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Permit No. 55

CITY OF EDINBURG 2009 Annual Drinking Water Quality Report

July 1, 2010

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; 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 (1-800-426-4791).

Public Participation Opportunities

Date: 1st and 3rd Tuesday of Each Month

Time: 7:00 p.m.

Location: 415 East University Drive

Phone Number: (956) 388-8212

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

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. (956) 388-8212, para hablar con una persona bilingüe en español.

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

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.

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.

Where do we get our drinking water?

Our drinking water is obtained from SURFACE water source, which comes from the RIO GRANDE RIVER. A Source Water Susceptibility Assessment for your drinking water sources 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 our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

ABBREVIATIONS

NTU -Nephelometric Turbidity Units
MFL -million fibers per liter (a measure of asbestos)
MPN – Most Probable Number
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

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.

WATER CONSERVATION

STAGE 2 – MANDATORY COMPLIANCE – WATER ALERT

- | | |
|--|--------------------------------------|
| DESIGNATED DAYS – ODD ADDRESS – ODD DATE DAYS | EVEN ADDRESS – EVEN DATE DAYS |
|--|--------------------------------------|
- **Sprinkler Irrigation of lawns, gardens, landscaping, trees, and shrubs** - before 10:00 a.m. and after 6:00 p.m., on designated days only. Watering is permitted at any time, **on designated days only:** With hand-held hose; A hand-held, faucet filled bucket of five gallons or less; or a drip irrigation system.
 - **Washing of vehicles, trucks, trailers, boats, airplanes or mobile equipment** - before 8:00 a.m. and after 6:00 p.m., **on designated days only**, with a handheld bucket or a handheld hose equipped with a positive shutoff nozzle for quick rinses. Washing may be done at any time on premises of commercial carwash or commercial service station.
 - **Washing or sprinkling of foundations and refilling or adding water to swimming and wading pools** - before 10:00 a.m. and after 6:00 p.m., **on designated days only.**

About The Following Table: The following tables 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 up to 97 constituents.

Inorganic Contaminants

Year	Contaminant	Avg. Level	Min. Level	Max. Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2007	Barium	0.108	0.108	0.108	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2007	Chromium	1.2	1.2	1.2	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits.
2009	Fluoride	0.47	0.47	0.47	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2009	Nitrate	0.15	0.15	0.15	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2005	Gross Beta Emitters	5.1	5.1	5.1	50	0	pCi/L	Decay of natural and man-made deposits.

Organic Contaminants – TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Maximum Residual Disinfectant Level

Year	Disinfectant	Avg. Level	Min. Level	Max. Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2009	Chloramines	2.00	0.50	4.1	4.0	<4.0	ppm	Disinfectant used to control microbes.

Disinfection By-Products

Year	Disinfectant	Avg. Level	Min. Level	Max. Level	MCL	Unit of Measure	Source of Contaminant
2009	Total Haloacetic Acids	14.7	11.2	22.6	60	ppb	By-product of drinking water disinfection.
2009	Total Trihalomethanes	42.0	32.4	62.0	80	ppb	By-product of drinking water disinfection.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts – This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acid in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA also requires the data to be reported here.

Year	Disinfectant	Avg. Level	Min. Level	Max. Level	MCL	Unit of Measure	Source of Contaminant
2008	Total Haloacetic Acids	19.8	14.4	27.3	NA	ppb	By-product of drinking water disinfection.
2008	Total Trihalomethanes	16.6	1	36.3	NA	ppb	By-product of drinking water disinfection.

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection by-products. There is no maximum contaminant level for these chemicals at the entry point to the distribution.

Year	Contaminant	Avg. Level	Min. Level	Max. Level	Unit of Measure	Source of Contaminant
2009	Chloroform	1.8	1.8	1.8	ppb	By-product of drinking water disinfection.
2009	Bromoform	2.2	2.2	2.2	ppb	By-product of drinking water disinfection.
2009	Bromodichloromethane	3.2	3.2	3.2	ppb	By-product of drinking water disinfection.
2009	Dibromochloromethane	3.1	3.1	3.1	ppb	By-product of drinking water disinfection.

Unregulated Contaminant Monitoring Rule 2 (UCMR2)

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. Any unregulated contaminants detected are reported in the following table. For additional information and data visit <http://www.epa.gov/safewater/ucmr/ucmr2/index.html> or call the Safe Drinking Water Hotline at 1-800-426-4791

Year	Contaminant	Avg. Level	Min. Level	Max. Level	Unit of Measure	Source of Contaminant
2009	Explosives	<0.87	<0.8	<1	ppb	Contaminants used in explosives.
2009	Herbicides	<1.7	<1	<2	ppb	Chemicals used to kill plants.
2009	Herbicide Degradates	<1.5	<1	<2	ppb	Formed when herbicides change in natural environment
2009	Nitrosamines	0.004	<0.002	0.005	ppb	Chemical compounds that exist in sources of drinking water or that form when disinfectants are added to water to kill microbes.
2009	Flame Retardants	<0.61	<0.3	<0.9	ppb	Materials used to stop fires from spreading.

This report is available at the City of Edinburg's website <http://www.cityofedinburg.com>

Lead and Copper

Year	Contaminant	The 90 th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2009	Lead	1.4	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2009	Copper	0.182	0	1.3	ppm	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives

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 the 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Constituent
2009	Turbidity	0.8	95	0.3	NTU	Soil Runoff

Total Organic Carbon

Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. By-products of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Avg. Level	Min. Level	Max. Level	Unit of Measure	Source of Constituent
2009	Source Water	4.65	3.10	6.41	ppm	Naturally present in the environment.
2009	Drinking Water	3.88	2.70	4.69	ppm	Naturally present in the environment
2009	Removal Ratio	14.65	29.0	38.6	% removal*	N / A

*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

Cryptosporidium Monitoring Information

Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing methods determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water. The following results were acquired from untreated water coming into our raw water reservoir: prior to any chemical treatment.

Year	Contaminant	Avg. Level	Min. Level	Max. Level	Unit of Measure	Source of Constituent
2008	Cryptosporidium	0.08	0	1.0	oocysts	Microbial pathogen found in water contaminated by feces.
2008	Eschericia Coli	6.5	1.0	13.2	MPN/100 ml	Microbial pathogen found in water contaminated by feces.

Total Coliform

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Year	Contaminant	Highest Monthly % of Positive Samples	MCL	Unit of Measure	Source of Constituent
2009	Coliform Bacteria	2	*	Presence	Naturally present in the environment

*Presence of coliform bacteria in 5% or more of the monthly samples.

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

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

Year	Constituent	Avg. Level	Min. Level	Max. Level	Secondary Limit	Unit of Measure	Source of Constituent
2009	Bicarbonate	143	143	143	NA	ppm	Corrosion of carbonate rocks such as limestone.
2009	Chloride	152	152	152	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2009	pH	7.5	7.5	7.5	>7.0	ppm	Measure of corrosivity of water.
2009	Sodium	94	94	94	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2009	Sulfate	238	238	238	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2009	Total Alkalinity as CaCO3	117	117	117	NA	ppm	Naturally occurring soluble mineral salts.
2009	Total Dissolved Solids	716	716	716	1000	ppm	Total dissolved mineral constituents in water.