

**HELENDALE COMMUNITY SERVICES DISTRICT**

26719 Vista Rd., Suite 3

PO Box 359

Helendale, CA 92342-0359

FIRST CLASS  
US POSTAGE  
PAID  
VICTORVILLE, CA  
PERMIT #235



**HELENDALE COMMUNITY SERVICES DISTRICT**

**2011 CONSUMER CONFIDENCE REPORT**

“Doing great things for our customers and our community”

**RESULTS OF 2010 DRINKING-WATER-QUALITY TESTS**

Helendale Community Services District is committed to keeping you informed about the quality of your drinking water. This report includes the results of hundreds of tests for various constituents conducted during 2010; *substances not detected are not listed*. The presence of various elements in the water does not necessarily indicate that the water poses a health risk. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents.

**\*Your drinking water does not meet the current EPA standard for:**

Manganese - During the first quarter of 2010 Well 6 had manganese levels above the secondary maximum contaminant level (SMCL). SMCL's have been established for contaminants that may affect the aesthetic quality of the drinking water. This has to do with taste, smell, color, etc. and is not a health-related issue. The secondary standards are not federally enforceable, but are intended as guidelines for the states.

*To correct this:*

In early 2010 the District designed and implemented a blending plan that blends the water from Well 6 prior to the first customer's tap. Since this implementation, water quality tests have shown to be well below the SMCL. Additionally, the District has built a new well to further improve water quality and minimizes the use of Well 6.

**En Español**

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

**Board of Directors**

- **H. James Keoshkerian, President**
- **John Higdon, Vice President**
- **Ron Clark, Secretary**
- **Sandy Haas, Director**
- **Craig Schneider, Director**



**Board Meetings  
are held on the  
1st and 3rd Thursdays  
of each month at  
6:30 pm at  
26719 Vista Rd., Suite 6  
Helendale, CA**



Helendale CSD routinely monitors for constituents in the District's drinking water according to Federal and State laws. The tables show the results of the monitoring for the period of January 1st through December 31st, 2010.

Questions about this report or concerning the water system?

Contact Mike Simpson, Water Operations Manager at (760) 951-0006.

**OFFICE HOURS:**

Monday through Friday

8:00 am—5:30 pm

Closed on Holidays

**How We Provide Top-Quality Water**

Our State certified water operations staff, works diligently to ensure that the water we provide to your home or business is safe and clean.

**TESTING:** Water-quality technicians test the water system weekly at four locations. The samples are tested by an independent lab and in the field. We also perform bacteriological tests on each active well site quarterly.

**CHLORINATION:** The technicians add trace amounts of chlorine at each well on a continuous basis to ensure the water remains free of possible bacteria.

**FLUSHING:** We periodically flush water out of fire hydrants at high velocity to remove small amounts of natural sand and minerals that can slowly build up in pipelines.

- **Maximum Contaminant Level (MCL):** 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** are set to protect the odor, taste, and appearance of drinking water.
- **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 are set by the U.S. Environmental Protection Agency (USEPA)
- **Public Health Goal (PHG):** 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.
- **Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **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 contaminants.
- **Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWS do not affect the health at the MCL levels.
- **Regulatory Action Level:** The concentration of a contaminant which, if detected, triggers treatment or other requirements that a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **pCi/L:** picocuries per liter (a measure of radiation) **ppm:** parts per million or milligrams per liter (mg/L) **ppb:** parts per billion or micrograms per liter (ug/L)

**Other Parameters That May Be of Interest to Consumers**

Constituent	Average	Range	Constituent	Average	Range
Sodium (mg/L)	105.66	60-290	Bicarbonate (mg/L)	208.33	190-240
CaCO <sup>3</sup> Hardness (mg/L)	245	180-370	Magnesium (mg/L)	9.43	6.9-13
Calcium (mg/L)	82.41	60-130	Aggressive Index	12.10	11.97-12.36
pH (Lab)	7.58	7.4-7.8			

**DID YOU KNOW...**

- 1 mg/L is equivalent to one second of time in approx. 11 1/2 days**
- 1 ug/L is equivalent to one second of time in approx. 31.7 years**

**Inorganic Contaminants with Primary Drinking Water Standards**

Contaminant	Average	Range	MCL	MCLG (PHG)	Violation	Major Sources in Drinking Water
Arsenic (ug/L)	1.87	0-11.5	10	0.004	N	Erosion of natural deposits
Total Chromium (ug/L)	0.58	0-3.5	50	100	N	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Nitrate (NO3) (mg/L)	3.86	0-15	45	45	N	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Fluoride (mg/L)	0.41	.26-.84	2	1	N	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (ug/L)	0.21	0-1.6	2	1.2	N	Erosion of natural deposits; discharge from refineries and factories; run-off from landfills and crop land
Nickel (ug/L)	2.16	0-13	100	12	N	Erosion of natural deposits; discharge from metal factories

**Regulated Contaminants with Secondary Maximum Contaminant levels**

Contaminant	Average	Range	Secondary MCL	Violation	Major Sources in Drinking Water
Turbidity Units (NTU)	1.01	0-5.1	5	N	Soil runoff
Odor-Threshold (TON)	0.66	0-1	3	N	Naturally occurring organic materials
Iron (mg/L)	0.061	0-0.250	.300	N	Leaching from natural deposits
Manganese (mg/L)	0.007	0-0.062	0.05	N	Leaching from natural deposits
TDS (mg/L)	452	380-550	1,000	N	Runoff/leaching from natural deposits
Color (UNITS)	3.33	0-10	15	N	Naturally-occurring organic materials
Spec. Conduct (umhos/cm)	734.0	650-840	1,600	N	Substances that form ions when in water; seawater influence
Chloride (mg/L)	74.32	41-300	500	N	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	150.16	81-330	500	N	Runoff/leaching from natural deposits; industrial wastes
Zinc (mg/L)	0.008	0-0.96	5.0	N	Runoff/leaching from natural deposits; industrial wastes
MBAS (mg/L)	0.01	0-0.08	0.5	N	Municipal and industrial waste discharges

**Lead and Copper**

Contaminant	No. of samples collected	90th percentile level detected	No. sites exceeding Action Level (AL)	AL	PHG	Typical Source of Contaminant
Lead (ppb) 9/16/09	22	5.1	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppb) 9/16/09	22	300	0	1300	150	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**Are Special Precautions Needed?**

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. Helendale CSD 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 30 seconds to 2 minutes before using water for drinking or cooking. 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 or at <http://www.epa.gov/safewater/lead>.

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. EPA/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 Water Drinking Hotline (800-426-4791).

**Radioactive Contaminants**

Contaminant	Average	Range	MCL	Violation	Major Sources in Drinking Water
Gross Alphas (pCi/L)	8.16	4.2-19	15	No	Erosion of natural deposits
Uranium (pCi/L)	4.95	0-8.3	20	No	Erosion of natural deposits

**SOURCE WATER ASSESSMENT**

Source water assessments were conducted for the sources of the Helendale Community Services District water system in June 2002, while the system was under the direction and control of San Bernardino County Service Area 70, Improvement Zone C. Well 1-A was assessed in July 2010. The assessments are summarized in the table below.

Source Number	Source ID	Most Vulnerable Activities (PCA)	Chemical Detected	Source Number	Source ID	Most Vulnerable Activities (PCA)	Chemical Detected
001	Well 01	Recreational area - surface water source; sewer collection systems	None	008	Well 04	Housing -high density; Sewer collection systems Recreational area - surface water source	Nitrate None
010	Well 1A	Recreational surface water and sewer collection systems	None	005	Well 06	Septic systems -high density	None
002	Well 02	Recreational area - surface water source; sewer collection systems	None	007	Well 08	Housing - high density; sewer collection systems Naturally occurring Automobile -Gas stations	Nitrate Arsenic None

**Disinfection Byproducts**

Contaminants	Average	Range	MCL	Violation	Major Sources in Drinking Water
Total Trihalomethanes (TTHMs) (ug/L))	20.5	10.6-30.4	80	N	By-product of drinking water disinfection

A copy of the complete assessment may be viewed at the Helendale Community Services District office or at the California Department of Public Health Drinking Water Field Operations Branch, 464 West 4th Street, Suite 437, San Bernardino, CA 92401. You may request a summary of the assessment be sent to you by contacting the CDPH District Engineer at (909) 383-4328.

**What's in Water in the Environment?**

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. The District's source of supply is 100 percent groundwater. 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*, that can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which 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 the same protection for public health.

**Where does my water come from?**

Your water comes from six of the District's eight wells constructed to a depth of up to 650 feet. One well is not utilized for daily production, but is on emergency standby. The District gets all of its water from the Upper Basin area, known as the Alto Subarea, of the underground aquifer that provides water to the high desert.