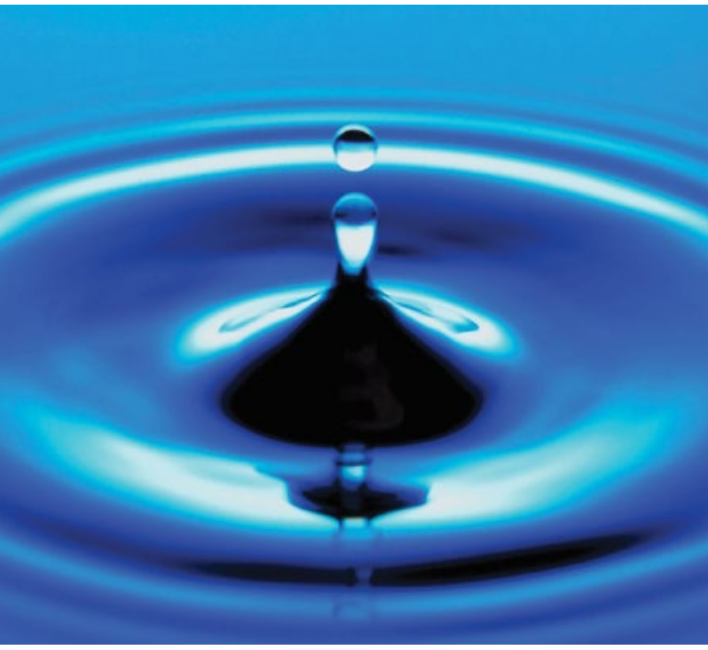
2013 ANNUAL DRINKING WATER QUALITY REPORT



A SUPERIOR RATED WATER SYSTEM

CITY OF CORPUS CHRISTI TEXAS
INCORPORATED
1852

PWS ID: TX1780003

DEAR WATER CUSTOMERS:

The Corpus Christi Utilities Department is pleased to present its 2013 Annual Water Quality Report in accordance with the United States Environmental Protection Agency (EPA) National Primary Drinking Water Regulations, 40 CFR Part 141 Subpart 0, which requires all drinking water suppliers to provide the public with an annual statement describing the water supply and the quality of its water.

Highly trained professionals take steps to perform extensive water quality monitoring and testing so that our water supply meets or exceeds all federal and state drinking water requirements. We are mindful of our responsibility to provide you with a safe product at all times.

Corpus Christi's surface water is supplied through a network of three reservoirs, including Choke Canyon and Lake Corpus Christi which are located in the Nueces River Basin. The Nueces River transports water from the two reservoirs where it is pumped to the O. N. Stevens Water Treatment Plant.

Water pumped from Lake Texana through the Mary Rhodes Pipeline is blended at the treatment plant.

2013 DRINKING WATER QUALITY REPORT

Our drinking water is regulated by the Texas Commission on Environmental Quality (TCEQ). The information that follows lists all of the federally regulated or monitored contaminants which have been found in our drinking water. The U.S. EPA required water systems to test for up to 97 contaminants.

INORGANIC CONTAMINANTS

Year	Constituent (Unit of Measure)	Average	Range	MCL	MCLG	Likely Source of Contaminant
2013	Arsenic (ppb)	3.10	NA	10	NA	Discharge of drilling waste, erosion of natural deposits
2013	Barium (ppm)	0.15	NA	2	2	Discharge of drilling waste, erosion of natural deposits
2013	Fluoride (ppm)	0.35	NA	4	4	Erosion of natural deposits, water additive
2013	Nitrate (ppm)	0.35	0.32–0.35	10	10	Runoff from fertilizer use, erosion of natural deposits
2011	Gross Beta Particle Activity (pCi/L)	5.40	NA	50	0	Decay of natural/man-made deposits
2013	Selenium (ppb)	5.50	NA	50	50	Erosion of natural deposits

DISINFECTION BY-PRODUCTS

Year	Constituent (Unit of Measure)	Highest Yearly Average	Range	MCL	MCLG	Likely Source of Contaminant
2013	Total Trihalomethanes (ppb)	52.2	22.9–186	80	NA	By-product of drinking water disinfection
2013	Total Haloacetic Acids (ppb)	24.2	1.20–36.5	60	NA	By-product of drinking water disinfection

The locational running annual average is a health concern at levels above the the MCL. Analysis of drinking water at Park Road 22 (DBP2-09) for TTHMs indicates a compliance value in quarter 2 of 2013 of 125 ppb. Chemical and mechanical cleaning was completed at DBP2-09. In addition, DBP2-09 was removed as a sample site due to not being a representative site of the distribution system. Some people who drink water containing TTHMs in excess of the MCL over many years may experience problems with their liver, kidney, or central nervous systems, and may have an increased risk of getting cancer.

TOTAL ORGANIC CARBON

Year	Constituent (Unit of Measure)	Average	Range	MCL	MCLG	Likely Source of Contaminant
2013	Source Water (ppm)	6.29	4.01–7.24	NA	NA	Naturally present in the environment
2013	Plant 1 (ppm)	4.31	3.0–5.34	NA	NA	Naturally present in the environment
2013	Plant 2 (ppm)	4.45	2.95–6.14	NA	NA	Naturally present in the environment
2013	Plant 1 Removal Ratio (% removal*)	1.23	0.45–1.92	NA	NA	Naturally present in the environment
2013	Plant 2 Removal Ratio (% removal*)	1.15	0.06–1.95	NA	NA	Naturally present in the environment

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 (THM) and haloacetic acids (HAA5) 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.

ORGANIC CONTAMINANTS

Year	Constituent (Unit of Measure)	Average	Range	MCL	MCLG	Likely Source of Contaminant
2013	Atrazine (ppb)	0.23	0.12–0.31	3	3	Runoff from herbicide used on row crops
2013	Di(2-ethylhexyl) phthalate (ppb)	1.80	NA	6	0	Discharge from chemical factories

MAXIMUM RESIDUAL DISINFECTANT LEVEL

Year	Constituent (Unit of Measure)	Average	Range	MRDL	MRDLG	Likely Source of Contaminant
2013	Chloramines (ppm)	2.5	2.3–2.6	4	4	Disinfectant used to control microbes

UNREGULATED CONTAMINANTS

Year	Constituent (Unit of Measure)	Highest Yearly Average	Range	MCL	MCLG	Likely Source of Contaminant
2013	Bromodichloromethane (ppb)	11.45	7.70–20.5	NA	NA	By-product of drinking water disinfection
2013	Dibromochloromethane (ppb)	13.66	6.20–59.2	NA	NA	By-product of drinking water disinfection
2013	Chloroform (ppb)	5.31	3.10–9.10	NA	NA	By-product of drinking water disinfection
2013	Bromoform (ppb)	12.5	1.90–97.7	NA	NA	By-product of drinking water disinfection

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.

TURBIDITY

Year	Constituent (Unit of Measure)	Highest Single Measurement	Lowest % of Samples Meeting Limits	Entry Point MCL	Single Measurement MCL	Likely Source of Contaminant
2013	Plant 1 (NTU)	0.19	100	≤0.3	1.0	Soil runoff
2013	Plant 2 (NTU)	0.24	100	≤0.3	1.0	Soil runoff

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.

MICROBIOLOGICAL CONTAMINANTS

Year	Constituent	Highest Monthly % of Positive Samples	Unit of Measurement	MCL	Likely Source of Contaminant
2013	Total Coliform Bacteria	0.6	Presence	**	Naturally present in the environment
2013	Fecal Coliform and *E. coli*	0	Presence	***	Naturally present in the environment

**Presence of coliform bacteria in 5% or more of the monthly samples. ***A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive.

Fecal Coliform bacteria, in particular, *E. coli*, are members of the coliform bacteria group originating in the intestinal tract of warm-blooded animals and are passed into the environment through feces. The presence of fecal coliform bacteria (*E. coli*) in drinking water may indicate recent contamination of the drinking water with fecal material.

LEAD AND COPPER RULE MONITORING

Year	Constituent (Unit of Measure)	90th Percentile	Number of Sites Exceeding Action Level	Action Level	Likely Source of Contaminant
2012	Lead (ppb)	2.69	1	15.0	Corrosion of household plumbing systems, erosion of natural deposits
2012	Copper (ppm)	0.065	0	1.3	Corrosion of household plumbing systems, erosion of natural deposits

UNREGULATED CONTAMINANT MONITORING RULE 2 (UCMR2)

Year	Screening Survey List 2	Average	Range	MCL	Likely Source of Contaminant
2009	Nitrosamines (ppm) *N*-Nitrosodimethylamine (NDMA)	0.0069	0.0023–0.0147	NA	Naturally found in water or form when disinfectant is added for treatment

SECONDARY AND OTHER CONSTITUENTS – Not Associated with Adverse Health Effects

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 USEPA. 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.

Year	Constituent (Unit of Measure)	Average	Range	MCL	Likely Source of Contaminant
2013	Aluminum (ppm)	0.121	0.06–0.186	0.2	Abundant naturally occurring element
2011	Bicarbonate (ppm)	134	134–134	NA	Corrosion of carbonate rocks such as limestone
2013	Calcium (ppm)	65	45–93	NA	Abundant naturally occurring element
2013	Chloride (ppm)	137	67–199	300	Abundant naturally occurring element, used in water purification
2013	Copper (ppm)	0.0027	<0.002–0.0027	NA	Corrosion of household plumbing systems, erosion of natural deposits
2013	Hardness as $CaCO_3$ (ppm)	185	152–224	NA	Naturally occurring calcium and magnesium
2011	Magnesium (ppm)	12.7	12.7–12.7	NA	Abundant naturally occurring element
2013	Manganese (ppm)	0.0034	<0.002–0.0049	0.05	Abundant naturally occurring element
2011	Nickel (ppm)	0.002	0.002–0.002	NA	Erosion of natural deposits
2013	pH	7.64	6.77–7.99	>7.0	Measure of corrosivity of water
2013	Sodium (ppm)	94.3	58.6–127	NA	Erosion of natural deposits, oil field by-product
2013	Sulfate (ppm)	76	51–97	300	Naturally occurring, oil field by-product
2013	Total Alkalinity as $CaCO_3$ (ppm)	122	100–138	NA	Naturally occurring soluble mineral salts
2013	Total Dissolved Solids (ppm)	514	334–671	1,000	Total dissolved mineral constituents in water

A REMINDER TO CONSERVE WATER

Most of us take for granted that we will always have enough water. Unfortunately, our area often experiences long periods of drought. We encourage residents to continue to conserve water as we strive to provide the highest water quality in Texas. Conservation is saving tomorrow's water today and conservation begins with each of us.

Visit our web site for conservation tips and information at **www.corpuschristiwater.com**.

WANT TO KNOW MORE ABOUT YOUR WATER?

For more information on the quality of your drinking water, visit our website at **www.corpuschristiwater.com** and click on "General Info" on the lower left hand side of the page. Check out our "Guide to Common Water Quality Concerns" informational link in the menu on the left side of the webpage.

www.facebook.com/ccwaterquality
"Like" us on Facebook to receive information on upcoming events, major line breaks, water quality information, and more!

Or call our water quality hotline at **361-826-1234** to speak with someone.

GET A FREE REUSABLE SHOPPING BAG JUST FOR ATTENDING!

The City of Corpus Christi Utilities Department (CCUD) will hold a meeting to discuss the contents of the 2013 Annual Drinking Water Quality Report. Attendees will receive a free reusable shopping bag. The meeting will be held on July 1, 2014 at 6:00 p.m. at the Water Utilities building located at 2726 Holly Road, Corpus Christi, Texas. Please join us as we share our challenges and our accomplishments. We want to provide our community with the best drinking water. Shopping bags are limited to one per adult customer.

CORPUS CHRISTI UTILITIES DEPARTMENT

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