Annual Drinking Water Quality Report

TX1750002 CITY OF CORSICANA

Annual Water Quality Report for the period of January 1 to December 31. 2015
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.

CITY OF CORSICANA is Surface Water

For more information regarding this report contact:

Name Connie Standridge City Manager (903) 654-4803

Phone (903) 654-4889

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (903)654-4889.

Public Participation

City of Corsicana Council Meetings: 2nd & 4th Monday of each month.

Location: 200 N. 12th St., Corsicana Government Center

Time: 6:00 P.M.

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:

- 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.

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 (800-426-4791)** or at http://www.epa.gov/safewater/lead.

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact: Connie Standridge City Manager (903) 654-4803.

Information about Source Water Assessments:

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: https://gisweb.tceq.texas.gov/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.state.tx.us/DWW/

Source Water Name	Type of Water	Report Status	Location
1-4	SW	A	Navarro Mills
HA1-4	SW	A	Lake Halbert

Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Maximum Contaminant Level or 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 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.
Maximum residual disinfectant level or	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 or 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 contaminants.
MFL	million fibers per liter (a measure of asbestos)
na:	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
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.
ppt	parts per trillion, or nanograms per liter (ng/L)
ppq	parts per quadrillion, or picograms per liter (pg/L)

2015 Regulated Contaminants Detected

Lead and Copper

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.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/09/2013	1.3	1.3	0.0513	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/09/2013	0	15	1.01	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2015	80.8	15 – 80.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2015	105	27 – 105	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**
Aluminum	2015	.029	.026-.029		0.2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Antimony	2015	.00023	0-.00023		.006	Ppm	N	Discharges from petroleum refineries, fire retardants, ceramics, electronics, solder test addition.
Arsenic	2015	.00087	.00084-.00087		.01	ppm	N	From erosion of natural deposits and certain human activies.
Barium	2015	0.049	0.048 - 0.049	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2015	0.85	0.82 - 0.85	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	2015	156	86-156	200	No MCL at this time	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2015	0.857	0.504-0.85756	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Manganese	2015	.0037	.00071-.0037		.05	ppm	N	Manganese compounds may be present in the atmosphere as suspended particulates resulting from industrial emissions, soil erosion
Mercury	2015	.000269	0 - .000269		.002	ppm	N	Organic mercury (primarily methyl mercury) is produced by specific bacterial organisms in surface waters that convert inorganic mercury into organic mercury, which is the form of mercury that poses a significant threat to human health
Nickel	2015	.0013	.0009 - .0013		0.1	ppm	N	The primary source of nickel in drinking-water is leaching from metals in contact with drinking-water, such as pipes and fittings.

Nitrate [measured as Nitrogen]	2015	0.0335	0 - .0335	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2015	1.1	0-1.1	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Radioactive Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Beta/photon emitters	01/26/2011	4.7	0 - 4.7	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	01/26/2011	1	1 - 1	0	5	pCi/L	N	Erosion of natural deposits.

Synthetic organic contaminants including pesticides and herbicides	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	Likely Source of Contamination
Atrazine	2015	0.54	0 - 0.54	3	3	ppb	N	Runoff from herbicide used on row crops.
Di (2-ethylhexyl) phthalate	2014	1	0 - 0.7	0	6	ppb	N	Discharge from rubber and chemical factories.

UCMR3 Sampling Results

Chemical	**Minimum Detected**	**Maximum Detected**	**Average Detected**	**Units**	**Violations**	
Strontium	251	536	419	ug/l	N	Strontium occurs naturally in the environment. Air, dust, soil, foods and drinking water all contain small amounts of strontium. Ingestion of small amounts of strontium is not harmful.
Vanadium	1.13	1.92	1.33	ug/l	N	Exposure to vanadium is very common, as it is a naturally occurring element that is found in many parts of the environment, including at low levels in many foods
Molybdenum	<1	2	1.25	ug/l	N	Molybdenum is considered to be an essential trace element in both animals and humans.

"Unregulated contaminants are those for which the 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 regulations are warranted."

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.29 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. It is an indicator of water quality and the effectiveness of treatment filtration.

Disinfection Residual

Chemical	MDRL	MDRLG	Average Reading	Lowest Reading	Highest Reading	Units	Violation	Likely Sources of Contamination
Chloramines	4.0	4.0	1.95	0.5	4.85	Mg/l	N	Water additive used to control microbes

Variances or Exemptions

Variance or Exemptions	Explanation of Variance	Date Variance was issued	Date Variance Expires	Brief status on the steps the System is taking to comply with the terms and Schedule of the Variance.	Any opportunity for public input on the review or removal of the Variance.
Variance Alternative Capacity Requirement (ACR)	ACR is a reduction in the TCEQ's .6gpm/connection Rule	6/1/2010	N/A	The City is monitoring water pumpage so not to exceed 14.1 MG/D	Not at this time.