2015 Annual Drinking Water Quality Report

CITY OF VERNON, TX 76384

(940) 552-2581 www.vernontx.gov

Important Health Information

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; those 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 **.**

Public Participation Opportunities

Date: 4th Tuesday of each month
Time: 6:30 pm
Location: City Commission Chamber, City Hall at 1725 Wilbarger St.
Phone Number: (940) 552-2581

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (940) 552-2581 – para hablar con una persona bilingue en espanol.

Our Drinking Water is Regulated

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.

Source of Drinking Water

The source of drinking water (both tap water and bottled water) includes 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 animal or 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 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 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 runoff, and septic systems.
-Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Where do we get our drinking water?

The City of Vernon receives its ground water from wells out of the Seymour Aquifer. The well fields are located in Northern Wilbarger County (the Odell and Winston Farm wells), in west Vernon (the Schmoker wells) and in south Vernon (Orbison Park wells, used only as an emergency supply). Chlorine is injected into the water for disinfecting purposes. The amount of chlorine residual in the water is tightly controlled to meet the TCEQ standards, and to keep the chlorine residual at lower safer concentrations, which are less likely to cause long-term chronic health effects.

Source Water Assessment

The TCEQ completed a source water assessment and results indicate that some of our water sources are susceptible to certain contaminants. The sampling requirements for our water system are based on the 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 (940) 552-2581 or (940) 552-9961.
For more information about our sources of water, please refer to the Source Water Assessment Viewer available at the following URL: http://www.tceq.texas.gov/gis/swaview. Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww2.tceq.texas.gov/DWW/.

All Drinking water may contain contaminants

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health

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 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 (940) 552-2581 or (940) 552-9961

Additional Health information for Lead

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. The City of Vernon is 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.

Abbreviations

NTU – Nephelometric Turbidity Units

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

mrem/year–millirems per year (a measure of radiation absorbed by the body)

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

ppq – parts per quadrillion, or pictograms per liter

Definitions

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)
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)
Treatment technique or TT	A required process intended to reduce the level of a contaminant in drinking water.
Action Level or AL	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

2015 Contaminants Detected

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum	Highest No. of Positive	Fecal Coliform or E. Coli Maximum	Total No. of Positive E. Coli or Fecal Coliform	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1		0	N	Naturally present in the environment.

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	08/07/2013	1.3	1.3	0.215	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/07/2013	0	15	5.08	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Disinfectant Residual Data

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Reason for Addition to water
Chlorine	2015	0.84	0.61	1.47	4.0	<4.0	ppm	N	Disinfectant used to control microbes

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)	2015	4	1.04-6.18	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**
Antimony	02/23/2011	0.661	0.661 - 0.661	6	6	ppb	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Arsenic	02/23/2011	0.82	0.82 - 0.82	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	02/23/2011	0.22	0.22 - 0.22	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	02/23/2011	2.85	2.85 - 2.85	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	3/11/2014	0.566	0.566 - 0.566	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Nitrate [measured as Nitrogen] - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.	2015	8	6.93-7.97	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Thallium	02/23/2011	0.055	0.055 - 0.055	0.5	2	ppb	N	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	02/23/2011	2.6	2.6 - 2.6	0	5	pCi/L	N	Erosion of natural deposits.
Uranium	3/11/2014	1.7	1.7 - 1.7	0	30	ug/l	N	Erosion of natural deposits.

Secondary Constituents

(No associated adverse health effects)

Constituent	Year	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
pH	2011	7.7	7.7	7.7	>7.0	units	Measure of corrosivity of water

Violations Table

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 drinking water (e.g., a boil water emergency).			
Violation Type	Violation Begin	Violation End	Violation Explanation
None	None	None	None

Water Loss

During the 2013 83rd Regular Legislative Session, House Bill (HB) 1461 was passed and became effective on September 1, 2013. HB 1461 requires any retail public utility that is required to file a water loss audit with the Texas Water Development Board to notify its customers of the most recent water loss reported in the water loss audit.

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2015, our system lost an estimated 3.07% gallons of water. If you have any questions about the water loss audit please call (940) 552-9961