

CITY OF HAYS CONSUMER CONFIDENCE REPORT- March 2015

Covering Calendar Year 2014

This brochure is a snapshot of the quality of the water that the City of Hays provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. The City of Hays is committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are made continually to improve their water systems. For more information, please contact **BERNIE KITTEN** at 785-628-7380. This information is also available via the City's website at www.haysusa.com. The Hays City Commission meets on the second and fourth Thursdays of each month at 6:30 p.m. at City Hall.

The City of Hays receives its water from 37 groundwater wells. Twelve are shallow wells averaging 60 feet deep. They are located 12 miles south of Hays and receive their water from the Smoky Hill Aquifer. Thirteen shallow wells, averaging 60-90 feet deep, are located in and around Hays and receive their water from the Big Creek Aquifer. Six deep wells, averaging 500 feet deep, receive their water from the Dakota Aquifer and are located 3.5 miles southwest of Hays, and six remediation wells are located in south Hays.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 healthcare providers. EPA/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 (800-426-4791).

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's Safe Drinking Water Hotline (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, 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 before it is treated include: Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Inorganic contaminants, such as salts and metals, which 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, which may come from a variety of sources such as storm water run-off, agriculture, and residential users. Radioactive contaminants, Naturally occurring or the from mining activity. Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. The City of Hays water is treated according to EPA's regulations. Food and Drug Administration regulations establish limits for

contaminants in bottled water, which must provide the same protection for public health.

The City of Hays water system tested a minimum of 20 samples per month in accordance with the Total Coliform Rule for microbiological contaminants.

Coliform bacteria are usually harmless, their presences in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If exceeded, the water supplier must notify the public.

Water Quality Data

The following tables list all of the drinking water contaminants, which were detected during the 2014 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1 - December 31, 2014. The state requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. If only one test is taken in a year, the range is the same as the highest value. Some of the data, though representative of the water quality, is more than one year old. **The bottom line is that the water that is provided to you is safe.**

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): the "Maximum Allowed" MCL is 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.

Secondary Maximum Contaminant Level (SMCL): recommended level for a contaminant that is not regulated and has no MCL.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

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

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.

Non-Detects (ND): laboratory analysis indicates that the contaminant is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Monitoring Period Average (MPA): An average of sample results obtained during a defined timeframe, common examples of monitoring periods are monthly, quarterly and yearly.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

Aquifer: underground rock, clay, sand and gravel materials that store water.

Remediation: KDHE Air Strippers that remove Volatile Organic Compounds in the water.

Testing Results for CITY OF HAYS

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of August, 3 sample(s) returned as positive	MCL: Systems that Collect Less Than 40 Samples per Month-No more than 1 positive monthly sample	0	Naturally present in the environment

Regulated Contaminants	Collection Date	Your Highest Value	Range If more than 1 test	Unit	MCL Maximum allowed	MCLG	Typical Source
ARSENIC	3/8/2012	1.3		ppb	10	0	Erosion of natural deposits
BARIUM	3/8/2012	0.009		ppm	2	2	Discharge from metal refineries
CHROMIUM	3/8/2012	1		ppb	100	100	Discharge from steel and pulp mills
FLUORIDE	3/8/2012	0.61		ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
NITRATE (AS N)	12/9/2014	6		ppm	10	10	Runoff from fertilizer use
SELENIUM	3/8/2012	5.9		ppb	50	50	Erosion of natural deposits

Disinfection Byproducts	Monitoring Period	Your Highest RAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2014	16	3.1-19	ppb	60	0	By-product of drinking water disinfection
TOTAL TRIHALOMETHANES (TTHMs)	2014	40	28.206-50	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 TH Percentile	Range (low/high)	Unit	AL= Action Level	Sites Over AL	Typical Source
COPPER, FREE	2011-2013	0.11	0.0054- 0.15	ppm	1.3	0	Corrosion of household plumbing
LEAD	2011-2013	2.2	1 – 3.3	ppb	15	0	Corrosion of household plumbing

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. Your water system 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>.

Secondary Contaminants	Collection Date	Your Highest Value	Unit	SMCL suggested maximum allowed
ALKALINITY, TOTAL	3/8/2012	79.5	MG/L	300
CALCIUM	3/8/2012	34	MG/L	200
CHLORIDE	3/8/2012	160	MG/L	250
CONDUCTIVITY @ 25 C UMHO/CM	3/8/2012	1200	UMHO/CM	1500
HARDNESS, TOTAL (AS CaCO ₃)	3/8/2012	150	MG/L	400
MAGNESIUM	3/8/2012	15	MG/L	150
NICKEL	3/8/2012	0.001	MG/L	0.1
PH	3/8/2012	7.7	PH	8.5
POTASSIUM	3/8/2012	8.8	MG/L	100
SILICA	3/8/2012	30	MG/L	50
SODIUM	3/8/2012	200	MG/L	100
SULFATE	3/8/2012	250	MG/L	250
TDS (TOTAL DISSOLVED SOLIDS)	3/8/2012	770	MG/L	500

During the 2014 calendar year, the City had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Type
8/1/2014-8/31/2014	COLIFORM (TCR)	MCL (TCR), MONTHLY

Additional Required Health Effects language:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed which is a warning of potential problems. Retesting the locations found no Coliforms.
Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

UCMR3 The City of Hays Water Plant has been monitoring for Unregulated Contaminant Monitoring Regulation (UCMR3). Unregulated contaminants are those that don't yet have a drinking water standard set by the US EPA. The purpose of monitoring for these contaminants is to help EPA decide whether contaminants should have a standard. The City of Hays had no reported violations on UCMR3 testing in 2014. Additional information on UCMR3 is available online at <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/index.cfm>

Please note: Because of sampling schedules, results may be older than 1 year.