

2016 ANNUAL DRINKING WATER QUALITY REPORT
VIOLET WATER SUPPLY CORPORATION
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This Annual Water Quality Report is for the period of January 1 to December 31, 2016. 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 source of drinking water used by VIOLET WSC is Purchased Surface Water from the O.N. Stevens Plant Corpus Christi. This report is a summary of the quality of the water we provide our customers. 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.

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 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 regulation establishes limits for contaminants in bottled water which must provide the same protection for public health.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants 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. 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 <http://www.epa.gov/safewater/lead>.

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: <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>.

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 allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk. MCLG's allow for a margin of safety.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): This is the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

ABBREVIATIONS

NTU – Nephelometric Turbidity Units

MFL – Million fibers per liter (a measure of asbestos)

pCi/l – Picocuries per liter (a measure of radioactivity)

ppm – Parts per million, or milligrams per liter (mg/L)

ppb - Parts per billion, or micrograms per liter

ppt – Parts per trillion, or nanograms per liter.

Ppg – Parts per quadrillion, or picograms per liter

TT - A required process intended to reduce the level of contaminant in drinking water

Na - Not Applicable

Mrem- Millirems per year (a measure of radiation absorbed by the body)

The Board of Directors for Violet Water Supply Corporation meet at 7:00 p.m. every 3rd Monday for a regular monthly meeting, at the Corporation office, 3861 CR 61, Robstown, TX. Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono 361-387-3350.

RESULTS OF 2016 DRINKING WATER QUALITY REPORT FROM THE CITY OF CORPUS CHRISTI

INORGANIC CONSTITUENTS

Year	Unregulated Contaminants	Average	Range	MCL	MCLG	Source of Contaminant
2016	Barium (ppm)	0.11	NA	2	2	Discharge of drilling waste, erosion of natural deposits
2016	Fluoride	0.60	NA	4	4	Erosion of natural deposits, water additive
2016	Nitrate	0.34	NA	10	10	Petroleum/metal discharge, erosion of natural deposits
2016	Cyanide (total) (ppb)	175	110-270	NA	NA	Discharge from plastic and fertilizer factories.

TURBIDITY

Year	Turbidity	Highest Single Measurement	Lowest % of Samples Meeting Units	Entry Point	Single Measurement MCL	Source of Contaminant
2016	Plant 1 (NTU)	0.27	100	<0.3	1.0	Soil runoff
2016	Plant 2 (NTU)	0.34	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, and diarrhea and associated headaches.

ORGANIC CONTAMINANTS

Year	Constituent	Average	MCL	MCLG	Source of Contaminant
2016	Atrazine (ppb)	<0.1	3.0	3.0	Runoff from herbicide use on row crops

SECONDARY AND OTHER CONSTITUENTS – NOT ASSOCIATED WITH ADVERSE HEALTH EFFECTS

Year	Constituent	Average	Range	MCL	Source of Contaminant
2016	Bicarbonate (ppm)	133	NA	NA	Corrosion of carbonate rocks such as limestone
2016	Chloride (ppm)	131	NA	300	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2016	Hardness as Ca/Mg (ppm)	184	NA	NA	Naturally occurring calcium and magnesium
2016	Calcium (ppm)	59.7	NA	NA	Abundant naturally occurring element
2016	Aluminum (ppm)	0.029	NA	0.2	Abundant naturally occurring element
2016	Sulfate (ppm)	65	NA	300	Naturally occurring; common industrial byproduct
2016	Sodium (ppm)	74.5	NA	NA	Erosion of natural deposits; by-product of oil field activity
2016	Total Alkalinity (ppm)	141	109-173	NA	Naturally occurring soluble mineral salts
2016	Total Dissolved Solids (ppm)	443	NA	1000	Naturally occurring calcium & magnesium
2016	Magnesium (ppm)	8.51	NA	NA	Abundant naturally occurring element
2016	Nickel (ppm)	0.0015	NA	NA	Abundant naturally occurring element
2016	Manganese (ppm)	0.0193	NA	0.05	Abundant naturally occurring element
2016	Potassium (ppm)	8.28	NA	NA	Abundant naturally occurring element

Many constituents, such as calcium, sodium or irons, 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 concerns. Therefore, secondary's are not required to be reported, but they may greatly affect the appearance and taste of your water.

UNREGULATED CONTAMINANT MONITORING RULE 3 (UCMR3)

Year/Screening Survey List	Average	Range	MRL (Minimum Reporting Level)
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

VIOLET WATER SUPPLY CORPORATION ANNUAL WATER QUALITY DATA FOR 2016

REGULATED CONTAMINANTS

Year	Disinfection By-Products	Highest Single Sample	Range of Levels Detected	MCLG	MCL	UNITS	Violations	Likely Source of Contamination
2016	Total Trihalomethanes (TThm)	54	35.4-56.4	No Goal for the Total	80	ppb	None	By products in drinking water disinfection
2016	Haloacetic Acids (HAA5)	29	18.9-30.4	No Goal for the Total	60	ppb	None	By products in drinking water disinfection

Year	INORGANIC CONTAMINANTS	Highest Level Detected	Range of Levels Detected	MCLG	MCL	UNITS	Violations	Likely Source of Contamination
2016	Nitrate (Measured as Nitrogen)	1	0.33-0.58	10	10	ppb	None	Runoff from fertilizer use; Leaching from Septic tanks, Erosion of natural deposits.

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Units of Measure	Violations	Likely Source of Contamination
2016	Chloramine	1.42	1.11	2.12	4	4	ppm	None	Water Additive used to control microbes

Violations Table

Chlorine			
Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	01/01/2016	03/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Lead and Copper Rule			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2015	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2016	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	02/08/2016	04/10/2016	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

