

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.

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.

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 ndep.nv.gov/bsdw.

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

BOARD OF DIRECTORS

The Searchlight 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.

SEARCHLIGHT WATER SYSTEM

2017 Water Quality Report

ABOUT YOUR SOURCE WATER

The Searchlight Water System service area is supplied by wells in Piute Valley. Well S-2 and its Treatment Plant are the primary water source; Well S-1 and S-3 provide additional production when needed and backup for well maintenance or emergencies. The three wells are typically not in use at the same time. The wells in Searchlight are recharged by precipitation and snowmelt runoff from the Lucy Gray range, the Castle Mountains and the McCullough Mountains, as well as groundwater flows from the adjacent upgradient valley.

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 Searchlight 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 Searchlight Water Company public water system (also known as Searchlight Water System) is currently 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 water monitoring has detected several volatile organic compound (VOC) contaminants for two of the wells. These two wells are considered to have a moderate vulnerability to VOC contamination. Gross alpha particles have also been detected at or above 50% of the maximum contaminant level; however, these are likely naturally occurring and not from any potential contaminant source. The water system is considered to have a moderate vulnerability to radionuclide contamination. Two of the three wells have elevated levels of arsenic. The water system is considered to have a high vulnerability to arsenic contamination. The water system has installed an arsenic treatment facility that provides safe drinking water to the water users. The aquifer is considered to have a low vulnerability for inorganic compound, synthetic organic compound and microbiological 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 Searchlight'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. When water from Well S-2 is drawn, it also is treated for arsenic removal by a treatment plant located at the well to ensure compliance with Safe Drinking Water Act standards.

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

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

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

Searchlight Water System
Las Vegas Valley Water District
1001 S. Valley View Blvd.
Las Vegas, NV 89153
2017 Water Quality Report



SEARCHLIGHT 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⁾			TREATMENT PLANT WELL S-2 ⁽¹⁾			WELL S-1 ⁽¹⁾		WELL S-3 ⁽¹⁾			POSSIBLE SOURCES OF CONTAMINATION
				MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	AVERAGE	
Alpha Emitters	pCi/L	15	0	Entry Point Monitoring Only			8 ⁽²⁾	8 ⁽²⁾	N/A	N/D ⁽²⁾	N/D ⁽²⁾	N/D ⁽²⁾	8 ⁽²⁾	5 ⁽²⁾	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
Arsenic	ppb	10	0	Entry Point Monitoring Only			N/D	3	1 ⁽³⁾	2	2	6	6	N/A	Erosion of natural deposits
Barium	ppm	2	2	Entry Point Monitoring Only			N/D	N/D	N/D	0.04	0.04	N/D	N/D	N/A	Erosion of natural deposits; discharge from metal refineries; discharge of drilling wastes
Chromium	ppb	100	100	Entry Point Monitoring Only			38	45	41	N/D	N/D	17	17	N/A	Erosion of natural deposits
Copper ⁽⁴⁾	ppm	1.3 ⁽⁵⁾ (Action Level)	1.3	0.01 ⁽²⁾	0.07 ⁽²⁾	0.06 ⁽²⁾ (90th% value)	Distribution System Monitoring Only			Distribution System Monitoring Only		Distribution System Monitoring Only			Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	ppm	4.0	4.0	Entry Point Monitoring Only			1.0	1.0	1.0	0.7	0.7	1.0	1.0	N/A	Erosion of natural deposits
Free Chlorine Residual	ppm	4.0 ⁽⁶⁾ (MRDL)	4.0 ⁽⁶⁾ (MRDLG)	0.4	1.2	0.8 ⁽³⁾	Distribution System Monitoring Only			Distribution System Monitoring Only		Distribution System Monitoring Only			Water additive used to control microbes
Haloacetic Acids	ppb	60	N/A ⁽⁷⁾	1	1	N/A	Distribution System Monitoring Only			Distribution System Monitoring Only		Distribution System Monitoring Only			By-product of drinking-water disinfection
Lead ⁽⁴⁾	ppb	15 ⁽⁵⁾ (Action Level)	0	N/D ⁽²⁾	4 ⁽²⁾	N/D ⁽²⁾ (90th% value)	Distribution System Monitoring Only			Distribution System Monitoring Only		Distribution System Monitoring Only			Corrosion of household plumbing systems; erosion of natural deposits
Mercury	ppb	2	2	Entry Point Monitoring Only			N/D	N/D	N/D	0.4	0.4	N/D	N/D	N/A	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands
Nitrate (as Nitrogen)	ppm	10	10	Entry Point Monitoring Only			3.7	3.7	3.7	3.6	3.6	2.8	2.8	N/A	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	ppb	50	50	Entry Point Monitoring Only			1	2	2	19	19	2	2	N/A	Erosion of natural deposits; discharge from mines; component of petroleum
Total Trihalomethanes	ppb	80	N/A ⁽⁷⁾	8	8	N/A	Distribution System Monitoring Only			Distribution System Monitoring Only		Distribution System Monitoring Only			By-product of drinking-water disinfection
Uranium	ppb	30	0	Entry Point Monitoring Only			7	7	N/A	5	5	5	5	N/A	Erosion of natural deposits
Xylenes, total	ppm	10	10	Entry Point Monitoring Only			N/D	0.002	0.001	N/D	N/D	N/D	N/D	N/A	Discharge from petroleum factories; discharge from chemical factories

FOOTNOTES: **(1)** Some Safe Drinking Water Act (SDWA) regulations require monitoring in the distribution system, while other SDWA regulations require monitoring at the entry points to the distribution system (Treatment Plant and Wells). **(2)** Annual testing not required. Data is from 2014. **(3)** This value is the highest running annual average reported in 2016. Reports are filed quarterly. **(4)** Samples are from Searchlight customers' taps. **(5)** Lead and copper are 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, and for lead it is 15 ppb. **(6)** Chlorine is regulated by MRDL, with a goal stated as a MRDLG. **(7)** No collective MCLG but there are MCLGs for some of the individual contaminants. Haloacetic Acids: dichloroacetic acid (0), trichloroacetic acid (300 ppb); Trihalomethanes: bromodichloromethane (0), bromoform (0), dibromochloromethane (60 ppb).

KEY TERMS

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

Disinfection by-product: A substance created by the chemicals or processes used to destroy potentially harmful microorganisms.

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.

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.

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.

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.

N/A: Not applicable

N/D: Not detected. Does not equate to zero, but refers to an amount below analytical reporting limits.

Part per billion (ppb): A unit used to describe the levels of detected contaminants. Equivalent to 1 cent in \$10 million.

Part per million (ppm): A unit used to describe the levels of detected contaminants. Equivalent to 1 cent in \$10,000.

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.

Running annual average: The average of sample results for 12 consecutive months or four consecutive quarters, based on the monitoring requirements.

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

Variations and Exemptions: State or EPA permission not to meet an MCL or a Treatment Technique under certain conditions.

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 Searchlight 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, industrial wastewater discharges and mining;
- 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 mining 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.