

# 2008 Annual Drinking Water Quality Report

(Consumer Confidence Report)

CITY OF MASON

Phone Number: (325) 347-6449

## 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 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. The 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).

## Public Participation Opportunities

Date: None Scheduled

Time: None Scheduled

Location: City Hall  
124 Moody St.

\*Phone Number: 325-347-6449

\*To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

Or contact Joe Martinez 325-347-6449

## OUR DRINKING WATER IS REGULATED

by the Texas Commission on Environmental Quality (TCEQ) and they have determined that certain water quality issues exist which prevent our water from meeting all of the requirements as stated in the Federal Drinking Water Standards. Each issue is listed in this report as a violation and we are working closely with the TCEQ to achieve solutions.

**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.

### En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (325) 347-6449 - para hablar con una persona bilingüe en español.

## Where do we get our drinking water?

Our drinking water is obtained from GROUND water sources. It comes from the following Lake/River/Reservoir/Aquifer: HICKORY. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The 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. For more information on source water assessments and protection efforts at our system, please contact us.

## 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

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

## About The Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

### DEFINITIONS

#### 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.

#### 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 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.

#### Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

#### Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

### ABBREVIATIONS

NTU - Nephelometric Turbidity Units  
MFL - million fibers per liter (a measure of asbestos)  
pCi/L - picocuries per liter (a measure of radioactivity)  
ppm - parts per million, or milligrams per liter (mg/L)  
ppb - parts per billion, or micrograms per liter (µg/L)  
ppt - parts per trillion, or nanograms per liter  
ppq - parts per quadrillion, or picograms per liter

- 1 -

- 2 -

1600001

2008 Annual Drinking Water Quality Report

1600001

2008 Annual Drinking Water Quality Report

### Inorganic Contaminants

| Year or Range | Contaminant               | Average Level | Minimum Level | Maximum Level | MCL | MCLG | Unit of Measure | Source of Contaminant  |
|---------------|---------------------------|---------------|---------------|---------------|-----|------|-----------------|--|
| 2008          | Fluoride                  | 0.32          | 0.11          | 0.52          | 4   | 4    | ppm             | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories. |
| 2008          | Nitrate                   | 1.32          | 1.28          | 1.35          | 10  | 10   | ppm             | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.                               |
| 2008          | Combined Radium 226 & 228 | 6.29          | 4.64          | 7.47          | 5   | 0    | pCi/L           | Erosion of natural deposits.   |
| 2008          | Gross beta emitters       | 9.34          | 8             | 10.3          | 50  | 0    | pCi/L           | Decay of natural and man-made deposits.  |
| 2008          | Gross alpha               | 6.13          | 2.7           | 12.3          | 15  | 0    | pCi/L           | Erosion of natural deposits.   |

Organic Contaminants TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

### Maximum Residual Disinfectant Level

| Year | Disinfectant            | Average Level | Minimum Level | Maximum Level | MRDL | MRDLG | Unit of Measure | Source of Disinfectant                 |
|------|-------------------------|---------------|---------------|---------------|------|-------|-----------------|--|
| 2008 | Chlorine Residual, Free | 1.61          | 0.5           | 2.91          | 4    | 4     | ppm             | Disinfectant used to control microbes. |

### Disinfection Byproducts

| Year | Contaminant           | Average Level | Minimum Level | Maximum Level | MCL | Unit of Measure | Source of Contaminant                     |
|------|-----------------------|---------------|---------------|---------------|-----|-----------------|---|
| 2007 | Total Trihalomethanes | 3.1           | 2.6           | 3.5           | 80  | ppb             | Byproduct of drinking water disinfection. |

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts WAIVED OR NOT YET SAMPLED

Unregulated Contaminants NOT REPORTED OR NONE DETECTED

### Lead and Copper

| Year | Contaminant | The 90th Percentile | Number of Sites Exceeding Action Level | Action Level | Unit of Measure | Source of Contaminant   |
|------|-------------|---------------------|--|--------------|-----------------|---|
| 2008 | Lead        | 2.4                 | 0                                      | 15           | ppb             | Corrosion of household plumbing systems; erosion of natural deposits.                                   |
| 2008 | Copper      | 0.098               | 0                                      | 1.3          | ppm             | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. |

### Recommended Additional Health Information for Lead

All water systems are required by EPA to report the language below starting with the 2009 CCR to be delivered to you by July of 2010. We are providing this information now as a courtesy.

"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>."

- 3 -

1600001

2008 Annual Drinking Water Quality Report

Turbidity NOT REQUIRED

Total Coliform REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA.

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

### VIOLATIONS

| Violation Type   | Health Effects  | Duration                | Explanation  | Steps to Correct |
|--|---|-------------------------|--|------------------|
| ENTRY POINT 001: MCL VIOLATION - COMBINED RADIUM 226 & 228 | Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. | 4/1/2007 to 6/30/2008   | The U.S. Environmental Protection Agency set the MCL for COMBINED RADIUM 226 & 228 at 5 pico curies per liter (pCi/L), and has determined a health concern exists at levels above the MCL. Analysis of drinking water in our community for Combined Radium 226 & 228 indicates a level of 6.29 pCi/L. This is not an emergency, but, some people who drink water containing Radium 226 & 228 in excess of the MCL over many years have an increased risk of cancer. You do not need to use an alternative water supply. If you have health concerns you may want to talk to your doctor to get more information about how this may affect you. |                  |
| ENTRY POINT 002: MCL VIOLATION - COMBINED RADIUM 226 & 228 | Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. | 1/1/2008 to 3/31/2008   | The City is working to correct the problem by participating in a feasibility study with Parsons Engineering to identify viable options. A centrally located reverse osmosis dispenser may satisfy the city's obligations. In addition we are working to correct the problem by studying the feasibility of limiting the use of certain wells to lower combined radium contamination and by considering the purchase of an additional drinking water well which may reduce combined radium contamination.   |                  |
| ENTRY POINT 002: MCL VIOLATION - COMBINED RADIUM 226 & 228 | Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. | 4/1/2008 to 6/30/2008   |  |                  |
| ENTRY POINT 002: MCL VIOLATION - COMBINED RADIUM 226 & 228 | Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. | 7/1/2008 to 9/30/2008   |  |                  |
| ENTRY POINT 002: MCL VIOLATION - COMBINED RADIUM 226 & 228 | Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. | 10/1/2008 to 12/31/2008 |  |                  |

### Secondary and Other Constituents Not Regulated (No associated adverse health effects)

| Year or Range | Constituent               | Average Level | Minimum Level | Maximum Level | Secondary Limit | Unit of Measure | Source of Constituent   |
|---------------|---------------------------|---------------|---------------|---------------|-----------------|-----------------|---|
| 2008          | Bicarbonate               | 257           | 221           | 293           | NA              | ppm             | Corrosion of carbonate rocks such as limestone.   |
| 2008          | Chloride                  | 14            | 9             | 19            | 300             | ppm             | Abundant naturally occurring element; used in water purification; byproduct of oil field activity |
| 2008          | Hardness as Ca/Mg         | 281           | 250           | 311           | NA              | ppm             | Naturally occurring calcium and magnesium.  |
| 2008          | pH                        | 7.6           | 7.6           | 7.6           | >7.0            | units           | Measure of corrosivity of water.  |
| 2008          | Sulfate                   | 12            | 7             | 16            | 300             | ppm             | Naturally occurring; common industrial byproduct; byproduct of oil field activity.                |
| 2008          | Total Alkalinity as CaCO3 | 257           | 221           | 293           | NA              | ppm             | Naturally occurring soluble mineral salts.  |
| 2008          | Total Dissolved Solids    | 318           | 310           | 325           | 1000            | ppm             | Total dissolved mineral constituents in water.  |

- 4 -

1600001

2008 Annual Drinking Water Quality Report