

Fremont 2014 Water Quality Report

Fremont Dept. of Utilities * 400 E. Military * Fremont, NE 68025 * 727-2600

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o hable con Alguien que lo entienda bien.

Why this Report?

U. S. Congress revised the Safe Drinking Water Act in 1996, requiring public water supply systems to send annual water quality reports to all of their customers, paid for by customers through water rates. For more information about your water quality, call Larry Andreasen, Water & Sewer Superintendent, or Warren Sund, Water Treatment Technician. (402) 727-2613

Water Sources

We serve more than 25,000 customers an average of 5 million gallons of water per day. Water sources include the Platte River Wellfield and several groundwater peak-shaving wells in the High Plains Alluvial Aquifer.

Source Water Assessment

The Nebraska Department of Environmental Quality (NDEQ) has completed the Source Water Assessment. Included in the assessment is a Wellhead Protection Area map, potential contaminant source inventory, vulnerability rating and source water protection information. For more information contact the Water Department at (402) 727-2821 or NDEQ at (402) 471-6988

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

Backflow Prevention Program

Federal and State Laws require water suppliers to protect their water systems from contamination. Therefore, the City of Fremont has implemented an aggressive program to contain or isolate backflow and cross-connection hazards. Public awareness and cooperation is the best solution to keeping our water safe and pure. If you have not as yet filled out and returned a Backflow Report form, please stop in when paying your Utilities bill and ask to fill one out.

Public Works Board Meetings

Meetings are held the Wednesday preceding the City Council Meeting at 4:15 P.M. in the 2nd Floor Conference Room at 400 E. Military, Fremont. The City Council Meetings are held on the 2nd Tuesday and last Tuesday of the month. For an agenda call: (402) 727-2630

Your Drinking Water Surpasses Every Federal and State Requirement

Our goal is to provide you with high quality, safe drinking water that surpasses every federal and state standard, and test results show we're doing just that. Since we do not have the capability or resources to determine health risks of any chemical compound found in the water, we must rely on EPA and Nebraska Health and Human Services to tell us what substances are a health risk-and if they are a health risk, what levels are safe for human consumption

Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

The source of water used by City of Fremont is Ground Water.

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 that may be present in source water include:

- ◆ Microbial contaminants, such as viruses and bacteria, which 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.

Required Testing for Regulated Contaminants

The City of Fremont is required to test for the following contaminants: Coliform Bacteria, Antimony, Arsenic, Asbestos, Barium, Beryllium, Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Selenium, Sodium, Thallium, Alachlor, Atrazine, Benzo(a)pyrene, Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl)adipate, Dibromochloropropane, Dinoseb, Di(2-ethylhexyl)phthalate, Diquat, 2,4-D, Endothall, Endrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl (Vydate), Pentachlorophenol, Picloram, Polychlorinated biphenyls, Simazine, Toxaphene, Dioxin, Silvex, Benzene, Carbon Tetrachloride, o-Dichlorobenzene, Para-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, Cis-1,2-Dichloroethylene, Trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Monochlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, Styrene, Tetrachloroethylene, Toluene, Xylenes (total), Gross Alpha (minus Uranium & Radium 226), Radium 226 plus Radium 228, Sulfate, Chloroform, Bromodichloromethane, Chlorodibromomethane, Bromoform, Chlorobenzene, m-Dichlorobenzene, 1,1-Dichloropropene, 1,1-Dichloroethane, 1,1,2,2-Tetrachloroethane, 1,2-Dichloropropane, Chloromethane, Bromomethane, 1,2,3-Trichloropropane, 1,1,1,2-Tetrachloroethane, Chloroethane, 2,2-Dichloropropane, o-Chlorotoluene, p-Chlorotoluene, Bromobenzene, 1,3-Dichloropropene, Aldrin, Butachlor, Carbaryl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methoxyl, Metolachlor, Metribuzin, Propachlor.

Notice to Immuno-compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised people- such as those with cancer undergoing chemotherapy, people with HIV/AIDS or other immune system disorders, some older adults and infants may be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers.

EPA and the Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the:

Safe Drinking Water Hotline 1-800-426-4791

Test results on this page reflect analysis of Fremont water which is current through Dec. 31, 2014. The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

Coliform Bacteria

Contaminants Level Goal (MCLG)	Total Coliform Maximum Contaminant Level (MCL)	Highest No. of Positive Total Coliform Samples in any Month	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples in 2013	Violation?	Likely Source of Contamination
0	2.27% of monthly samples are positive	1.0	A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E.Coli positive	0	No	Naturally present in the environment

Lead and Copper - Date Sampled: 2013

Lead MCLG	Lead Action Level (AL)	Lead 90 th Percentile	# Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90 th Percentile	# Sites Over Copper AL	Likely Source of Contaminant
0 ppb	15 ppb	2.64 ppb	0	1.3 ppm	1.3 ppm	0.656 ppm	0	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Regulated Contaminants

Regulated Contaminants	Highest Level Detected	Range of Levels Detected	Unit of Measure	MCLG	MCL	Violation?	Likely Source of Contaminant
Disinfection By-Products							
TTHM (10/27/2014)	54.6	27.50 - 54.6	ppb	N/A	80	No	By-product of drinking water disinfection
Total Haloacetic Acids (HAA5) (10/27/2014)	24.8	8.05 - 24.8	ppb	N/A	60	No	By-product of drinking water disinfection
Regulated Contaminants							
Arsenic (02/22/2012)	8.39	4.45 - 8.39	ppb	0	10	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (05/05/2014)	162	62 - 162	ppb	N/A	2000	No	Discharge from drilling wastes; Discharge from metal refineries; Erosion from natural deposits
Chromium (05/05/2014)	6.5	4.87 - 6.5	ppb	100	100	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (01/29/2014)	0.852	0.4 - 0.852	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; fertilizer discharge
Nitrate Nitrite (02/19/2014)	3.19	0.99 - 3.19	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits
Radiological Contaminants							
Combined Radium (-226 & -228) (08/07/2012)	2.6	0.8 - 2.6	pCi/L	0	5	No	Erosion of natural deposits
Gross Alpha, Incl. Radon & U (01/15/2013)	6.4	3.7 - 6.4	pCi/L	0	15	No	Erosion of natural deposits
Radium-226 (04/17/2012)	0.3	0.1 - 0.3	pCi/L	0	5	No	Erosion of natural deposits
Radium-228 (08/07/2012)	2.4	0.7 - 2.4	pCi/L	0	5	No	Erosion of natural deposits
Synthetic Organic Contaminants (Including pesticides and herbicides)							
Atrazine (1/29/2014)	0.296	0.149 - 0.296	ppb	3	3	No	Runoff from herbicide used on row crops
Pentachlorophenol (10/11/2011)	0.67	0.349 - 0.67	ppb	1	1	No	Discharge from wood preserving factories

Our Water System has sampled for a series of unregulated contaminants during the 2013 and 2014 sampling years. Unregulated contaminants are those that don't yet have a drinking water standard set by the EPA. The purpose of monitoring for these contaminants is to help the EPA decide whether the contaminants should have a standard. Below are the detected monitoring results from our wells and our distribution system. If you wish to see the full set of results, contact Warren Sund at 402-727-2613.

Unregulated Water Quality Data	Highest Level	Range of Levels	Unit of	MCLG	Sec.	Violation?	Likely Source of Contaminant
Nickel (04/12/2011)	0.00252	0.00252	mg/L	N/A	0.1	N/A	Erosion of Natural Deposits; Leaching
Sulfate (4/12/2011)	68.1	68.1	mg/L	N/A	250	N/A	Erosion of Natural Deposits
Unregulated Water Quality Data/Well Samples							
Molybdenum (03/05/2014)	3.988	1.205 - 3.988	ug/L	N/A	N/A	N/A	Erosion of Natural Deposits
Chromium-6 (03/05/2014)	0.189	0.031 - 0.189	ug/L	N/A	N/A	N/A	Erosion of Natural Deposits / Making of steel and other alloys - chrome plating
Strontium (03/05/2014)	351.29	275.4 - 351.29	ug/L	N/A	N/A	N/A	Erosion of Natural Deposits
Vanadium (03/05/2014)	6.272	1.771 - 6.272	ug/L	N/A	N/A	N/A	Erosion of Natural Deposits
Chlorate (03/05/2014)	72.653	20.584 - 72.653	ug/L	N/A	N/A	N/A	Agricultural defoliant - disinfection byproduct
1,4 Dioxane (03/05/2014)	1.308	0.085 - 1.308	ug/L	N/A	N/A	N/A	Cyclic aliphatic ether; solvent-auto coolant-cosmetics
1,1 Dichloroethane (03/05/2014)	0.154	0.034 - 0.154	ug/L	N/A	N/A	N/A	Halogenated alkane - used in solvent
Unregulated Water Quality Data/Distribution System Samples							
Molybdenum (03/05/2014)	3.988	3.347 - 3.988	ug/L	N/A	N/A	N/A	Erosion of Natural Deposits
Chromium-6 (03/05/2014)	0.031	0.031	ug/L	N/A	N/A	N/A	Erosion of Natural Deposits / Making of steel and other alloys - chrome plating
Strontium (03/05/2014)	315.9	307.3 - 315.9	ug/L	N/A	N/A	N/A	Erosion of Natural Deposits
Vanadium (03/05/2014)	6.442	5.821 - 6.442	ug/L	N/A	N/A	N/A	Erosion of Natural Deposits
Chlorate (03/05/2014)	81.658	81.658	ug/L	N/A	N/A	N/A	Agricultural defoliant - disinfection byproduct

Infants, young children, and pregnant women are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated levels in your home's water, you may wish to have your water tested. Flushing your tap for 30 seconds to 2 minutes before using your tap water will clear the line of any lead that may have leached into the water while the line was idle. Additional information is available from the Safe Drinking Water Hotline (800-426-4791) or the Department of Health and Human Services/Division of Public Health/Office of Drinking Water (402-471-2541).

Water Quality Parameters from Blended Distribution Water

Chemical	Fremont's Avg.	Sec. MCL ¹	Chemical	Fremont's Avg.	Sec. MCL ¹	Chemical	Fremont's Avg.	Sec. MCL ¹	Chemical	Fremont's Avg.	Sec. MCL ¹
Calcium (7/13)	47.3 ppm	None	Magnesium (7/13)	10.3 mg/L	None	Phosphorus (7/11)	0.3 mg/L	None	Total Hardness (7/13)	9.4 gr./gal.	None
Chloride (7/13)	15.0 mg/L	250 mg/L	Manganese (7/13)	0.11 mg/L	0.05 mg/L	Silicon (7/11)	15.2 mg/L	None	Total Organic Carbon (7/11)	2.0 mg/L	None
Conductivity (7/13)	0.483 mmhos/cm	None	Nitrate as N (7/13)	0.6 mg/L	10.0 mg/L	Sodium (7/13)	30.0 mg/L	500 mg/L	Turbidity (7/11)	0.2 NTU	None
Dissolved Oxygen (7/11)	4.14 mg/L	None	Orthophosphate Phos. (2/12)	0.71 mg/L	None	Sulfate (7/13)	56.0 mg/L	250 mg/L	Turbidity (7/11)	0.2 NTU	None
Fluoride (7/11)	1.00 mg/L	2 mg/L	pH (7/13)	7.68	6.5 - 8.5	Total Alkalinity (7/11)	174.0 CaCO ₃	None			
Iron (7/13)	0.02 ppm	0.3 mg/L	Phosphate Total (2/12)	1.29 mg/L	None	Total Dissolved Solids (7/13)	314.0 mg/L	500 mg/L			
¹ Secondary Standards are not hazardous to health in these concentrations, but may cause odor or taste concerns.											
MCL (Maximum Contaminant Level), MCLG (Maximum Contaminant Level Goal), AL (Action Level), PPM (parts per million), PPB (parts per billion), Mg/L (milligrams per liter), Ug/L (micrograms per liter), pCi/L (picocuries per liter), Sec (Secondary)											

*Fluoride occurs naturally in Fremont wellwater. The Water Dept. adds 0.6 ppm Fluoride for a total of 1.0 ppm.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.