



2016 CITY OF VAN

ANNUAL DRINKING WATER QUALITY REPORT CONSUMER CONFIDENCE REPORT (CCR)

NOTICE

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. In accordance with EPA requirements, the City of Van hereby provides this Annual Water Quality Report, which covers the period from January 1, 2016 to December 31, 2016. If you would like additional information concerning this report, please contact the Van Water Department at 903-963-7216. Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (903) 963-7216.

PUBLIC PARTICIPATION OPPORTUNITIES

The public may participate in regular City Council meetings held every second Thursday of the month at the Van City Hall, located at 113 West Main, Van TX 75790.

REQUIRED INFORMATION

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 might have 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities. 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. 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. 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.

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

The TCEQ completed an assessment of your source water and results indicate that our sources have a low susceptibility to contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts are our system, contact the Van Water Department. 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/swaview>. Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWWW/>.

SOURCE OF DRINKING WATER

The City of Van receives groundwater from four deep wells tapping the Carrizo-Wilcox aquifer.

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.

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

Contaminant - Any physical, chemical, biological or radiological substance or matter in water.

Maximum contaminant level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to maximum contaminant level goals 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 risk to health. MCLGs allow for a margin of safety.

Maximum residual disinfectant level (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 (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.

TERMS

MFL - million fibers per liter (a measure of asbestos);
mrem/year - millirems per year (a measure of radiation absorbed by the body);
N/A – Not Applicable;
NTU - nephelometric turbidity units (a measure of turbidity);
pCi/L - picocuries per liter (a measure of radioactivity);
ppb - parts per billion, or micrograms per liter (µ/L);
ppm - parts per million, or milligrams per liter (mg/L);
ppt - parts per trillion, or nanograms per liter (ng/L); and
ppq - parts per quadrillion, or picograms per liter (pg/L).

COLIFORM BACTERIA

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	There were no TCR detections for this system in this CCR period	0	0	N	Naturally present in the environment.

LEAD AND COPPER

Lead / Copper Results	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.13	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives Corrosion of household plumbing systems.
Lead	2016	0	15	2.4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2016	7	7.3-7.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	22	22.3-22.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

INORGANIC CONTAMINANTS

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Antimony	1/11/2010	Levels lower than detect level	0-0	6	6	ppb	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Arsenic	1/11/2010	Levels lower than detect level	0-0	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2016	0.035	0.035-0.035	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Beryllium	1/11/2010	Levels lower than detect level	0-0	4	4	ppb	N	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium	1/11/2010	Levels lower than detect level	0-0	5	5	ppb	N	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints.
Chromium	2016	2.3	2.3-2.3	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	04/30/2014	0.154	0.154-0.154	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Mercury	1/11/2010	Levels lower than detect level	0-0	0	2	ppb	N	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.
Nitrate [measured as Nitrogen]	2016	0.181	0.181	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	1/11/2010	Levels lower than detect level	0-0	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Thallium	1/11/2010	0.005	0.005 - 0.005	0.5	2	ppb	N	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories.

RADIOACTIVE CONTAMINANTS

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	3/23/2009	Levels lower than detect level	0 - 0	0	4	mrem/yr	N	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	3/23/2009	Levels lower than detect level	0 - 0	0	15	pCi/L	N	Erosion of natural deposits.
Combined Radium 226/228	11/02/2015	1.5	1.5-1.5	0	5	pCi/L	N	Erosion of natural deposits.

SYNTHETIC ORGANIC CONTAMINANTS (SOC) INCLUDING PESTICIDES AND HERBICIDES

SOCS	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2,4,5-TP (Silvex)	2010	Levels lower than detect level	0 - 0	50	50	ppb	N	Residue of banned herbicide.
2,4-D	2010	Levels lower than detect level	0 - 0	70	70	ppb	N	Runoff from herbicide used on row crops.
Alachlor	3/23/2009	Levels lower than detect level	0 - 0	0	2	ppb	N	Runoff from herbicide used on row crops.
Atrazine	3/23/2009	Levels lower than detect level	0 - 0	3	3	ppb	N	Runoff from herbicide used on row crops.
Benzo(a)pyrene	3/23/2009	Levels lower than detect level	0 - 0	0	200	ppt	N	Leaching from linings of water storage tanks and distribution lines.
Carbofuran	2010	Levels lower than detect level	0 - 0	40	40	ppb	N	Leaching of soil fumigant used on rice and alfalfa.
Chlordane	3/23/2009	Levels lower than detect level	0 - 0	0	2	ppb	N	Residue of banned termiticide.
Dalapon	2010	Levels lower than detect level	0 - 0	200	200	ppb	N	Runoff from herbicide used on rights of way.
Di (2-ethylhexyl) adipate	3/23/2009	Levels lower than detect level	0 - 0	400	400	ppb	N	Discharge from chemical factories
Di (2-ethylhexyl) phthalate	3/23/2009	Levels lower than detect level	0 - 0	0	6	ppb	N	Discharge from rubber and chemical factories
Dibromochloropropane (DBCP)	2010	Levels lower than detect level	0 - 0	0	0	ppt	N	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards..
Dinoseb	2010	Levels lower than detect level	0 - 0	7	7	ppb	N	Runoff from herbicide used on soybeans and vegetables.
Endrin	3/23/2009	Levels lower than detect level	0 - 0	2	2	ppb	N	Residue of banned insecticide.
Ethylene dibromide	2010	Levels lower than detect level	0 - 0	0	50	ppt	N	Discharge from petroleum refineries.
Heptachlor	3/23/2009	Levels lower than detect level	0 - 0	0	400	ppt	N	Residue of banned termiticide.
Heptachlor epoxide	3/23/2009	Levels lower than detect level	0 - 0	0	200	ppt	N	Breakdown of heptachlor.
Hexachlorobenzene	3/23/2009	Levels lower than detect level	0 - 0	0	1	ppb	N	Discharge from metal refineries and agricultural chemical factories.
Hexachlorocyclopentadiene	3/23/2009	Levels lower than detect level	0 - 0	50	50	ppb	N	Discharge from chemical factories
Lindane	3/23/2009	Levels lower than detect level	0 - 0	200	200	ppt	N	Runoff/leaching from insecticide used on cattle, lumber, gardens.
Methoxychlor	3/23/2009	Levels lower than detect level	0 - 0	40	40	ppb	N	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.
Oxamyl [Vydate]	2010	Levels lower than detect level	0 - 0	200	200	ppb	N	Runoff/leaching from insecticide used on apples, potatoes and tomatoes.
Pentachlorophenol	2010	Levels lower than detect level	0 - 0	0	1	ppb	N	Discharge from wood preserving factories.
Picloram	2010	Levels lower than detect level	0 - 0	500	500	ppb	N	Herbicide runoff.
Simazine	3/23/2009	Levels lower than detect level	0 - 0	4	4	ppb	N	Herbicide runoff.
Toxaphene	3/23/2009	Levels lower than detect level	0 - 0	0	3	ppb	N	Runoff/leaching from insecticide used on cotton and cattle.

VOLATILE ORGANIC CONTAMINANTS (VOC)

VOCs	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
1,1,1-Trichloroethane	1/11/2010	Levels lower than detect level	0 - 0	200	200	ppb	N	Discharge from metal degreasing sites and other factories.
1,1,2-Trichloroethane	1/11/2010	Levels lower than detect level	0 - 0	3	5	ppb	N	Discharge from industrial chemical factories.
1,1-Dichloroethylene	1/11/2010	Levels lower than detect level	0 - 0	7	7	ppb	N	Discharge from industrial chemical factories.
1,2,4-Trichlorobenzene	1/11/2010	Levels lower than detect level	0 - 0	70	70	ppb	N	Discharge from textile-finishing factories.
1,2-Dichloroethane	1/11/2010	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from industrial chemical factories.
1,2-Dichloropropane	1/11/2010	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from industrial chemical factories.
Benzene	1/11/2010	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from factories; Leaching from gas storage tanks and landfills.
Carbon Tetrachloride	1/11/2010	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from chemical plants and other industrial activities.
Chlorobenzene	1/11/2010	Levels lower than detect level	0 - 0	100	100	ppb	N	Discharge from chemical and agricultural chemical factories.
Dichloromethane	1/11/2010	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from pharmaceutical and chemical factories.
Ethylbenzene	1/11/2010	Levels lower than detect level	0 - 0	700	700	ppb	N	Discharge from petroleum refineries.
Styrene	1/11/2010	Levels lower than detect level	0 - 0	100	100	ppb	N	Discharge from rubber and plastic factories; Leaching from landfills.
Tetrachloroethylene	1/11/2010	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from factories and dry cleaners.
Toluene	1/11/2010	Levels lower than detect level	0 - 0	1	1	ppm	N	Discharge from petroleum factories.
Trichloroethylene	1/11/2010	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from metal degreasing sites and other factories.
Vinyl Chloride	1/11/2010	Levels lower than detect level	0 - 0	0	2	ppb	N	Leaching from PVC piping; Discharge from plastic factories.
Xylenes	1/11/2010	Levels lower than detect level	0 - 0	10	10	ppm	N	Discharge from petroleum factories; Discharge from plastic factories.
cis-1,2-Dichloroethylene	1/11/2010	Levels lower than detect level	0 - 0	70	70	ppb	N	Discharge from industrial chemical factories.
o-Dichlorobenzene	1/11/2010	Levels lower than detect level	0 - 0	600	600	ppb	N	Discharge from industrial chemical factories.
p-Dichlorobenzene	1/11/2010	Levels lower than detect level	0 - 0	75	75	ppb	N	Discharge from industrial chemical factories.
trans-1,2-Dichloroethylene	1/11/2010	Levels lower than detect level	0 - 0	100	100	ppb	N	Discharge from industrial chemical factories.