2012 Consumer Confidence Report

January 1 to December 31, 2012

(Annual Drinking Water Quality Report)

972-427-3771

WHERE DO WE GET OUR DRINKING WATER?

The City of Crandall is a member of the North Texas Municipal Water District (NTMWD) which supplies water to over 35 cities across North Texas. The primary source for Crandall's water is purchased SURFACE water. Water is delivered from Lavon Lake and is supplemented by water from Lake Texoma (currently offline due to the invasive species infestation of the zebra mussel), Jim Chapman Lake, Lake Tawakoni and the East Fork Raw Water Supply Project (Wetland). Crandall's water is treated at the NTMWD facility in Wylie, Texas and is delivered to customers through the city's distribution system. In addition, a Source Water Susceptibility Assessment for your drinking water source (s) is currently being updated by the Texas Commission on Environmental Quality and should be provided to us this year. 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

Public Participation Opportunities

Date: Monday, August 5, 2013
Time: 6:30 p.m.
Place: 114 S. Main Street
Phone: 972-427-3771
To learn about future public meetings, concerning your drinking water, or to request to schedule one, please call us.

En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono 972-427-3771.

OUR DRINKING WATER IS REGULATED

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. The City of Crandall strives to provide high quality drinking water that is both safe and reliable. The analysis was made by using the most recent U.S. Environmental Protection Agency (EPA) tests. 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 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 EPA's Safe Drinking Water Hotline at 800 -426-4791. Contaminants that may be present in source water 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 ad 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.

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 necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

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 at 800-426-4791.

IMPORTANT HEALTH INFORMATION REGARDING LEAD

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. The NTMWD 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.

DEFINITIONS

Avg.: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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 a 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.

ABBREVIATIONS

MFL:	Million fibers per liter (a measure of asbestos)
mrem/year:	Millirems per year (a measure of radiation absorbed by the body)
NTU:	Nephelometric Turbidity Units (a measure of turbidity)
pCi/L:	Picocuries per liter (a measure of radioactivity)
ppb:	Parts per billion or micrograms per liter-or 1 ounce in 7,350,000 gallons of water
ppm:	Parts per million or milligrams per liter -or 1 ounce in 7,350 gallons of water
ppq:	Parts per quadrillion or picograms per liter (pg/L)
ppt:	Parts per trillion or nanograms per liter (ng/L)

Compliance Deadline Extension

The City of Crandall has been has granted a two-year extension by the Texas Commission on Environmental Quality (TCEQ) to the Stage 2 Disinfection Byproducts Rule (DBP2) in accordance with 30 TAC §290.115(a)(2) because it buys some or all of its water from the North Texas Municipal Water District (NTMWD). This extension is warranted because the NTMWD is making extensive and complex capital improvements to the Wylie Water Treatment Plant to facilitate compliance with the rule; the NTMWD and its customers, and have demonstrated a need for the extension by having one or more locations where high DBP results were evident or possible during drought conditions.

The extension is valid from April 1, 2012 to March 30, 2014. During this period, compliance monitoring will continue under the Stage 1 Disinfection Byproduct Rule. Compliance monitoring will for DBP2 will begin on April 1, 2014. If you have questions regarding this matter, you may contact Joe Villarreal at 972-427-3771.

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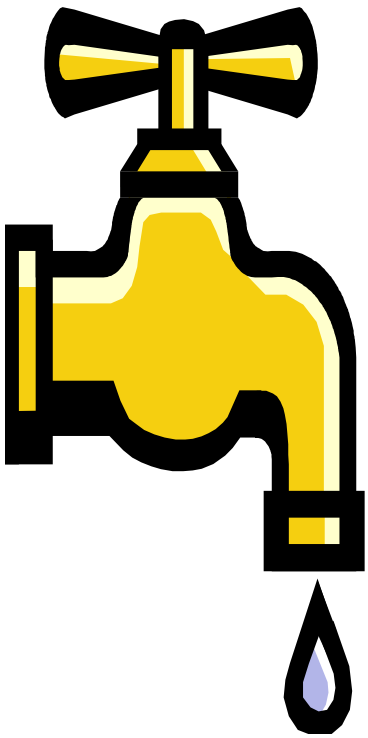
We Welcome Your Questions or Comments

We welcome your questions and/or comments at the City of Crandall Public Works Department. We are located at 110 South Main Street. Our phone number is 972.427.3771.

Normal office hours are Monday through Friday, 8:00 AM to 5:00 PM.

Payments are accepted during regular business hours or you may drop your payment in our night box located to the left of the door of City Hall. We accept checks or money orders. Cash is not accepted. Payments are collected by 8:00 AM. Any payment put in the night box after that time will not be posted to your account until the following business day. You may also make your payment online at www.crandalltexas.com ($5.00 fee applies). To mail your payment, address it to PO Box 277, Crandall Texas, 75114.

We also have free automatic bill pay available. To enroll, please print the ACH authorization form at www.crandalltexas.com or request a form from our water department.



Water bills are mailed at the end of each month. They are always due on the 20th day of each month. If not paid by the 20th, a $15 late fee will be assessed to any outstanding balance of five dollars ($5) or more on the 21st day of each month. If the 20th falls on the weekend, you have until the end of the next business day to pay without incurring a late fee. If you do not receive your bill by the 10th of the month, please give us a call and we will be happy to print and mail you another bill.

DEFINITIONS:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

COLIFORM BACTERIA

Collection Date	Type	Highest Level Detected	Maximum Level	Total No. of Positive E. Coli or Coliform Samples	MCL	Source of Constituent
2012	Coliform	0	0	0	0	Naturally present in the environment.

DISINFECTANTS AND DISINFECTION BY—PRODUCTS

Collection Date	Type	Highest Level Detected	Range of Levels Detected	MCL	Unit of Measure	Source of Constituent
2012	Total Haloacetic Acids (HAA5)	23.8	23.8—23.8	60	ppb	By-product of drinking water disinfection.
2012	Total Trihalomethanes (TThm)	39.5	39.5—39.5	80	ppb	Byproduct of drinking water disinfection.

INORGANIC CONTAMINANTS

Collection Date	Type	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Unit of Measure	Source of Contaminant
2012	Antimony	.256	.195—.256	6	6	ppb	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; and test addition.
2012	Arsenic	1.1	.951—1.1	10	0	ppm	Erosion of natural deposits; runoff from orchards, glass and electronics production waste.
2012	Barium	.0389	.0364—.0389	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2012	Chromium	2.55	2.35—2.55	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits.
2012	Fluoride	.66	.50—.66	4	4	ppm	Erosion of natural deposits; Water water-additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2012	Nitrate	.135	.02—.135	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2012	Selenium	.244	.232—.244	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.

RADIOACTIVE CONTAMINANTS

Collection Date	Type	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Beta/photon emitters	4.4	4.4—4.4	50	0	pCi/L	Decay of natural and man-made deposits.

SYNTHETIC ORGANIC CONTAMINANTS

Collection Date	Type	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Unit of Measure	Source of Contaminant
2012	Atrazine	.71	0—.71	3	3	ppb	Runoff from herbicide used on row crops.
2012	Di (2-ethylhexyl) adipate	.74	0—.74	400	400	ppb	Discharge from chemical factories.
2012	Simazine	.38	.11—.38	4	4	ppb	Herbicide runoff.

TURBIDITY

Collection Date	Type	Highest Single Measurement Limit	Lowest Monthly % of Meeting Limits	Turbidity Limit	Level Detected	Unit of Measure	Source of Contaminant
2012	Turbidity	1	98.16%	.3	.62	NTU	Soil runoff.

NOTE: 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 parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

MAXIMUM RESIDUAL DISINFECTANT LEVEL

Collection Date	Type	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2012	Chlorine Residual (Chloramines)	1.50	1.40	1.60	4.0	<4.0	ppm	Disinfectant used to control microbes.
2012	Chlorine Dioxide	0	0	.1	.8	.8	ppm	Disinfectant
2012	Chlorite	.42	.08	.81	1.0	N/A	ppm	Disinfectant

TOTAL ORGANIC CARBON

Collection Date	Type	Highest Level Detected	Range of Levels Detected	Unit of Level	Source of Contaminant Measure
2012	Source Water	4.94	4.22—4.94	ppm	Naturally present in the environment
2012	Drinking Water	4.16	2.95—4.16	ppm	Naturally present in the environment
2012	Removal Ratio	39.4%	14% - 39.4%	% removal*	N/A

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

LEAD AND COPPER

Collection Date	Type	MCLG	The 90th Percentile	Number of Sites Over Action Level	Action Level	Unit of Measure	Source of Contaminant
2012	Lead	0	3.44	0	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.
2012	Copper	1.3	.652	0	1.3	ppm	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

UNREGULATED CONTAMINANTS

Collection	Type	Result	Unit of Measure	Source of Contaminant
2012	Chloroform	24.0	ppb	By product of drinking water disinfection.
2012	Bromoform	<1.0	ppb	Byproduct of drinking water disinfection.
2012	Bromodichloromethane	10.9	ppb	By product of drinking water disinfection.
2012	Dibromochloromethane	4.6	ppb	By product of drinking water disinfection.

SECONDARY AND OTHER CONSTITUENTS NOT REGULATED

Collection Date	Type	Highest Level Detected	Range of Levels Detected	Unit of Measure	Source of Contaminant
2011	Bicarbonate	120	73—120	ppm	Corrosion of carbonate rocks such as limestone.
2012	Calcium	47.5	39.9—47.5	ppm	Abundant naturally occurring element.
2012	Chloride	26	22.8—26	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.
2012	Harness as Ca/Mg	133	114—133	ppm	Naturally occurring calcium and magnesium.
2012	Magnesium	3.54	3.5—3.54	ppm	Abundant naturally occurring element.
2012	Manganese	.00125	.000525—.00125	ppm	Abundant naturally occurring element.
2012	Nickel	.00609	.00563—.00609	ppm	Erosion of natural deposits.
2012	pH	8.0	7.7—8.0	units	Measure of corrosivity of water.
2012	Sodium	30.6	27.2—30.6	ppm	Erosion of natural deposits; by-product of oil field activity.
2012	Sulfate	75.7	59.9—75.7	ppm	Naturally occurring; common industrial by-product; by-product of oil field activity.
2012	Total Alkalinity as CaCO3	92	74—92	ppm	Naturally occurring soluble mineral salts.
2012	Total Dissolved Solids	264	229—264	ppm	Total dissolved mineral constituents in water.
2012	Total Hardness as CaCO3	133	114—133	ppm	Naturally occurring calcium.
2012	Zinc	.00617	.000874—.00617	ppm	Moderately abundant naturally occurring element used in the metal industry.