

A photograph of water being poured from a glass pitcher into a tall, clear glass. The water is captured in motion, creating a dynamic splash and ripples in the glass. The background is a soft, light blue gradient.

Annual
WATER
QUALITY
REPORT
Reporting Year 2012

Presented By _____
Fort Bend County MUD No. 25

PWS ID#: 0790130

Este reporte incluye información importante sobre el agua para tomar.
Para asistencia en español, favor de llamar al teléfono (281) 277-0129, ext.
5306, 5308, 5309, or 5310.

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 (EPA) 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 informacion importante sobre el agua para tomaz. Para asistencia en espanol, favor de llamar al telefono (281) 277-0129, ext. 5306, 5308, 5309, or 5310.

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 James Cupp Meeting Center, adjacent to the District's office, located at 18230 Old Richmond Road, Sugar Land, TX 77498. Please call (281) 277-0129, ext. 5300, to confirm the meeting date and location of future public meetings.

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>.

Contaminants That May Be Present in Source 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 can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife; **Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may 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 by-products of industrial processes and petroleum production and which may also come from gas stations, urban stormwater runoff, and septic systems; and **Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

All Drinking Water 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 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 (800-426-4791).

Where Do We Get Our Drinking Water?

Our drinking water is obtained from groundwater sources and comes from the Chicot Aquifer. We obtain the water through four entry points at the water system. The TCEQ completed an assessment of your source water with respect to 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. 5312.

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.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://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>. It is important to protect your drinking water by protecting your water source.

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.

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.
- Turn off the tap when brushing your teeth.
- 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.
- 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.

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. 5312.

Violation of Routine Monitoring Applicable to Total Coliform

Bacteriological 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 determine if this distribution system is free of coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Under applicable TCEQ drinking water standard rules, the District is required to conduct monitoring and testing and to report activities with respect to any coliforms in the drinking water distribution system. In particular, these rules require that the District collect and submit to TCEQ the results of 10 bacteriological samples for coliform monitoring of the District’s water distribution system each month. The District did collect the required amount of bacteriological samples for the month of February 2012, and all samples tested negative for total coliform, so no drinking water health hazard was identified to exist. However, the Microbial Monitoring forms required to be submitted by the District to the TCEQ were not completed correctly; specifically, the forms (the “check” boxes) were not properly marked stating that all samples were for distribution. Therefore, a violation for this paper-keeping error was determined to have occurred under 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. The Public Notice was issued by the District on or about March 30, 2012. The District has administered further training by supervisory personnel to assure that required Microbial Monitoring forms are properly completed on a going forward basis. Should you have any questions or need clarification regarding this violation, please contact Brian Sebesta, Acting General Manager, at (281) 277-0129, ext. 5311.

What’s a Cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection 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.

Information on the Internet

Contaminants U.S. EPA Office of Water (www.epa.gov/watrhome) and the Centers for Disease Control and Prevention (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) that provides complete and current information on water issues in Texas, including valuable information about our watershed.

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 health effects, call the U.S. EPA’s Safe Drinking Water Hotline at (800) 426-4791.

PWS ID 0790130

Fact *or* Fiction

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.)*

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 may be directed to District Operations at (281) 277-0129, ext. 5312.

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
Radioactive Contaminants							
Combined Radium 226 and 228 (pCi/L)	2009-2010	0.88	0–0.88	5	0	No	Erosion of natural deposits
Gross Beta Emitters (pCi/L)	2009-2012	5.2	0–5.2	50 ¹	0	No	Decay of natural and man-made deposits
Inorganic Contaminants							
Arsenic (ppb)	2011–2012	2.9	0–2.9	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2011–2012	0.313	0.202–0.313	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	2010-2012	0.56	0.24–0.56	4	4	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	2011–2012	0.15	0.10–0.15	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2011–2012	5.2	0–5.2	50	50	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Organic Contaminants							
Bis(2-ethylhexyl) Phthalate (ppb)	2009	1.2	0–1.2	6	0	No	Discharge from rubber and chemical factories

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2012	1.3	1.3	0.081	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2012	15	0	1.89	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

UNREGULATED SUBSTANCES ²

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AVERAGE DETECTED LEVEL	RANGE LOW-HIGH	TYPICAL SOURCE
Bromoform (ppb)	2011–2012	0.3	0–0.9	Byproduct of drinking water disinfection
Chloroform (ppb)	2011–2012	0.23	0–0.7	Byproduct of drinking water disinfection
Dibromochloromethane (ppb)	2011–2012	0.23	0–0.7	Byproduct of drinking water disinfection

MAXIMUM RESIDUAL DISINFECTANT LEVEL

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AVERAGE DETECTED LEVEL	RANGE	MRDL	MRDLG	VIOLATION	TYPICAL SOURCE
Chlorine Residual, Free (ppm)	2012	1.16	0.57–1.81	4	<4	No	Disinfectant used to control microbes

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.

¹The MCL for beta particles is 4 mrem/year. The U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

²Unregulated 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 regulation is warranted.