Consumer Confidence Report 2013

What's New?

Recently, the State of California approved funding for two new wells and water treatment facilities for the City of Hughson. These improvements would replace wells recently lost to contaminants, and lower arsenic from all wells to levels determined acceptable by state and federal regulations. The City is continually working to find ways to improve the drinking water quality while keeping customer water bills as low as possible.

What is the City doing to ensure my drinking water will stay safe?

Although the water provided to our customers meets almost every state and federal drinking water standard, there are contaminants in the local groundwater that we must prevent from getting in the water supply. In response, the City has stopped using wells that have the highest levels of contaminants, and is replacing them with new wells that have treament systems to remove the conaminants. In 2011, the City completed construction of Well No. 8 Water Treatment Facility, which is equipped with a filter process to remove arsenic. Most of the drinking water for the City comes from this well. Additional arsenic treatment is being proposed for a new City well that may be constructed in the next year or two.

The City of Hughson's water is supplied solely by deep groundwater wells. Groundwater is water that has soaked into the soils from rains, rivers, and irrigation, and continuing downward, filling openings in beds of gravel and sand called aquifers. Our active wells are operated and maintained by State licensed water treatment operators.

Our water sources include:

- Well 3 - Starn Park
- Well 4 - Hughson Elementary School
- Well 5 - Tully Road – south of Whitmore
- Well 6 - Locust Street near Samaritan Village
- Well 8 – Euclid Avenue
- Storage Tank - Fox Road / Charles Street

To ensure your water is safe to drink, water samples are taken weekly from various locations throughout the water distribution system. Samples are taken directly at wells and points in the water system. The samples are tested by our operators and by State certified laboratories to see that they meet all state and Federal drinking water standards.

Water Conservation

As you know, we are in a period of severe drought, so all communities in California are being requested to do their part by responsibly using water. Many communities are in a state of emergency, not knowing if they will get through the summer without running out of water. Although the City of Hughson does not expect to have severe water shortages, we still need to conserve water. Please help us conserve water (and reduce your water bills!) by taking simple steps, like don't over water your landscape, don't run water while brushing your teeth, don't let hoses run while washing your car, etc. Thank you for your participation during this state of emergency.

Consumer Confidence Report 2013

What's In Your Water?

This report contains important information about the quality of the City of Hughson's drinking water for the period of January 1, 2013 – December 31, 2013. Included are details about where your water comes from, data about what is in your water and how water tests on your drinking water compare to Federal and State drinking water standards.

We encourage our non-English speaking residents to speak with someone who can assist them in reading this report.

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

For more information on your water quality or questions about this report, please contact the City of Hughson Public Works Department at (209) 503-3049 and ask for Sam Rush. You are welcome to participate in the City Council meetings to voice any concerns regarding your drinking water. The City Council meets the second and fourth Monday of each month at 7:00pm at City Hall located at 7018 Pine Street, Hughson, CA.

City of Hughson
7018 Pine Street
Hughson, CA 95326

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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).

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 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).

Sources of drinking 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, radio-active 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 storm-water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants; naturally-occurring or the result of oil and gas production and mining activities.

If present, elevated levels of lead can cause serious 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 City of Hughson 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. In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Definitions

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.

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.

Primary Drinking Water Standards (PDWS):

MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS):

MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Regulatory Action Level (AL):

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

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

pCi/L: picocuries per liter (a measure of radiation)

Water Quality Report

Water quality data for the period of January 1 - December 31, 2013

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of Detections (In a Month)	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	1	0	More than one sample in a month with a detection	0	Naturally present in the environment

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (and reporting units)	No. of Samples Collected (Date)	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	20 (2013)	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	20 (2013)	<0.071	0	1.3	0.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituents	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2012	63	40-84	None	None	Salt present in the water and is generally naturally occuring
Hardness (ppm)	2011	99	35-259	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occuring.

TABLE 4- DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituents	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG)	Typical Source of Contaminant
Arsenic (As) ppb	2013	9.3	ND-19[2]	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (Ba) ppm	2012	0.12	0.04-0.258	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2012	0.1	ND-0.4	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (NO3) ppm	2013	30.7	9-33.8	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha (pCi/L)	2012	2.13	1.7-2.6	15	(0)	Erosion of natural deposits
Uranium (pCi/L)	2010	8.2	6-10	20	0.43	Erosion of natural deposits

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituents	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2012	26.5	10-68	500	N/A	Runoff/leaching from natural deposits; seawater influence
Odo - Threshold (TON)	2012	0.5	ND-2	3	N/A	Naturally-occurring organic materials
Turbidity	2012	0.12	ND-03	5	N/A	Soil Runoff
Specific Conductance (uS/cm)	2012	514	343-762	1600	N/A	Substances that form ions when in water; seawater influence
Sulfate (SO4) ppm	2012	18.6	4.0-57	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Iron (Fe) ppb	2013	ND	ND	300	N/A	Naturally occurring mineral
Manganese (Mn) ppb	2013	ND	ND	50	N/A	Naturally occurring mineral
Total Dissolved Solids (TDS) ppm	2012	340	260-490	1000	N/A	Runoff/leaching from natural deposits

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituents	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Baron (B) ppm	2012	0.13	ND-03	1	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.
Vanadium (V) ppb	2012	16	6-21	50	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals

TABLE 7 - DETECTION OF FEDERAL DISINFECTANT/ DISINFECTANT BYPRODUCT RULE

Chemical or Constituents	Sample Date	Level Detected	Range of Detections	MCL (MRDL)	PHG (MCLG)	Typical Sourc e of Contaminant
TTHMs (Total Trihalomethanes) ppb	2013	2.5	2.5	80	N/A	By-product of drinking water disinfection