUR SOURCE WATER

The Jean Water System service area is supplied by three wells in the Ivanpah Valley. The groundwater comes from the Ivanpah Valley aquifer, which is recharged from the southern end of the Spring Mountains and the New York Mountains. Water from the three wells is blended before entry into the distribution system. Potential groundwater contaminants include materials leaching from landfills and mines in the recharge area.

SOURCE WATER ASSESSMENT

The federal Safe Drinking Water Act was amended in 1996 and requires states to develop and implement source water assessment programs to analyze existing and potential threats to the quality of public drinking water throughout the state. A summary of the Jean Water System's susceptibility to potential sources of contamination was initially provided by the state of Nevada in 2005 and was updated in 2016, as follows:

The Jean Utility Services Inc. public water system (also known as Jean Water System) is in compliance with all state and federal safe drinking water requirements. The water system operates three wells to provide safe drinking water to the water users. Routine safe drinking monitoring has detected radium-228 and gross alpha particles; however, it is likely naturally occurring and not from any potential contaminant source. The water system is considered to have a moderate vulnerability to radionuclide contamination. Portions of the distribution system have been constructed using asbestos cement pipe (ACP). The water system is considered to have a moderate vulnerability for asbestos fiber contamination in the areas where the ACP is installed. The aquifer has elevated levels of naturally occurring arsenic. The water system blends all water sources to meet the arsenic maximum contaminant level of 0.01 milligrams per liter. The water system is considered to have a high vulnerability for arsenic. The aquifer is considered to have a low vulnerability from surface contamination.

Additional summary information for this 2016 source water assessment may be accessed online at lvvwd.com. Detailed information pertaining to the findings of the source water assessment is available for viewing in person Monday-Thursday, by appointment, at the Las Vegas Valley Water District, 1001 S. Valley View Blvd. Please call **702-258-3215** for an appointment. Additional information about the Nevada Source Water Assessment Program may be found at ndep.nv.gov/bsdw.

TREATMENT AND TESTING

Because Jean's water supply is protected within the principal groundwater aquifer, it does not require the level of treatment associated with surface water sources. However, water quality is closely monitored. Once pumped from the principal aquifer, the water is disinfected using sodium hypochlorite. Zinc orthophosphate is added to control corrosion of lead and copper as water travels through the distribution system.

Every month, water samples from Jean's water system are collected and analyzed. The Water District monitors in accordance with all Safe Drinking Water Act requirements.

Water delivered by the Jean Water System meets or surpasses all state of Nevada and federal drinking-water standards. Learn more in this report.

The Jean Water System is owned and operated by the Las Vegas Valley Water District (LVVWD)

2017 Water Quality Report

Las Vegas, NV 89153
1001 S. Valley View Blvd.
Las Vegas Valley Water District

Jean Water System



JEAN WATER SYSTEM Water Quality Test Results

These results represent levels in the treated water supply, based on 2016 data, except where noted.

REGULATED CONTAMINANTS	UNIT	MCL (EPA LIMIT)	MCLG (EPA GOAL)	DISTRIBUTION SYSTEM ⁽¹⁾			1 PRISON ROAD ⁽¹⁾			POSSIBLE SOURCES OF CONTAMINATION	KEY TERMS
				MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	AVERAGE		
Alpha Emitters	pCi/L	15	0	Entry Point Monitoring Only			11 ⁽²⁾	11 ⁽²⁾	N/A	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation	<p>Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.</p> <p>Disinfection by-product: A substance created by the chemicals or processes used to destroy potentially harmful microorganisms.</p> <p>Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.</p> <p>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 allow for a margin of safety.</p> <p>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.</p> <p>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 contamination.</p> <p>N/A: Not applicable</p> <p>N/D: Not detected. Does not equate to zero, but refers to an amount below analytical reporting limits.</p> <p>Part per billion (ppb): A unit used to describe the levels of detected contaminants. Equivalent to 1 cent in \$10 million.</p> <p>Part per million (ppm): A unit used to describe the levels of detected contaminants. Equivalent to 1 cent in \$10,000.</p> <p>Picocuries per liter (pCi/L): A measure of the radioactivity in water. Low levels of radiation occur naturally in many water systems, including the Colorado River.</p> <p>Running annual average: The average of sample results for 12 consecutive months or four consecutive quarters, based on the monitoring requirements.</p> <p>Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.</p>
Arsenic	ppb	10	0	Entry Point Monitoring Only			7	8	8 ⁽³⁾	Erosion of natural deposits	
Barium	ppm	2	2	Entry Point Monitoring Only			0.08 ⁽²⁾	0.08 ⁽²⁾	N/A	Erosion of natural deposits; discharge from metal refineries; discharge of drilling wastes	
Beta Particles and Photon Emitters	pCi/L	50 ⁽⁴⁾	0	Entry Point Monitoring Only			5.3 ⁽⁵⁾	5.3 ⁽⁵⁾	N/A	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit a form of radiation known as photons and beta radiation	
Chromium (total)	ppb	100	100	Entry Point Monitoring Only			6 ⁽²⁾	6 ⁽²⁾	N/A	Erosion of natural deposits	
Copper ⁽⁶⁾	ppm	1.3 ⁽⁷⁾ (Action Level)	1.3	0.01 ⁽²⁾	0.7 ⁽²⁾	0.5 ⁽²⁾ (90th% value)	Distribution System Monitoring Only			Corrosion of household plumbing systems; erosion of natural deposits	
Fluoride	ppm	4.0	4.0	Entry Point Monitoring Only			0.5 ⁽²⁾	0.5 ⁽²⁾	N/A	Erosion of natural deposits	
Free Chlorine Residual	ppm	4.0 ⁽⁸⁾ (MRDL)	4.0 ⁽⁸⁾ (MRDLG)	0.6	1.1	1.0 ⁽³⁾	Distribution System Monitoring Only			Water additive used to control microbes	
Nitrate (as Nitrogen)	ppm	10	10	Entry Point Monitoring Only			3	3	N/A	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Selenium	ppb	50	50	Entry Point Monitoring Only			4 ⁽²⁾	4 ⁽²⁾	N/A	Erosion of natural deposits; discharge from mines; component of petroleum	
Total Trihalomethanes	ppb	80	N/A ⁽⁹⁾	1 ⁽²⁾	1 ⁽²⁾	N/A	Distribution System Monitoring Only			By-product of drinking-water disinfection	
Uranium	ppb	30	0	Entry Point Monitoring Only			4 ⁽²⁾	4 ⁽²⁾	N/A	Erosion of natural deposits	

FOOTNOTES: (1) Some Safe Drinking Water Act (SDWA) regulations require monitoring in the distribution system, while others require monitoring at the entry point to the distribution system (1 Prison Road). (2) Annual monitoring not required. Data is from 2015. (3) This value is the highest running annual average reported in 2015. Reports are filed quarterly. (4) The actual MCL for beta particles is 4 mrem/year. The U.S. Environmental Protection Agency considers 50 pCi/L to be the level of concern for beta particles. (5) Annual testing not required. Data is from 2012. (6) Samples are from Jean customers' taps. (7) Copper is regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. If more than 10% of tap-water samples exceed the Action Level, water systems must take additional steps. For copper the Action Level is 1.3 ppm. (8) Chlorine is regulated by MRDL, with a goal stated as a MRDLG. (9) No collective MCLG but there are MCLGs for some of the individual contaminants. Trihalomethanes: bromodichloromethane (0), bromoform (0), dibromochloromethane (60 ppb).

UNDERSTANDING TEST RESULTS

The Las Vegas Valley Water District tests for more than 100 regulated and unregulated substances. As required by the Safe Drinking Water Act, the test results above for Jean list those regulated contaminants with primary standards that were detected. A complete analysis report is available through the Water District at lvvwd.com.

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. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at **800-426-4791**.

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, other

contaminants, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source (untreated) water include:

- Microbial contaminants, such as viruses and bacteria, which may come from septic systems and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban runoff, septic systems and industrial wastewater discharges;
- Pesticides and herbicides, which may come from a variety of sources such as urban runoff and residential uses;
- Organic chemical contaminants, including synthetic or volatile organic chemicals, which are by-products of industrial processes and can come from gas stations, urban runoff and septic systems;

- Radioactive contaminants, which can be naturally occurring or the result of industrial activities.

To ensure tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide similar protection for public health.

LEAD AND COPPER EDUCATION

The Las Vegas Valley Water District actively monitors for lead and copper in accordance with state and EPA Lead and Copper Rule requirements. The following information is provided to help you assess risks in your tap water. If present at elevated levels, 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 LVVWD is responsible for providing high-quality drinking water up to your meter, 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 two minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested by a private laboratory. For more information, call the EPA Safe Drinking Water Hotline, **800-426-4791**, or visit epa.gov.