

2009 Annual Drinking Water Quality Report

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT No. 281

Yes, your water is safe to drink



OUR WATER MEETS ALL FEDERAL (EPA) AND STATE REQUIREMENTS

The Texas Commission on Environmental Quality (TCEQ) assessed our system, Harris County Municipal Utility District No. 281 (MUD 281), and determined that our water is safe to drink. The analysis was made by using the data in the tables in this report which uses testing results from 2005 through 2009.

Because our water meets all state and federal drinking water health standards for the sampling period, there may not be any health based benefits to purchasing bottled water or point of use devices. MUD 281 system identification number is 101-3178. We hope this information helps you become more knowledgeable about what's in your drinking water.

En Español – Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o discusiones sobre este reporte en espanol, favor de llamar al tel. 281.376.8802 par hablar con una persona bilingue en espanol.

TABLE INFORMATION

The tables contain chemical constituents which have been found in your drinking water. The TCEQ and the Environmental Protection Agency (EPA) require water systems to test up to 97 constituents. Only five regulated constituents were detected in MUD 281's water, and these were well below the maximum contaminant level allowed in drinking water. The agencies do not require some contaminants to be monitored annually because their concentrations are not expected to vary. This report states the results of the most current water testing from 2005 through 2009.



REGULATED INORGANICS									
Year Tested	Contaminant Detected	Unit of Measure	Average Level*	Minimum Level*	Maximum Level*	Allowed (EPA's MCL)	MCLG	Meets Standards	Possible source of Contaminant
2008	Barium	ppm	0.130	0.130	0.130	2.0	2.0	yes	Erosion of natural deposits
2008	Fluoride**	ppm	1.810	1.720	1.900	4.0	4.0	yes	Erosion of natural deposits
2009	Nitrate	ppm	0.010	0.010	0.010	10.0	10.0	yes	Erosion of natural deposits
UNREGULATED INORGANICS									
2008	Sodium	ppm	216.000	216.000	216.000	n/a	n/a	n/a	Erosion of natural deposits

DISINFECTANT RESIDUALS									
Year	Constituent	Unit	Average	Minimum	Maximum	MRDL	MRDLG	Source	
2009	Free Chlorine	ppm	1.720	0.60	2.60	4.0	4.0	Disinfectant used to control microbes	

DISINFECTANT BYPRODUCTS									
Year	Constituent	Unit	Average*	Minimum*	Maximum*	MCL	Source		
2007	Total Haloacetic Acids	ppb	2.500	2.500	2.500	60.0	Byproduct of drinking water disinfection		
2007	Total Trihalomethanes	ppb	16.200	16.200	16.200	80.0	Byproduct of drinking water disinfection		

UNREGULATED CONTAMINANT									
Year Tested	Contaminant	Unit of Measure	Average Level*	Minimum Level*	Maximum Level*	Source of Contaminant			
2008	Bromodichloromethane	ppb	1.500	1.500	1.500	The Unregulated Contaminants are a byproduct of the drinking water disinfection.			
2008	Bromoform	ppb	4.800	4.800	4.800				
2008	Chloroform	ppb	0.600	0.600	0.600				
2008	Dibromochloromethane	ppb	4.000	4.000	4.000				

* When there is only one sample, the average, minimum, and maximum will be the same number.

UNREGULATED CONTAMINANTS

Unregulated contaminants are those for which 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 regulation is warranted.

**FLUORIDE INFORMATION

The above reported level of fluoride is from two samples collected by the state in 2008. MUD 281 actually samples the fluoride level weekly. In 2009, the average fluoride level was 1.6 to 1.9 ppm. This level is within the acceptable EPA limit. **We encourage you to inform your dentist of the current level before receiving any additional fluoride treatment.**

TERMS USED IN THIS REPORT

Contaminant: The technical term for anything else in water except pure water is "contaminant." Technically, pure, fresh orange juice can be considered water which has been "contaminated" by the oil, orange pulp and flavorings in the orange which make it taste so good.

Obviously, some contaminants aren't good and can actually be hazardous to your health at specific levels. Those are the ones that are tested and measured.

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 allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. MCLs are set at very stringent levels.

MCLG, Max. Contaminant Level Goal: 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.

MRDL, Max. Residual Disinfectant Level: 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.

MRDLG, Maximum Residual Disinfectant Level Goal: The level of 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.

n/a: not established at this time

ppm - Part per million: One part per million equals 1 teaspoon in 1,302 gallons, which is enough water to fill a typical bathtub over 40 times.

ppb - Part per billion: One part per billion equals 1 teaspoon in 1,302,000 gallons, which is enough water to fill a typical bathtub over 40,000 times.

WHAT'S IN THE WATER 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 public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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, or at www.epa.gov/safewater.

Bottled water information may be obtained at: www.nrdc.org/water/drinking/bw/bwinx.asp.

LEAD AND COPPER – TESTED AT THE CUSTOMER'S TAP (SAMPLES COLLECTED FROM 20 HOMES)						
Year Tested	Substance	Unit of Measure	90th Percentile	No. of Homes Exceeding Action Level	Action Level	Possible Sources of Lead and Copper
2008	Lead	ppb	2.1000	0 of 20	15.0	Corrosion of household plumbing systems;
2008	Copper	ppm	0.1110	0 of 20	1.3	Erosion of natural deposits

INFORMATION ON LEAD IN WATER 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 www.epa.gov/safewater/lead.

WATER SOURCES 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 before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

SOURCE WATER ASSESSMENT Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the TCEQ. This information describes 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 allows us to focus our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at dww.tceq.state.tx.us/DWW/. For more information on source water assessments and protection efforts at our system, please contact us.

SECONDARY CONSTITUENTS Many contaminants (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. These constituents are called secondary contaminants and are regulated by the State of Texas, not EPA.

The secondary constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

OUTSTANDING PERFORMANCE The water system was awarded an Outstanding Performance Certificate for no violations of the Safe Drinking Water Act bacteriological sampling rule from 2001 – 2007. The water system continues with the same performance record to date.

WHERE YOUR WATER COMES FROM

MUD 281 obtains its water from two wells both of which are located here in the area and jointly owned with HC MUD No. 280 and HC MUD No. 282.

The wells draw water from the Jasper and Evangeline Aquifers.

The District maintains an interconnect valve with Northwest HC MUD No. 15 which is governed by the same drinking water regulations as MUD 281. The valve is opened only in the event of an emergency or maintenance.

HAVE QUESTIONS If you would like more information about particular health risks or contaminants, you may call the EPA at 1.800.426.4791, or the Harris County Health Department at 713.439.6000.



EPA has answers to many questions at www.epa.gov/safewater/ccr/frequentquestions.

The District's Operator, Water District Management (WDM), may also be able to assist you with your questions at 281.376.8802.

ADDITIONAL TESTING Additional testing is done daily at the water plant and throughout the community at various locations to ensure that a safe level of disinfectant is in the system. Water samples are sent to an independent state-approved laboratory to verify the absence of harmful bacteria. No such bacteria has been detected in this water system.



USE CHEMICALS SPARINGLY

Pesticides kill insects - all insects, even the good ones.

No one would spread pesticides or fertilize over a body of water, but when you over-apply chemicals the excess washes down the street and eventually into streams and lakes. Read the label and follow the directions. Choose natural products when possible and protect creeks, lakes and the Gulf – our water.

HOW TO DISPOSE OF GREASE

Please put your grease in a container with a lid and then dispose of in your trash.

Grease can create sewer backups in your household lines and in the District's sewer lines causing expensive repairs.



THE GREEN CHOICE — TAP WATER

Clean fresh well water is delivered to your home for just pennies a glass without the fuel consumption of trucking or the waste left behind by plastic bottles.



KIDS OF ALL AGES

**BRAIN TICKLERS
FUN FACTS
WATER EXPERIMENTS at**

www.groundwateradventures.org



PUBLIC PARTICIPATION

MUD 281 meets at 11:00 a.m. on the first Monday of each month at 1300 Post Oak Blvd., Suite 1400, Houston, Texas. Any last minute cancellations will be posted at the clubhouse, 12650 Norhtpointe Terrace. Call 281.376.8802 for directions.

SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, PEOPLE WITH HIV/AIDS OR OTHER IMMUNE PROBLEMS:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS, those that are undergoing treatment with steroids, or other immune system disorders, some elderly, and infants can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers.

EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline, 1.800.426.4791.