Helendale Community Services District

2014 Consumer Confidence Report

Issued June 2015

Board of Directors

H. James Keoshkerian, President
Ron Clark, Vice President
Sandy Haas, Secretary
Craig Schneider, Director
Tim Smith, Director

How to get involved

Board meetings are always open to the public. They are held the first and third Thursday of each month at 6:30 p.m. at the Helendale Community Center, 26540 Vista Rd. Suite C. Helendale, CA 92342. You also may visit our website at www.helendalecsd.org.

En Español

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien, 760-951-0006.

Questions?

For questions about this report or concerning the water system, please contact Michael Simpson, Water Operations Manager at 760-951-0006 during our regular office hours:
Monday-Friday
8:00 am. – 5:30 pm.
Closed on Holidays.

HELENDALE CSD PASSED OUR ANNUAL WATER QUALITY CHECKUP!

The Helendale Community Services District is pleased to present the 2014 Consumer Confidence Report. Last year, your tap water met all EPA and State drinking water health standards. Helendale CSD vigilantly safeguards its water supplies and once again, we are proud to report that our system met all water quality standards.

This report contains detailed information regarding your drinking water quality, where it comes from, and other information in compliance with State and Federal laws. This report is intended to assure citizens that their drinking water is of the highest quality and meets all Federal and State water quality standards implemented by the US Environmental Protection Agency (USEPA) Safe Drinking Water Act, passed in 1974. The District has approximately 2,809 service connections, including residential and business customers. In 2014, we provided 1,690 acre-feet of potable (drinkable) water to customers. Through our trained and certified water professionals, citizens have the security of knowing their drinking water has proper monitoring and oversight.

HOW WE PROTECT WATER QUALITY

Our State certified water operations staff works diligently to ensure that the water we provide to your home or business has met all drinking water standards.

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

DISINFECT FOR SAFETY: A small amount of chlorine is added at each well on a continuous basis to ensure the water remains free of any bacteria.

FLUSH TO KEEP THE SYSTEM CLEAN: 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; this happens because our water comes from deep groundwater wells.

WATER IN THE ENVIRONMENT

The 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 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 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 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, the U.S. Environmental Protection Agency (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.

Results of our 2014 Drinking Water Quality Tests

Helendale CSD is committed to keeping you informed about the quality of your drinking water. This report includes results from several tests for various constituents conducted during 2014. 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791). As the chart shows, very few substances could be detected, and all are within strict water quality standards established to protect water customers.

Inorganic Contaminants with Primary Drinking Water Standards

Contaminant	Average	Range	MCL	PHG (MCLG)	Sample Date	Violation	Major Sources in Drinking Water
Nitrate (NO3) (mg/L)	2.25	2.2-2.4	45	45	2014	**NO**	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Fluoride (mg/L)	0.31	0.25-0.40	2	1	2013/14	**NO**	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Arsenic (ug/L)	1.05	<2.0-2.1	10	0.004	2013/14	**NO**	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Nitrate + Nitrite (as N) (ug/L)	515	500-540	10,000	10,000	2014	**NO**	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Regulated Contaminants with Secondary Maximum Contaminant Levels

Contaminant	Average	Range	Secondary MCL	Sample Date	Violation	Major Sources in Drinking Water
Turbidity (NTU)	0.05	N.D.-0.2	5	2013/14	**NO**	Soil runoff
Total Dissolved Solids (mg/L)	443	370-510	1000	2013/14	**NO**	Runoff/leaching from natural deposits
Specific Conductance (µS/cm)	703	610-790	1600	2013/14	**NO**	Substances that form ions when in water; seawater influence
Chloride (mg/L)	51	44-58	500	2013/14	**NO**	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	105	69-140	500	2013/14	**NO**	Runoff/leaching from natural deposits; industrial wastes
Odor (units)	1	1	3	2013/14	**NO**	Naturally occurring organic materials

Lead and Copper

Contaminant	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG (MCLG)	Typical Source of Contaminant
Samples were taken at 22 various residential taps throughout the District. See page 3 under "Are Special Precautions Needed" for more information on Lead and Copper.							
Lead (ug/L)	Sept. 2012	22	ND	1	15	0.2	Internal corrosion of household water plumbing systems discharges from industrial manufacturers; erosion of natural deposits
Copper (ug/L)	Sept. 2012	22	190	0	1300	300	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

Radioactive Contaminants

Contaminant	Average	Range	MCL	PHG (MCLG)	Sample Date	Violation	Major Sources in Drinking Water
Gross Alpha (pCi/L)	6.91	2.31-**17***	15	None	2012/14	**NO**	Erosion of natural deposits
Uranium (pCi/L)	5.77	3.93-6.5	20	0.43	2012/14	**NO**	Erosion of natural deposits

*In 2014, the District performed Gross Alpha monitoring at Well 1A. The initial results were 15 pCi/L which resulted in an increase of quarterly monitoring. During the quarterly monitoring the District performed several tests, which ranged from 2.31 pCi/L to 17 pCi/L; the Running Annual Average was 9.41 pCi/L for Well 1A. The Running Annual Average results were below the MCL of 15 pCi/L, No violations were issued by the State Board.

Source Water Assessment

Source water assessments were conducted for the sources of the Helendale Community Services District water System. Well 1A was assessed in June 2010, and Well 4A was assessed in June 2011. The assessments are summarized in the table below.

Source Number	Source ID	Most Vulnerable Activities (PCA)	Chemical Detected
010	Well 1A	Recreational area - surface water source and sewer collection systems	None
012	Well 4A	Sewer collection systems; recreational area – surface water	None

Disinfection Byproducts

Contaminant	Sample Date	Average	Range	MCL	PHG (MCLG)	Violation	Major Sources in Drinking Water
Total Trihalomethanes (TTHM) (ug/L)	July 2014	10.5	7.4—12.3	80	None	**NO**	Byproduct of drinking water disinfection
Haloacetic Acids (HAA5) (ug/L)	July 2014	3.83	2.1—4.8	60	None	**NO**	Byproduct of drinking water disinfection

PEOPLE WITH SPECIAL NEEDS 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).

ARE SPECIAL PRECAUTIONS NEEDED? Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).

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 1-800-426-4791 or at *http://water.epa.gov/drink/info/lead/index.cfm* or *http://www.epa.gov/safewater/lead*.

Unregulated Contaminants

Constituent	Average	Range	NL	MCL	PHG (MCLG)	Date
Boron (ug/L)	205	150-260	1,000	None	None	2013/14
Vanadium (ug/L)	5.7	4.8-6.5	50	None	None	2013/14

Disinfectant Residuals

Contaminant	Sample Date	Average	Range	MCL	PHG (MCLG)	Violation	Major Sources in Drinking Water
Chlorine (mg/L)	Weekly	0.45	0.10—0.79	4	4	**NO**	Drinking water disinfectant added for treatment

Constituents that may be of interest to Consumers

Constituent	Average	Range	Date
Sodium (mg/L)	70	57-81	2013/14
Calcium (mg/L)	67	56-75	2013/14
pH (Lab)	7.3	7.3	2013/14
Bicarbonate (mg/L)	205	200-210	2013/14
Magnesium (mg/L)	8.3	7.8-8.7	2013/14
Potassium (mg/L)	2.5	2.0-2.9	2013/14
Total Hardness (as CaCO3) (mg/L)	198	170-220	2013/14
Total Alkalinity (as CaCO3) (mg/L)	165	160-170	2013/14

Did you know….

- The average Californian uses 196 gallons of water per day.
- A running toilet can waste up to 200 gallons of water per day.
- Taking a bath requires up to 70 gallons of water. A five-minute shower uses only 10 to 25 gallons.
- At 1 drip per second, a faucet can leak 3,000 gallons per year.
- It takes more than ten gallons of water to produce one slice of bread.

Source: US EPA

Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to the PHG's (or MCLG's) as is economically and technologically feasible.
Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's are set by the U.S. Environmental Protection Agency (USEPA).
Maximum Residual Disinfectant Level (MRDL): 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Notification Level (NL): The concentration of a contaminant which, if exceeded, triggers notification to local political jurisdictions and customers.
Primary Drinking Water Standard (PDWS): MCL's and MRDL's for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.
Regulatory Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
Secondary Drinking Water Standard: Requirements that ensure appearance, taste and smell of drinking water are acceptable.
Secondary MCL's (SMCL): Are set to protect the odor, taste, and appearance of drinking water.
ND: Not detected.
NTU: Nephelometric Turbidity Units.
µS/cm: a measure of conductance.
pCi/L: picocuries per liter (a measure of radioactivity).
mg/L = milligrams per liter or parts per million (ppm).
ug/L = micrograms per liter or parts per billion (ppb).
< : Less than the detection limit.

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

Helendale Community Services District
26540 Vista Rd. Suite, B.
PO Box 359
Helendale, CA 92342-0359

Helendale CSD routinely monitors for constituents in the District's drinking water in accordance with Federal and State laws. The tables show the results of the monitoring for the period of January 1st through December 31st 2014. However, some results represent the most recent sampling which could be from previous years. *Substances that are not detected (ND) are not listed*.

California's Drought

California is in a serious drought and we all must do our part to conserve. On April 1, 2015, Governor Brown issued Executive Order B-29-15, mandating a 25% reduction in water use. In support of that order, on May 5, 2015 the State Water Resources Control Board adopted emergency regulations that mandate a cutback of 25% in water usage for our community. Immediate action is necessary.

Included in the Executive Order are prohibitions that we all must follow:

- Do not wash down sidewalks and driveways
- No runoff from irrigation
- When washing a car you must have a shut-off nozzle on your hose
- Fountains must have a re-circulating system
- No irrigation during and 48 hours after a measurable rain event
- Restaurants can only serve water upon request.

As the drought progresses, these regulations may be amended and/or expanded. Residents are encouraged to call the CSD with any questions regarding this State mandate or implementation of conservation measures in our local community.

Here are a few easy things you can do to save water

- Don't let water run off your property.
- Use a broom instead of a hose to clean your driveway.
- Check your sprinklers once a week. Make repairs and adjustments right away to avoid water waste.
- Water early in the morning when temperatures are cooler and there is less wind.
- Use water efficient plants in your landscape. Plants that are adapted to our local climate use less water.
- Flushing the toilet can use more than 20 gallons of water per day. If you still have a standard toilet that uses close to 3.5 gallons per flush, you can save water by replacing it with a new low flush toilet, or retrofit your old toilet with a water displacement bag.
- Most front loading washing machines are energy and water efficient - using just over 20 gallons per load, while most top loading machines use as much as 40 gallons per load.

Where does my water come from?

In the 2014 calendar year your water came from two of the District's eight wells that are constructed to depths of up to 650 feet. Four wells were not utilized for daily production, but are 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.