

Annual Drinking Water Quality Report

TX1600001

CITY OF MASON

Annual Water Quality Report for the period of
January 1 to December 31, 2013

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking

CITY OF MASON is Ground Water

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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791. Contaminants that may be present in source water include: (a) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (b) 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; (c) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (d) 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; (e) 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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 the system's business office.

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>.

For more information regarding this report contact:

Name Mr. John Palacio, City Administrator

Phone 325-347-6449

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (325) 347-6449

Information about Source Water

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. 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 source water protection strategies.

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=>

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww.tceq.texas.gov/DWW>

Source Water Name	Type of Water	Report Status
1 - END OF EL PASO ST	END OF EL PASO ST	GW
4 - MILL CREEK RD	MILL CREEK RD	GW
5 - W OF TOWN	W OF TOWN	GW
7 - S OF TOWN	S OF TOWN	GW
8 - MILL CREEK RD	MILL CREEK RD	GW

NOTICE OF DRINKING WATER VIOLATIONS FOR BOTH RADIUM 226 & 228 AND GROSS ALPHA PARTICLES

The Texas Commission on Environmental Quality (TCEQ) has notified the **CITY OF MASON** water system that the drinking water being supplied to customers had exceeded the Maximum Contaminant Level (MCL) for gross alpha excluding radon and uranium. The U.S. Environmental Protection Agency has established the MCL for gross alpha excluding radon and uranium at 15 pico curies per liter (pCi/L) based on running annual average, and has determined that it is a health concern at levels above the MCL. Analysis of drinking water in your community for gross alpha excluding radon and uranium indicates a compliance value in quarter one 2014 of 18 pCi/L for EP1.

The Texas Commission on Environmental Quality (TCEQ) has notified the **CITY OF MASON** water system that the drinking water being supplied to customers had exceeded the Maximum Contaminant Level (MCL) for combined radium (-226 & -228). The U.S. Environmental Protection Agency (U.S. EPA) has established the MCL for combined radium (-226 & -228) at 5 pico curies per liter (pCi/L) based on running annual average (RAA), and has determined that it is a health concern at levels above the MCL. Analysis of drinking water in your community for combined radium (-226 & -228) indicates a compliance value in quarter one 2014 of 7 pCi/L for EP1.

This is not an emergency. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer. You do not need to use an alternative water supply. However, if you have health concerns, you may want to talk to your doctor to get more information about how this may affect you. The City is working to correct the problem through active management and monitoring of the individual wells and pumping schedules and is currently completing a new feasibility study regarding additional treatment possibilities and new sources of non-contaminated water. A centrally located reverse osmosis dispensing station has been provided at 1024 McKinley Ave to provide treated clean water at no cost to the residents of Mason. Please share this information with all people who drink this water, especially those who may not have received this notice directly (i.e., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

If you have questions regarding this matter, you may contact John Palacio, City Administrator at 325-347-6449.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)	2013	3.6	0 - 3.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	03/04/2009	2.6	0 - 2.6	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	03/04/2009	0.181	0.0333 - 0.181	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	01/20/2011	0.39	0.39 - 0.39	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2013	2	1.71 - 1.71	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2013	11.5	8.8 - 11.5	0	50	pCi/L*	N	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Combined Radium 226/228	2013	6	6 - 7	0	5	pCi/L	Y	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2013	19	11.9 - 20.3	0	15	pCi/L	Y	Erosion of natural deposits.
Uranium	2013	2	1.1 - 1.5	0	30	ug/l	N	Erosion of natural deposits.

These tables contain scientific terms and measures, some of which may require explanation:

pCi/L

picocuries per liter (a measure of radioactivity)

ppb:

micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm:

milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Maximum Contaminant Level or MCL:

Highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best treatment technology.

Maximum Contaminant Level Goal or MCLG:

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.

ANNOUNCEMENTS CONCERNING CITY OF MASON PUBLIC WATER SUPPLY

While Mason has had much more rainfall this year, we are still seeing a need for water conservation and wise use of this precious resource. We need to remind our residents that we have never lifted the voluntary water conservation measures, and we are requesting everyone to limit yard and landscape watering to **between the hours of 7:00 pm and 9:00 am** to avoid the significant evaporation during the heat of the day and to water **no more than two times each week**. The recent reports indicate that our residents are actively practicing very good water conservation, but we continue to encourage everyone to not waste our water resources and help protect it for the future residents of our hometown. The City monitors water levels and water quality regularly, but the radionuclide contamination in our water supply is a problem that is a naturally occurring result of the geography and landscape we live in. One additional service we provide for our residents to get absolutely "clean" water is the Reverse Osmosis station that the City operates and maintains next to the Eckert Civic Center at 1024 McKinley Avenue. The treated water is free if you will just bring your own container. The City is also working on a new Feasibility Study to identify new treatment options and possibilities as well as additional management and monitoring of our water supply and possible new sources of clean water.