Quality First

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water we provide to our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the following pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Where do we get our drinking water?
Water Sources: Carrizo Wilcox / Sabine River
Locations: Gregg and Rusk County
Types: Both Groundwater and Surface Water

The TCEQ completed an assessment of your source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this report. For more information on source water assessments and protection efforts at our system, contact Matt Linthicum (903) 836-2858

Some of this source water information assessment information will be available on Texas Drinking Water Watch at http://dww.tceq.state.tx.us/DWW/.

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar al tel (903) 657-6551 para hablar con una persona bilingue en espanol

Important Health Information

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections.

Cryptosporidium is a tiny intestinal parasite found naturally in the environment. It is spread by human and animal waste. If ingested, cryptosporidium may cause cryptosporidiosis , an abdominal infection (symptoms include nausea, diarrhea, ad abdominal cramps). Some of the ways cryptosporidium may cause cryptosporidium can be spread include drinking water, contaminated water, eating contaminated food that is raw or under cooked, exposure to the feces of animals or infected individuals (i.e. changing diapers without washing hands afterwards), or exposure to contaminated surfaces. Not everyone exposed to the organism becomes ill. During 2009, Henderson tested for cryptosporidium in it source water (Sabine River). Cryptosporidium has not been found in the source water (Sabine River). Henderson works to protect from contamination and optimizes the treatment process.

You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the U.S. EPA's Safe Drinking Water Hotline (800) 426-4791 or visit http://water.epa.gov/drink/hotline.

EPA Wants You To Know:

ALL drinking may contain contaminants. When drinking water meets federal standards there may not be any health-based benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).

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 include:

Microbial Contaminants, such as viruses and bacteria, which 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 agriculture, urban storm water runoff, and residential uses.

Organic Chemical Contaminants, , including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive Contaminants, , which can be naturally occurring or be the result of oil and gas production and mining activities.

Many constituents (such as calcium, sodium, or iron), which are often found in drinking water, can cause, taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not cause for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

2016 Sampling Results for Contaminants in Drinking Water for Henderson

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. The following information lists all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

REGULATED CONTAMINANTS

Contaminant	Year Sampled	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Potential Source of Contamination
INORGANIC CONTAMINANTS								
Arsenic	2016	<0.0007	<0.0007	<0.0007	0.01	0	ppm	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics wastes
Barium	2016	0.074	0.074	0.074	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2016	<0.0004	<0.0004	<0.0004	0.1	0.1	ppm	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide	2016	<0.05	<0.05	<0.05	4	4	ppm	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2016	0.077	0.077	0.077	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate	2016	0.0583	<0.01	0.188	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Selenium	2016	<0.001	<0.001	<0.001	0.05	0.05	ppm	Discharge from petroleum and metal refineries, erosion of natural deposits, discharge from mines
Thallium	2016	<0.2	<0.2	<0.2	2	0.5	ppb	Discharge from petroleum and metal refineries, erosion of natural deposits, discharge from mines.
Beta/Photon emiters	2014	<4.0	<4.0	<4.0	5	0	pCi/L	Decay of natural and man-made deposits.
Combined Radium 226/228	2014	1.5	1.5	1.5	5	0	pCi/L	Erosion of natural deposits
ORGANIC CONTAMINANTS								
Di(2-ethylhexyl)phthalate	2016	<0.5	<0.5	<0.5	6	0	ug/L	Discharge from rubber and chemical factories.

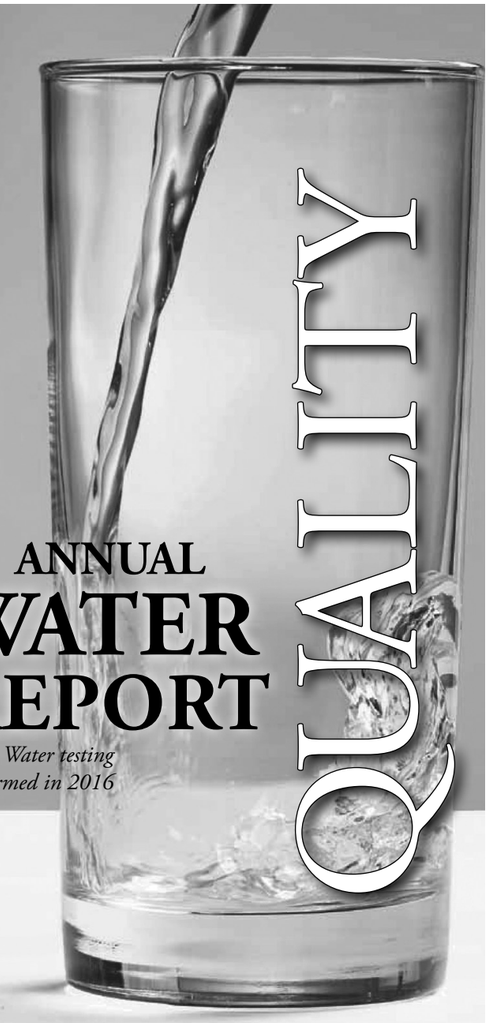
Community Participation

A public meeting will be held on August 16, 201, 2:00 pm, at the Henderson City Hall. This meeting will allow the public to discuss this report. Anyone who wishes to attend is encouraged to do so.

Location: City Hall at 400 W Main, Henderson, Texas
Phone Number: (903) 657-6551
To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

Questions

For more information about this report, or for any questions relating to your drinking water, please call Matt Linthicum at (903) 836-2858.



ANNUAL WATER REPORT

Water testing performed in 2016

QUALITY

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2016, our system lost an estimated 157,859,410 gallons of water (approximately 18.46% of our total treated water). If you have any questions about this water loss audit, please call (903) 657-5246

400 W. Main St., Henderson TX 75652-3099
(903) 836-2858 • www.hendersontx.us

Presented By

City of Henderson

Public Water System Identification Number 2010001

MAXIMUM RESIDUAL DISINFECTANT LEVEL

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must provide disinfectant type,minimum, maximum and average levels.

Disinfectant	Year Sampled	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Potential Source of Contamination
Chloramine	2017	1.43	0.5	4	<4.0	ppm	ppm	Disinfectant used to control microbes.

DISINFECTION BYPRODUCTS

Location	Contaminant	Year Sampled	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Potential Source of Contamination
Site 1	Haloacetic Acids (HAA5)	2016	60.2	57.40	64.80	80.00	ppb	Byproduct of drinking water disinfection.
	Total Trihalomethanes (TTHMs)	2016	32.6	28.80	36.50	60.00	ppb	Byproduct of drinking water disinfection.
Site 2	Haloacetic Acids (HAA5)	2016	18.6	6.00	28.10	80.00	ppb	Byproduct of drinking water disinfection.
	Total Trihalomethanes (TTHMs)	2016	12.8	3.60	20.80	60.00	ppb	Byproduct of drinking water disinfection.
Site 3	Haloacetic Acids (HAA5)	2016	22.8	15.10	29.90	80.00	ppb	Byproduct of drinking water disinfection.
	Total Trihalomethanes (TTHMs)	2016	18.2	28.60	32.20	60.00	ppb	Byproduct of drinking water disinfection.
Site 4	Haloacetic Acids (HAA5)	2016	7.7	3.00	15.60	80.00	ppb	Byproduct of drinking water disinfection.
	Total Trihalomethanes (TTHMs)	2016	2.5	1.10	5.90	60.00	ppb	Byproduct of drinking water disinfection.

UNREGULATED CONTAMINANTS

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfectant byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Contaminant	Year Sampled	Average Level	Minimum Level	Maximum Level	Unit of Measure	Potential Source of Contamination
Chloroform	2011-2016	19.6	1.91	161	ppb	Byproduct of drinking water disinfection.
Bromoform	2011-2016	0.93	<1	17.9	ppb	Byproduct of drinking water disinfection.
Bromodichloromethane	2011-2016	11.7	<1	53.1	ppb	Byproduct of drinking water disinfection.
Dibromochloromethane	2011-2016	6.74	<1	30.03	ppb	Byproduct of drinking water disinfection.

UNREGULATED CONTAMINANT MONITORING RULE 2 (UCMR2)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether further regulation is warranted. Any unregulated contaminants detected are reported in the flowing table. For additional information and data visit http://www.epa.gov./safewater/ucmr/ucmr2/index.html, or call the Safe Drinking Water Hotline at (800)426-4791.

Contaminant	Year Sampled	Average Level	Minimum Level	Maximum Level	Unit of Measure	Potential Source of Contamination
Chloroform	2016	10.4	<1	38.3	ppb	Byproduct of drinking water disinfection.
Bromoform	2016	0.092	<1	1.84	ppb	Byproduct of drinking water disinfection.
Bromodichloromethane	2016	6.88	<1	25.1	ppb	Byproduct of drinking water disinfection.
Dibromochloromethane	2016	2.63	<1	11.5	ppb	Byproduct of drinking water disinfection.

LEAD AND COPPER

Contaminant	Year Sampled	The 90th Percentile	Number of Samples	Action Level	Number of sites Exceeding Action Level	Unit of Measure	Potential Source of Contamination
Lead	2016	2.08	20	15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Copper	2016	0.268	20	1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Additional Health Information for Lead "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. This water supply 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."

ASBESTOS

Some people who drink water containing asbestos well in excess of the maximum contaminant level (MCL) for many years may have an increased risk of developing benign intestinal polyps.

Year Sampled	Average Level	Minimum Level	Maximum Level	MCL Limit	Unit of Measure	Potential Source of Contamination
2013	<0.185	<0.185	<0.185	7	MFL	Decay of asbestos cement water mains; and erosion of natural deposits.

TURBIDITY

Turbidity has no health effects. However, Turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. Turbidity is removed by sedimentation and filtration.

Contaminant	Year Sampled	Highest Single Measurement	Lowest monthly % of Samples Meeting Limits	Turbidity Limit	Unit of Measure	Potential Source of Contamination
Turbidity	2016	0.29	100%	0.3	NTU	Soil Runoff

TOTAL ORGANIC CARBON

Total organic carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Contaminant	Year Sampled	Average Level	Minimum Level	Maximum Level	Unit of Measure	Potential Source of Contamination
Source Water	2016	6.42	5.40	7.54	ppm	Naturally present in environment
Drinking Water	2016	3.09	2.34	4.17	ppm	Naturally present in environment
Removal Ratio	2016	1.16	0.92	1.30	% removal	N/A

*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

TOTAL COLIFORM

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Contaminant	Year Sampled	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Potential Source of Contamination
Total Coliform Bacteria	2016	0	*	Presence	Naturally present in the environment.
Fecal Coliform	2016	0	*	Presence	Naturally present in the environment.

*** Two or more consecutive Coliform present in samples in any single month**

SECONDARY AND OTHER CONSTITUENTS NOT REGULATED
(NO ASSOCIATED ADVERSE HEALTH EFFECTS)

Constituent	Year Sampled	Number of Samples	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Potential Source of Contamination
Aluminum	2016	1	0.017	0.017	0.017	0.2	ppm	Abundant naturally occuring element
Bicarbonate	2016	1	33.6	33.6	33.6	N/A	ppm	Corrosion of carbonate rocks such as limestone
Calcium	2016	1	13.9	13.9	13.9	N/A	ppm	Abundant naturally occuring element
Chloride	2016	1	55.3	55.3	55.3	N/A	ppm	Abundant naturally occuring element; used in water purification; byproduct of oil field activity
Copper, Free	2016	21	0.146	0.019	0.315	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Iron	2016	1	<0.02	<0.02	<0.02	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities
Lead	2016	21	0.00112	<0.0004	0.00239	N/A	ppm	Corrosion of household plumbing systems; erosion of natural deposits
Magnesium	2016	1	4.44	4.44	4.44	N/A	ppm	Abundant naturally occuring element
Manganese	2016	1	0.0023	0.0023	0.0023	0.05	ppm	Abundant naturally occuring element
pH	2011	5	8.1	7.7	8.1	N/A	ppm	Measure of corrosivity of water
Sodium	2016	1	42.2	42.2	42.2	N/A	ppm	Erosion of natural deposits; byproduct of oil field activity
Sulfate	2016	1	32.4	32.4	32.4	300	ppm	Naturally occuring; common industrial byproduct; byproduct of oil field activity
Total Alkalinity as CaCO3	2016	13	43.9	22	70	N/A	ppm	Naturally occuring soluble mineral salts
Total Dissolved Solids	2016	1	173	173	173	1000	ppm	Total dissolved mineral constituents in water
Total Hardness as Magnesium	2016	1	53	53	53	N/A	ppm	Naturally occuring calcium
Zinc	2016	1	0.0043	0.0043	0.0043	5	ppm	Moderately abundant naturally occuring element used in the metal industry

TOTAL ORGANIC CARBON

The City of Henderson received one violation for 2016. The violation is listed as "Follow-Up or Routine Tap M/R (LCR)". The City of Henderson is required to submit 30 lead and copper samples from previously selected and approved residences. Due to residence vacancies and the state's lab failure to send a complete list with the previously approved sample locations, we pulled samples from 10 alternate sites in an effort to meet our 30 sample requirement. We were, however, denied credit for the 10 alternate sites. TCEQ has required the City of Henderson to distribute one public notice for the violation (which has already been delivered to customers), updating our current monitoring plan to include 30 additional alternate lead and copper sample sites, and resampling for lead and copper in the third quarter of 2017. It should be noted that all of the lead and copper samples pulled in 2016, both preapproved and unapproved, were well below the action levels for lead and copper.

Definitions & Abbreviations

MCL – Maximum Contaminant Level – 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.

MCLG – Maximum Contaminant Level Goal – 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.

MRDL – Maximum Residual Disinfectant Level – This 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.

MRDLG – Maximum Residual Disinfectant Level Goal – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benfits of the use of disinfectants to control microbial contaminants.

MFL – Million fibers per liter (a measure of asbestos)

NTU – Nephelometric Turbidity Units – A measure of clarity.

pCi/L – Picocuries per Liter – A measure of radioactivity.

Ppm – parts per million – One part substance per million parts water (or milligrams per liter).

Ppb – parts per billion – One part substance per billion parts water (or micrograms per liter).

Ppt – parts per trillion – parts per trillion – parts per trillion, or nanograms per liter.

Ppq – parts per quadrillion or pictograms per liter.

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

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

N/A – Not applicable