

2016 Annual Drinking Water Quality Report (Consumer Confidence Report)

FOUR WAY SPECIAL UTILITY DISTRICT (TX0030020)

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Este informe incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al tel. (936)422-4188.

Public Participation Opportunities. To learn about future public meetings (concerning your drinking water), or to request to schedule one; please call Tommy Carswell at **(936) 422-4188**. The Board of Directors of Four Way SUD meets the second Tuesday of every month at 6:00 p.m. The meetings are open to the public and are held at the District's office at 411 North Main Street, in Huntington, Texas.

Annual Water Quality Report for the period of January 1 to December 31, 2016. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

Four Way Special Utility District (SUD) is Ground Water. Our water comes from the Yegua and the Carizzo Aquifers.

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. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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.

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; persons 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (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. We are responsible for providing high quality drinking water, but we 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>.

Information about Source Water Assessments: 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 Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Tommy Carswell.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

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

Source Water Name:	Well No.	Type of Water	Report Status	Location
2-1MI OF PLANT 1	WELL NO. 2	GW	Active	8996 FM 1669, Huntington TX
3-PLANT 5/HWY 69 LUFKIN	WELL NO. 3	GW	Active	7621 S US Highway 69, Lufkin TX
4-FM 2109/PLANT 2	WELL NO. 4	GW	Active	130 Bruce Thornton Dr., Huntington TX
5-HWY 69 LUFKIN	WELL NO. 5	GW	Active	6990 S US Highway 69, Lufkin TX
6-HWY 103	WELL NO. 6	GW	Active	9600 E State Highway 103, Lufkin TX
7-REPLACEMENT FOR 1	WELL NO. 1	GW	Active	457 Horseshoe Loop, Huntington TX
FM 2109/FORMERLY G0030015A	WELL NO. 7	GW	Active	7900 FM 2109, Huntington TX

Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples
Maximum Contaminant Level (MCL):	The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
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.
Maximum Contaminant Level Goal (MCLG):	The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.
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 Residual Disinfectant Level (MRDL):	The highest level of 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 contamination.
MFL:	million fibers per liter (a measure of asbestos)
na:	not applicable
mrem:	millirems per year (a measure of radiation absorbed by the body)
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.

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

ppt: parts per trillion, or nanograms per liter (ng/L)

ppq: parts per quadrillion, or picograms per liter (pg/L)

2016 Regulated Contaminants Detected

Definitions:

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 (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Source of Contaminant
Copper	2016	1.3	1.3	0.29	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	0	15	1.6	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit	Violation	Likely source of Contamination
Bromate	2016	1	0 – 4.6	0	10	ppb	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)*	2016	17	10.1-25.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	29	3.21-54.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit	Violation	Likely source of Contamination
Barium	2016	0.02	0.02-0.02	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2016	3.6	3.6-3.6	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	11/5/2014	87.6	0 - 87.6	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	3/2/2015	0.154	0.154 - 0.154	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2016	0.144	0.013-0.144	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit	Violation	Likely source of Contamination
Combined Radium 226/228	2016	1.5	1.5-1.5	0	5	pCi/L	N	Erosion of natural deposits.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Constituent
2016	Chloramine Residual	2.78	1.0	4.5	4	4	ppm	Disinfectant used to control microbes.