

Annual Drinking Water Quality Report

TX1780017

CORPUS CHRISTI NAVAL AIR STATION

Annual Water Quality Report for the period of January 1 to December 31, 2014

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.

CORPUS CHRISTI NAVAL AIR STATION is Purchased Surface Water
From the City of Corpus Christi

PUBLIC PARTICIPATION OPPORTUNITIES

City of Corpus Christi (Annual Public Meeting):
July 6, 2015 at 6:00pm at the Water Utilities Bldg.
2726 Holly Road, Corpus Christi, TX

NASCC: None scheduled. call 361-961-5357 for comments/questions.

For more information regarding this report contact:

Name RONI MILLER

Phone 361-961-5357

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (361) 961-5357.

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 pickup 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 or at <http://www.epa.gov/safewater/lead>.

Information about Source Water Assessments

NAS CORPUS CHRISTI

The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. The report 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 City of Corpus Christi, from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Nikki Gordon at 361-826-1234.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://www.tceq.texas.gov/gis/swview>

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

Source Water Name	Type of Water	Report Status	Location
SWP I/C FROM CORPUS CHRISTI -	CC FROM TX1780003 CITY OF	SW	_____A_____ NUECES RIVER

2014 Regulated Contaminants Detected

NAS CORPUS CHRISTI

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	2014	1.3	1.3	0.43	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2014	0	15	5.3	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

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 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 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)

Water Quality Test Results

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)

**Regulated Contaminants
NAS CORPUS CHRISTI**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Halacetic Acids (HAA5)*	2014	27	14.5 - 39.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trinalomethanes (TTHM)	2014	47	36.4 - 61	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
Nitrate [measured as Nitrogen]	2014	0.52	0.52 - 0.52	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.

**DISINFECTANT RESIDUAL TABLE
NAS CORPUS CHRISTI**

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Likely Source of Contamination
Chloramine Residuals	2014	2.45	0.50	4.40	4	4	ppm	N	Water additive used to control microbes.

UNREGULATED CONTAMINANTS
 NAS CORPUS CHRISTI

Bromoform, chloroform, bromodichloromethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

YEAR OR RANGE	CONTAMINANT	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	UNIT OF MEASURE	SOURCE OF CONTAMINANT
2014	Chloroform	12.6	7	20.5	ppb	Byproduct of drinking water disinfection
2014	Bromoform	6.3	1.3	11.9	ppb	Byproduct of drinking water disinfection.
2014	Bromodichloromethane	14.6	12.6	19.9	ppb	Byproduct of drinking water disinfection
2014	Dibromochloromethane	10.8	4.8	19.1	ppb	Byproduct of drinking water disinfection

TOTAL COLIFORM

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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 harder 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 CONTAMINANT
2014	Total Coliform Bacteria	0.0		No presence	

**VIOLATIONS TABLE NAS CORPUS CHRISTI
CONSUMER CONFIDENCE RULE**

VIOLATION TYPE	VIOLATION BEGAN	VIOLATION ENDED	VIOLATION EXPLANATION
<p>The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports (CCR) on the quality of the water delivered by the systems.</p> <p>CCR ADEQUACY/AVAILABILITY/CONTENT</p>	<p>07/01/2014</p>	<p>02/10/2015</p>	<p>NAS Corpus Christi sent out the FY2013 CCR to our customers in a timely manner, but the content failed to provide to you, our drinking water customers, adequate information to you, due to using an incorrect report from the City of Corpus Christi about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water. Corrections were done and the corrected CCR was distributed.</p>

City of Corpus Christi 2014 CCR Data

Inorganic Contaminants						
Year/Constituent	Mean	Range	MCL	MCLG	Likely Source of Contaminant	
2014 Barium (ppm)	0.11	NA	2	2	Discharge of drilling waste, erosion of natural deposits	
2014 Fluoride (ppm)	0.14	NA	4	4	Erosion of natural deposits, water additive	
2014 Nitrate (ppm)	0.24	NA	10	10	Petroleum/ metal discharge, erosion of natural deposits	
2011 Gross Beta Particle Activity (pCi/L)	5.4	NA	50	0	Decay of natural/man-made deposits	
2014 Cyanide (total) (ppb)	148	70-210	NA	NA	Discharge from plastic and fertilizer factories.	
Organic Contaminants						
Year/Constituent	Average	MCL	MCLG	Likely Source of Contaminant		
2014 Atrazine (ppb)	0.18	3.0	3.0	Runoff from herbicide use on row crops		
Turbidity						
Year/Constituent	Highest Single Measurement	Lowest % of Samples Meeting Limits	Entry Point MCL	Single Measurement MCL	Likely Source of Contaminant	
2013 Plant 1 (NTU)	0.26	100	≤0.3	1.0	Soil runoff	
2013 Plant 2 (NTU)	0.26	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.						
Unregulated Contaminant Monitoring Rule 3 (UCMR3)						
Year/Screening Survey List	Average	Range	MRL (Minimum Reporting Level)	Likely Source of Contaminant		
2014 Molybdenum (ppb)	1.2	1.2-1.3	1			
2014 Strontium (ppb)	339	280-390	0.3			
2014 Vanadium (ppb)	6.3	5.5-7.0	0.2			
2014 Chromium-Hexavalent (ppb)	0.05	0.03-0.08	0.03			
2014 Chlorate (ppb)	124	20-210	20			
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	Average	Range	MCL	Likely Source of Contaminant		
2014 Aluminum (ppm)	0.028	NA	0.2	Abundant naturally occurring element		
2014 Bicarbonate (ppm)	128	NA	NA	Corrosion of carbonate rocks such as limestone		
2014 Calcium (ppm)	48.5	NA	NA	Abundant naturally occurring element		
2014 Chloride (ppm)	100	NA	300	Abundant naturally occurring element; used in water purification		
2014 Hardness as CaCO3 (ppm)	152	NA	NA	Naturally occurring calcium and magnesium		
2014 Magnesium (ppm)	7.56	NA	NA	Abundant naturally occurring element		
2014 Manganese (ppm)	0.0071	NA	0.05	Abundant naturally occurring element		
2014 Nickel (ppm)	0.0013	NA	NA	Erosion of natural deposits		
2014 Potassium (ppm)	7.76	NA	NA	Abundant naturally occurring element		
2014 Sodium (ppm)	64	NA	NA	Erosion of natural deposits; oil field by-product		
2014 Sulfate (ppm)	62	NA	300	Naturally occurring; oil field by-product		
2014 Total Alkalinity (ppm)	137	105-203	NA	Naturally occurring soluble mineral salts		
2014 Total Dissolved Solids (ppm)	380	NA	1000	Total dissolved mineral constituents in water		