

# Water Quality Report 2015



**FORT BEND**

**C O U N T Y**

Municipal Utility District No. 25



## There When You Need Us

The Texas Commission on Environmental Quality (TCEQ) has assessed our system and determined that our drinking water meets or exceeds all federal drinking water requirements. The analysis was made by using data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached tables. We hope this information helps you become more knowledgeable about what's in your drinking water.

*Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (281) 277-0129, ext. 5302.*

PWSID: 0790130



## Public Participation



The Board of Directors of Fort Bend County Municipal Utility District No. 25 meet the third Thursday of each month at 5:30 p.m. at the District's office, located at 10347 Clodine Road, Richmond, Texas 77407. Please call (281) 277-0129, ext. 5412, to confirm the meeting date and location of future public meetings.

## Where Do We Get Our Drinking Water?

Our drinking water is obtained from groundwater sources and comes from the Chicot and Evangeline aquifers. We obtain the water through four entry points at the water system. The TCEQ completed an assessment of your source water for three of the entry points at the water system, and the results indicated that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. We expect that future, updated Source Water Susceptibility Assessments performed by the TCEQ on your source water will include consideration of the fourth entry point not assessed in the current assessment. For more information on source water assessments and protection efforts at our system, contact Field Operations at (281) 277-0129, ext. 5341.

The existing source water assessment report will describe the susceptibility and types of constituents that may come into contact with your drinking water source, based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water

protection strategies. Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessment and protection efforts at our system, please contact us. 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>. It is important to protect your drinking water by protecting your water source.

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2015, our system lost an estimated 6,189,000 gallons of water. If you have any questions about the water loss audit please call (281) 277-0129 ext. 5341.



## Why Provide a Water Quality Report Each Year?

The United States Congress has directed the EPA to require public water systems to report annually on the quality of the drinking water they serve. We support the regulation and are providing this report to all households in our service area.

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 stormwater 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 stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**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. 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.**

### QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call District Operations at (281) 277-0129, ext. 5412.

## Fact or Fiction About water

Water treatment began as a way to remove disease-causing agents. [Fiction: It was only in the 1950s that scientists began to suspect that water might carry diseases. Although earlier treatment of water could make the water safer, it was mainly done merely to improve the taste, smell, or appearance of the water.] About half of the world's water supply is available for drinking. [Fiction: If all the world's water were fit into a gallon jug, the fresh water available for us to use would equal only about one tablespoon.]

Due to its unique nature, water boils at the same temperature anywhere on the planet. [Fiction: At sea level, water boils at 212 degrees Fahrenheit, but on top of Mt. Everest, water boils at 154 degrees.]



# What's a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A crossconnection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage). Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.



Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection. For more information, review the Cross-connection Control Manual from the U.S. EPA's Web site at <http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm>. You can also call the Safe Drinking Water Hotline at [800] 426-4791.

## Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:



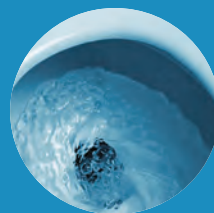
Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.



Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.



Turn off the tap when brushing your teeth.



Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.



Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

## SAMPLING RESULTS

The table below contains all of the chemical constituents detected in your drinking water. The table includes the results of the most recent sampling performed in accordance with the applicable regulations. The EPA requires water systems to test up to 97 constituents. Questions concerning this report maybe directed to District Operations at (281) 277-0129, ext. 5405.

The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

## REGULATED SUBSTANCES

Substance (Unit of measure)	Year Sampled	Highest Detected Level	Range Low-High	MCL	MCLG	Violation	Typical Source
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### RADIOACTIVE CONTAMINANTS

Combined Uranium (ppb)	2015	2.9	0-2.9	30	0	No	Erosion of natural deposits
Combined Radium 226 and 228 (pCi/L)	2015	0.6	0.6-0.6	5	0	No	Erosion of natural deposits
Gross Alpha Excluding Radon and Uranium (pCi/L)	2015	4	0-4	15	0	No	Erosion of natural deposits
Gross Beta Emitters (pCi/L)	2015	4.3	0-4.3	50 <sup>1</sup>	0	No	Decay of natural and man-made deposits

### INORGANIC CONTAMINANTS

Barium (ppm)	2015	0.21	0.21-0.21	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	2015	0.52	0.52-0.52	4	4	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	2015	0.17	0.01-0.17	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

### ORGANIC CONTAMINANTS

Ethylbenzene (ppb)	2015	1.1	0-1.1	700	700	No	Discharge from rubber and chemical factories
Xylenes (ppb)	2015	3.3	0-3.3	10	10	No	Discharge from petroleum refineries

## LEAD AND COPPER

Substance (Unit of measure)	Year Sampled	Action Level (AL)	MCLG	Amount Detected 90th Percentile	# Sites Over AL	Violation	Likely Source of Contamination
Copper (ppm)	2015	1.3	1.3	0.138	0	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb)	2015	15	0	1.0	0	N	Corrosion of household plumbing systems; Erosion of natural deposits

## UNREGULATED SUBSTANCES<sup>2</sup>

Substance (Unit of measure)	Year Sampled	Average Detected Level	Range Low-High	Typical Source
Bromodichloromethane (ppb)	2015	5.55	1.7-9.4	Byproduct of drinking water disinfection
Bromoform (ppb)	2015	3.9	1.7-6.1	
Chloroform (ppb)	2015	2.6	1.2-4	
Dibromochloromethane (ppb)	2015	6.75	2.5-11	

## MAXIMUM RESIDUAL DISINFECTANT LEVEL

Substance (Unit of measure)	Year Sampled	Average Level Detected	Range	MRDL	MRDLG	Violation	Typical Source
Chlorine Residual, Free (ppm)	2015	1.48	0.24-3.30	4	4	No	Disinfectant used to control microbes

## COLIFORM BACTERIA - 2015

Substance (Unit of measure)	Maximum Contaminant Level	Total Coliform Maximum Contaminant Level	Highest No. of Positive Detections	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
Coliform Bacteria	0	1 positive monthly sample	1	0	0	No	Naturally present in the environment

## DEFINITIONS

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

**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):** 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.

**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 benefits of the use of disinfectants to control microbial contaminants.

**mrem/yr (millirems per year):** A measure of radiation dosage.

**NA:** Not applicable.

**ND (Not Detected):** Indicates that the substance was not found by laboratory analysis.

**NTU (Nephelometric Turbidity Units):** Measure of turbidity.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter, µg/l).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter, mg/l).

**ppq (parts per quadrillion):** One part substance per quadrillion parts water (or picograms per liter, pg/l).

**ppt (parts per trillion):** One part substance per trillion parts water (or nanograms per liter, ng/l).

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

1. The MCL for beta particles for 4 mrem/year. The EPA considers 50 pCi/L to be the level of concern for beta particles.
2. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated substance monitoring is to assist the EPA in determining the occurrence of unregulated substances in drinking water and whether future regulations are warranted.

## INFORMATION ON THE INTERNET

U.S. EPA Office of Water ([www.epa.gov/watrhome](http://www.epa.gov/watrhome)) and the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the TCEQ has a Web site ([www.tceq.com](http://www.tceq.com)) that provides complete and current information on water issues in Texas, including valuable information about our watershed.

## HEALTH INFORMATION ABOUT YOUR WATER

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 these contaminants does not necessarily indicate that the 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].

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. Fort Bend County Municipal Utility District No. 25 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 drinking 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 CONSTITUENTS

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 our system's business office. For more information about contaminants and potential effects call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

### Violation of Routine Monitoring applicable to Lead and Copper:

Lead and copper samples are collected by Fort Bend County Municipal Utility District No. 25 (the "District") from the drinking water distribution system and analyzed by the District to assess to what extent lead and copper are found in drinking water. Lead and copper typically enter into the drinking water from plumbing materials. Under applicable TCEQ drinking water standards, the District is required to

conduct monitoring and reporting activities with respect to any lead and copper in the drinking water distribution system. In particular, these rules require that the District collect and submit to TCEQ the results of lead and copper tap water sampling every three years. The District failed to sample and report such lead and copper results by September 30, 2015, resulting in a violation under Title 30, Section 290.117(i) of the state regulations and the District was required to issue a Public Notice of this incident to all residents served by the drinking water distribution system, which Public Notice was issued by the District on or about December 16, 2015. The District conducted the required sampling between November 21 and December 6, 2015, and the results were subsequently reported to the TCEQ during 2015 to address this violation. The results of the recent testing validate that your drinking water meets all state requirements. The District took corrective measures in the form of retraining all personnel to assure that required lead and copper sampling and reporting are properly conducted in the future. Because we did not collect and report the lead and copper tap water samples that were required by September 30, 2015 until November-December 2015, we are required to include the following health effects language in this report:

**Lead.** Infants and children who drink water containing lead in excess of the MCL over many years could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

**Copper.** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

The lead and copper samples collected did not exceed respective lead and copper action levels and the TCEQ did not pursue enforcement in this matter. Should you have questions or need clarification regarding this violation, please contact Steve Kim at (281) 277-0129, ext. 5369.

