

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT No. 208

Drinking Water Quality Report

June 2013

Public Water Supply No. 1012419

EPA Safe Drinking Water Hotline (800 426-4791)

Water Quality Information (281 861-6215)

OUR DRINKING WATER IS REGULATED

Providing safe and reliable drinking water is the highest priority of Harris County Municipal Utility District No. 208's Board of Directors. 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. This report is a summary of the quality of the water we provide our customers. We hope this information helps you become more knowledgeable about what's in our drinking water. The analysis was made using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached water quality tables. Our water system also receives water from West Harris County Regional Water Authority and is blended in our tanks. Their water quality information is also provided. **All constituents are below the regulatory standards.** If you have any questions regarding this report, please call the District's operator, H₂O Consulting Inc. at 281 861-6215.

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; 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>.

SAFE DRINKING WATER HOTLINE
(800 426-4791) or at
<http://www.epa.gov/safewater/lead>.

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 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 **Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791) or the EPA's website at www.epa.gov/safewater.**

En Español: Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (281) 861-6215.

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

DEFINITIONS

Maximum Contaminant Level (MCL) - 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.

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.

Maximum Residual Disinfectant Level (MRDL) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of 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.

Avg - Regulatory compliance with some MCL's are based on running annual average of monthly samples.

ppm - milligrams per liter (mg/L) or parts per million—or one ounce in 7,350 gallons of water. **ppb** -micrograms per liter (ug/L) or parts per billion—or one ounce in 7,350,000 gallons of water; **ppt**- parts per trillion or nanograms per liter; **ppq**—parts per quadrillion, or picograms per liter.

pCi/L - picocuries per liter; a measure of radioactivity; **NTU**—Nephelometric Turbidity Units; **MFL**—million fibers per liter.

Public Participation Opportunities

Harris County MUD No. 208

Date: 3rd Friday of Each Month
or as otherwise posted.

Time: Noon

Location: 1301 McKinney

Phone No: 281 861-6215

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. Contaminants that may be present in source water before treatment 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.

Where Do We Get Our Drinking Water ?

Our drinking water is obtained from a combination of water sources and is blended at our water plant. A Source Water Susceptibility Assessment for your drinking water sources is currently being updated by the Texas Commission on Environmental Quality (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 this 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/DWWW/>. For more information on source water assessments and protection efforts at our system, please contact us at 281 861-6215.

Harris County MUD No. 208 - Inorganic Contaminants

Year	Contaminant	Highest Level	Range of Levels	Violation	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	Barium	0.136	0.136 -0.136	No	2	2	ppm	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries.
2011	Fluoride	0.44	0.44 -0.44	No	4	4	ppm	Erosion of natural deposits.
2008	Arsenic	2.5	2.5 - 2.5	No	10	0	ppb	Erosion of natural deposits.
2012	Nitrate	0.48	0.48 -0.48	No	10	10	ppm	Erosion of natural deposits.
2009	Gross beta emitters	4.0	4.0 - 4.0	No	50	0	pCi/L	Decay of natural and man made deposits.

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.

Harris County MUD No. 208 - Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Min Level	Max Level	Violation	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2012	Chloramine Residual	2.58	1.16	3.7	No	4	4	ppm	Disinfectant used to control microbes .

Harris County MUD No. 208 - Disinfection Byproducts

Year	Contaminant	Highest Level	Range of Levels	Violation	MCL	Unit of Measure	Source of Contaminant
2012	Total Haloacetic Acids	28.0	13.3 -69.7	No	60	ppb	Byproduct of drinking water disinfection.
2012	Total Trihalomethanes	29.0	16.6-76.3	No	80	ppb	Byproduct of drinking water disinfection.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future. Compliance is determined by annual average.

Harris County MUD No. 208 - Lead & Copper - Regulated at the Customer's Tap

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Levels	Action Level	Unit of Measure	MCLG	Source of Contaminant
2010	Copper	0.38	0	1.3	ppm	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2010	Lead	4.6	0	15	ppb	0	Corrosion of household plumbing systems; erosion of natural deposits.

Harris County MUD No. 208 - Synthetic Organic Contaminants

Year	Contaminant	Highest Level	Range of Levels	Violation	MCL	MCLG	Unit of Measure	Source of Contaminant
2012	Atrazine	0.16	0.16 -0.16	No	3	3	ppb	Herbicide runoff
2012	Simazine	0.12	0.12 -0.12	No	4	4	ppb	Herbicide runoff

Harris County MUD No. 208 - Secondary and Other Not Regulated Constituents

(No associated adverse health effects)

Year	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2011	Bicarbonate	131	131	131	N/A	ppm	Dissolving of carbonate rocks such as limestone.
2008	Calcium	29.3	29.3	29.3	N/A	ppm	Abundant naturally occurring element.
2011	Chloride	43	43	43	300	ppm	Abundant naturally occurring element; used in water purification.
2008	Copper	0.008	0.008	0.008	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
2008	Iron	0.12	0.12	0.12	0.3	ppm	Erosion of natural deposits.
2008	Magnesium	4.02	4.02	4.02	N/A	ppm	Abundant naturally occurring element.
2008	Manganese	0.0082	0.0082	0.0082	0.05	ppm	Abundant naturally occurring element.
2008	Nickel	0.0012	0.0012	0.0012	N/A	ppm	Erosion of natural deposits.
2008	pH	8.0	8.0	8.0	>7.0	units	Measure of corrosivity of water.
2008	Sodium	88.5	88.5	88.5	N/A	ppm	Erosion of natural deposits.
2011	Sulfate	67	67	67	300	ppm	Naturally occurring.
2011	Total Alkalinity as CaCO ₃	107	107	107	N/A	ppm	Naturally occurring soluble mineral salts.
2011	Total Dissolved Solids	270	270	270	1000	ppm	Total dissolved mineral constituents in water.
2008	Total Hardness as CaCO ₃	89.7	89.7	89.7	N/A	ppm	Naturally occurring calcium.

WEST HARRIS COUNTY REGIONAL WATER AUTHORITY

Water Quality Tables

WHCRWA provided over 90% of the water to Harris County MUD 208 during 2012.
WHCRWA's water quality information is listed below.

Inorganic Contaminants

Year	Contaminant	Compliant	Highest Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2012	Nitrate	Yes	0.23	0.23	0.23	10	10	ppm	Erosion of natural deposits.

Disinfection Byproducts

Year	Contaminant	Compliant	Highest Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2012	Total Haloacetic Acids	Yes	14.5	14.5	14.5	60	ppb	Byproduct of drinking water disinfection.
2010	Total Trihalomethanes	Yes	24.3	24.3	24.3	80	ppb	Byproduct of drinking water disinfection.

HARRIS COUNTY MUD No. 162

Water Quality Tables

Harris County MUD No. 162 provided water to Harris County MUD 208 from February 20th 2012 to February 23 2012, while improvements were being performed at the Harris County MUD No. 208's Water Plant. Harris County MUD No. 162's water quality information is listed on the next two pages.

Harris County MUD No 162- Disinfection Byproducts

Year	Contaminant	Highest Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Violation	Source of Contaminant
2012	Total Trihalomethanes	24.0	18.8	47.7	80	ppb	No	Byproduct of drinking water disinfection.
2012	Total Haloacetic Acids	23.0	14.0	56.4	60	ppb	No	Byproduct of drinking water disinfection.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future. Compliance is determined by annual average.

Harris County MUD No. 162- Inorganic Contaminants

Year	Contaminant	Highest level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2010	Barium	0.13	0.13	0.13	2	2	ppm	No	Erosion of natural deposits.
2011	Fluoride	0.13	0.13	0.13	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth.
2012	Nitrate	0.51	0.51	0.51	10	10	ppm	No	Erosion of natural deposits.
2010	Selenium	8.9	8.9	8.9	50	50	ppb	No	Erosion of natural deposits
2010	Uranium	14.5	14.5	14.5	30	0	ug/l	No	Erosion of natural deposits
2010	Radium 226 & 228	2.5	2.5	2.5	5	0	pCi/L	No	Erosion of natural deposits.
2010	Gross Beta Emitters	12.8	12.8	12.8	50	0	pCi/L	No	Decay of natural and man-made deposits.
2010	Gross Alpha	8.7	8.7	8.7	15	0	pCi/L	No	Erosion of natural deposits.

Harris County MUD No. 162 - Synthetic Organic Contaminants

Year	Contaminant	Highest Level	Range of Levels	Violation	MCL	MCLG	Unit of Measure	Source of Contaminant
2012	Atrazine	0.18	0.18- 0.18	No	3	3	ppb	Herbicide runoff
2012	Simazine	0.12	0.12 - 0.12	No	4	4	ppb	Herbicide runoff