# NUECES WATER SUPPLY CORPORATION 2013 ANNUAL WATER QUALITY REPORT

FOR THE PERIOD OF JANUARY 1 TO DECEMBER 31, 2013

#### (CONSUMER CONFIDENCE REPORT -

PWS ID NUMBER: TX1780052)

#### 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 provider. 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

#### Our Drinking Water is Regulated

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. 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. For more information regarding this report contact Carola Serrato, General Manager at (361)592-1720 or (866)543-5333.

**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 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 NWSC Business office at (361)592-1720.

# Where do we get our drinking water?

Our drinking water is obtained from surface water sources. Nueces Water Supply Corporation is supplied by South Texas Water Authority, who purchases treated water from the City of Corpus Christi whose surface water sources are Lake Corpus Christi, Lake Texana and Choke Canyon Reservoir. The TCEO has completed a Source Water Assessment for all drinking water systems that own their sources. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The system from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact NWSC General Manager Carola Serrato. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at http://gis3.tceg.state.tx.us/sway/Controller/index.isp?wtrsrc=. Further details about sources and source water assessments are available on Texas Drinking Water Watch at http://dww.tceq.texas.gov/DWW/.

# ALL drinking water may contain contaminants

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 (800)426-4791.

**Water Loss:** In the most recent Water Loss Audit submitted to the Texas Water Development Board for the period of January to December 2010, NWSC lost an estimated 5.1 million gallons of water.

### **About The Following Pages:**

The pages that follow 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 for up to 97 contaminants.

#### **Definitions & Abbreviations**

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.

**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.

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

MFL – million fibers per liter (a measurement of asbestos)

na – not applicable

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 contaminants.

NTU – Nephelometric Turbidity Units

pCi/L - picocuries per liter (a measure of radioactivity)

**ppm** – parts per million, or milligrams per liter (mg/L) – or one ounce in 7,350 gallons of water.

**ppb** – parts per billion, or micrograms per liter  $(\mu g/L)$  – or one ounce in 7,350,000 gallons of water.

**ppt** – parts per trillion, or nanograms per liter (ng/L)

**ppq** – parts per quadrillion, or picograms per liter (pg/L)

#### Nueces Water Supply Corporation (NWSC) – Coliform Bacteria

MCLG	Total Coliform MCL	Highest No. of Positive	Fecal Coliform or E. Coli MCL	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contaminant
0	1 positive monthly sample.	0	1+	0	N	Naturally present in the environment.

#### **NWSC - Maximum Residual Disinfectant Level**

Year	Disinfectant	Avg Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit	Source of Disinfectant
2013	Chloramine, Residual	2.00	0.5	4	4	4	ppm	Disinfectant used to control microbes.

#### **NWSC – Regulated Contaminants**

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Haloacetic Acids	2013	21	4.4 – 23.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes	2013	47	23.4 – 48.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

#### **NWSC - Inorganic Contaminants**

Contaminant	Collection Date	Highest level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2013	1	0.26 – 0.53	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrite (measured as Nitrogen)	2013	0.06	0 - 0.06	1	1	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

#### **NWSC - Lead and Copper**

Year	Lead & Copper	The 90 <sup>th</sup> Percentile	# of Sites Exceeding AL	MCLG	Action Level (AL)	Unit	Violation	Source of Contaminant
2011	Lead*	9.24	0	0	15	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.
2011	Copper	1.1	0	1.3	1.3	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

<sup>\*</sup>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 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

City of Corpus Christi – Inorganic Contaminants

Contaminant	Collection Date	Highest level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
Arsenic	2013	3	3.1 – 3.1	0	10	ppb	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2013	0.15	0.15 – 0.15	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	2013	0.4	0.35 – 0.35	4	4	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2013	0.35	0.32 – 0.35	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	2013	10	5.5 – 5.5	50	50	ppb	N	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.

#### City of Corpus Christi - Radioactive Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Beta/photon emitters	3/03/2011	5.4	5.4 – 5.4	0	50	pCi/L**	N	Decay of natural and man-made deposits.
Combined Radium	3/03/2011	1	1 – 1	0	5	pCi/L	N	Erosion of natural deposits.

<sup>\*\*</sup>EPA considers 50 pCi/L to be the level of concern for beta particles.

#### City of Corpus Christi – Synthetic Organic Contaminants

Contaminant	Collection Date	Highest level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
Atrazine	2013	0.31	0.12 – 0.31	3	3	ppb	N	Runoff from herbicide used on row crops.
Di (2- ethylhexyl) phthalate	2013	2	0 – 1.8	0	6	ppb	N	Discharge from rubber and chemical factories.

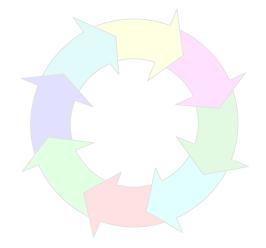
#### City of Corpus Christi – Turbidity

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Year/Constituent	Highest Single	Lowest % of Samples	Entry Point	Violation	Single Measurement	Likely Source of
	Measurement	Meeting Limits	MCL		MCL	Contamination
2013 Plant 1 (NTU)	0.15	100	≤0.3	N	1.0	Soil runoff.
2013 Plant 2 (NTU)	0.13	100	≤0.3	N	1.0	Soil runoff.

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

**Nueces Water Supply Corporation** P.O. Box 415 Kingsville, Texas 78364

### NUECES WATER SUPPLY CORPORATION



## 2013 DRINKING WATER QUALITY REPORT

### Public Participation Opportunity

8:00 a.m. – 5:00 p.m. :əmiT Monday through Friday Date:

South Texas Water Authority's Office, 111 Sage Rd., Kingsville, Texas Location:

(361)592-1720 or (866)543-5333 Phone No:

En Español

.8552-543(338) o 0271-292(136) onoi-91st la namall Este reporte incluye información importante sobre el agua para tomar. Para asistencía en español, favor de