

2018 ANNUAL DRINKING WATER QUALITY REPORT (Consumer Confidence Report)

January 1, 2018-----December 31, 2018
ARMSTRONG WATER SUPPLY CORPORATION

Phone Number: 254-657-2429
PWS ID NUMBER 0140019

OUR DRINKING WATER IS REGULATED

This report is a summary of the quality of the water we provide 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 attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

PUBLIC PARTICIPATION OPPORTUNITIES

DATE: 1st Tuesday of each month
TIME: 6:00 pm
LOCATION: 100 East Travis St.-Holland, Texas
PHONE NUMBER: 254-657-2429

To learn about future public meetings (concerning our drinking water), or to request to schedule one please call us.

SOURCES OF DRINKING WATER

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.

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.

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.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

SPECIAL NOTICE

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. 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 Safe Drinking Water Hotline at (800)426-4791.

Required 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>.

En Espanol

Este informe incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (254)657-2429.

Information about Source Water Assessments

Water Assessment for your drinking water source(s) is currently being conducted by the TCEQ and should be provided to us this year. The report describes the susceptibility and the types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment will allow us to focus our source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://www.tceq.texas.gov/gis/swaview>

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW>

For more information on source water assessments and protection efforts at our system, contact Billy James Smith @ 254-657-2429.

Source Water Name

SW from Central Texas WSC CC from TX0140161 CTWSC
12901 FM 1123/Standpipe Plant

Type of Water

Surface Water Stillhouse Hollow Lake
Ground Water 12901 FM 1123 Well

Location

ALL drinking water may contain contaminants

When drinking water meets federal standards, there may not be any health benefits to purchasing bottled water or point of using devices. Drinking water, including bottled water, may reasonable 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.

Secondary Constituents

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 causes 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.

Water Quality Test Results

Definitions	The following tables contain scientific terms and measures, some of which may require an explanation.
Action Level	The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow.
Action Level Goal (ALG)	The level of a contaminant in drinking water below which there is no known risk to health. ALGs allow for a margin of safety.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment	A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level Goal or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
Maximum Contaminant Level or MCL:	The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology
Maximum residual disinfectant level or 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, million fibers per liter (a measure of asbestos)
Maximum residual disinfectant level or 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.
na:	Not applicable
NTU	Nephelometric turbidity units (a measure of turbidity)
pCi/L	Picocuries per liter (a measure of radioactivity)
ppb:	Micrograms per liter or parts per billion-or one ounce in 7,350,000 gallons of water
ppm:	Milligrams per liter or parts per million-or one ounce in 7,350 gallons of water
ppt	Parts per trillion, or nanograms per liter (ng/L.)
ppq	parts per quadrillion, or picograms per liter (pg/L.)

Inorganic Contaminants

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2018	Fluoride	0.26	0.25 - 0.26	4	4.0	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2018	Nitrate {Measured as Nitrogen}	0.42	0.05- 0.42	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2018	Barium	0.0369	0.0369 0.0369	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2018	Cyanide	0.12	0.09- 0.12	200	200	ppb	N	Discharge from plastic and fertilizer factories.

***Nitrate advisory-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 advice from your health care provider.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Likely source of contamination
2018	Chlorine and Chloramines	2.59	0.50	4.0	4	4	ppm	N	Water additive used to control microbes.

Regulated Contaminants

Year	Disinfectants and Disinfectant By-Products	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2018	Haloacetic Acids (HAA5)	9.8	1.8- 9-8	No goal for the total	60	ppb	N	Byproduct of drinking water chlorination
2018	Trihalomethanes (TThm)	6.9	3.3- 6.9	No goal for the total	80	ppb	N	Byproduct of drinking water chlorination

Unregulated Contaminants

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2018	Chloroform	1.86	1.4	2.2	ppb	Byproduct of drinking water disinfection.
2018	Bromoform	2.4	1.3	4.1	ppb	Byproduct of drinking water disinfection.
2018	Bromodichloromethane	1.64	1.2	2.3	ppb	Byproduct of drinking water disinfection.
2018	Dibromochloromethane	1.5	1.0	1.9	ppb	Byproduct of drinking water disinfection.

Radioactive Contaminants

Year	Contaminant	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of contamination
2018	Beta/photon emitters	4.8	4.8-4.8	0	50	pCi/L*	N	Decay of natural & man-made deposits.
*EPA considers 50 pCi/L to be the level of concern for beta particles.								
2018	Combined Radium 226/228	1	1.36-1.36	0	5	pCi/L	N	Erosion of natural deposits.
2018	Gross alpha excluding radon & uranium	4.3	4.3-4.3	0	15	pCi/L	N	Erosion of natural deposits.

Regulated Contaminants Detected

Lead and Copper

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.63	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2017	0	15	2.4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Violations Table

There were no violations for Armstrong Water Supply Corporation for the year 2018

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec, 2018, our system lost an estimated 22,933,607 gallons of water. If you have any questions about the water loss audit please call 254-657-2429.