Source Water Assessment Availability

A wellhead protection area has been prepared by the Nebraska Department of Environmental Quality. For more information, please contact the **Ground Water Section, NDEQ at (402) 471-6988.**

Contaminants Found in Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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 or visiting the web site at www.epa.gov/safewater/**.

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, 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 are naturally-occurring.

Contaminants in Grand Island's tap water will usually be from naturally occurring dissolving of minerals and from agricultural and residential activities. Some contaminants typically associated with commercial and industrial activity have been detected. The EPA sets Maximum Contaminant Levels (MCL), to ensure public health, for both naturally occurring contaminants and those contaminants caused by pollution sources. **The Grand Island public water system meets all EPA regulations.**

Water Treatment

The City of Grand Island adds chlorine to the water to protect against microbial contamination. The City has also implemented a backflow/cross-connection prevention program to protect against contamination of the public water system.

By direction of the Nebraska Health and Human Services office (NHHS), the City has developed a control treatment program to reduce the corrosion of copper from household fixtures by adding ortho and poly phosphates.

Special Considerations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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/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**.

Drinking Water Regulations

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.

CITY OF GRAND ISLAND

City of Grand Island, Nebraska
Utilities Department
Annual Water Quality Report

Report includes data from
January 1 to December 31, 2008

This report is intended to provide you with important information about your drinking water and the efforts made to provide safe drinking water.

For more information regarding this report, contact:
Utilities Administration, City Hall
(308)385-5444, ext. 280

If you would like to observe the decision-making processes that affect drinking water quality, please attend the regularly scheduled meetings of the City Council. If you would like to participate in the process, please contact the **City Clerk, 308-385-5444, ext. 111**, to arrange to be placed on the agenda of the meeting of the City Council.

This report is also available on the World Wide Web at http://www.giud.com/, the website of the Grand Island Utilities Department.

Este formulario tiene informacion que es importante acerca del agua que usted bebe. Consiga que alguien se lo lea en espanol.

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) may 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, salts, metals, and, in some cases, radioactive material. Water can also pickup substances resulting from the presence of animals or from human activity.

The source of drinking water used by the City of Grand Island is groundwater from the sand and gravel aquifer that underlies the area.

This water is pumped from wells maintained by the City of Grand Island.

2008 Test Results

CONTAMINANT	VIOLATION YES/NO	NO. OF POSITIVE SAMPLES	RANGE OF LEVELS DETECTED	TOTAL NO. OF SAMPLES	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
MICROBIOLOGICAL							
Total Coliform Bacteria	No	0	Not applicable	768	0	Less than 5% of monthly samples	Backflow or back siphonage; naturally present in the environment.

CONTAMINANT	VIOLATION YES/NO	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	UNIT OF MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
INORGANICS							
Arsenic (7/11/05)	No	2.73	2.16-2.73	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production.
Barium	No	0.157	0.0836-0.157	ppm	2	2	Erosion of natural deposits, discharge of drilling wastes; discharge from metal refineries.
Chromium	No	9.11	4.88-9.11	ppb	100	100	
Copper (Households) (2006)	No	0.885 (90th percentile)	0.0143-1.14	ppm	1.3	1.3 (90th percentile)	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Copper (City wells) (2007)	No	0.007	0.001-0.007	ppm	1.3	1.3	Erosion of natural deposits; corrosion of household plumbing systems; leaching from wood preservatives.
Fluoride	No	0.62	0.32-0.62	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Lead (2006)	No	2.31 (90th percentile)	1.17-10.40	ppb	0	15 (90th percentile)	Corrosion of household plumbing systems; erosion of natural deposits.
Nickel (10/2/2006)	No	4.7	4.7	ppb	NA	100	Erosion of natural deposits; leaching.
Nitrate-Nitrite	No	8.8	0.25-8.8	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	No	5.17	5.01-5.17	ppb	50	50	Erosion of natural deposits; discharge from petroleum and metal refineries; discharge from mines.
RADIOCHEMICALS							
Alpha Emitters	No	25.5	11.5-25.5	pCi/L	0	15 Action Level	Erosion of natural deposits.
Uranium Mass	No	33.5	27.1-33.5	ug/L	0	30 (Quarterly avg.)	Erosion of natural deposits.
Combined Uranium	No	22.4	22.4	pCi/L	NA	Not applicable	Erosion of natural deposits.
SYNTHETIC ORGANIC CHEM.							
Atrazine	No	0.229	0.0857-0.229	ppb	3	3	Runoff from herbicide used on row crops.
DISINFECTION BY-PRODUCTS							
Total Trihalomethanes	No	30.07	12.7-30.07	ppb	NA	80	By-products of the chlorination process.
Total Haloacetic Acids	No	8.3	1.9-8.3	ppb	NA	60	By-products of the chlorination process.

UNREGULATED CONTAMINANTS	LEVEL DETECTED	RANGE OF LEVELS DETECTED	UNIT OF MEASUREMENT
Bromoform	0.71	Not applicable	ppb
Dibromochlormethane	0.63	Not applicable	ppb
Radon (1/5/2006)	202	Not applicable	pCi/L
Sulfate (10/2/2006)	230	Not applicable	ppm

Regulated and Unregulated Contaminanats Tested and Not Detected: vinyl chloride; 1,2-dichloroethane; chlorobenzene; ortho-dichlorobenzene; ethylbenzene; m,p-xylenes; styrene; bromomethane; chloroethane; tetrachloroethylene; cis-1,2-dichlorethene; ortho-chlorotoluene; para-chlorotoluene; dibromomethane; meta-dichlorobenzene; bromobenzene; bromochloromethane; n-butylbenzene; 1,2,3-trichlorobenzene; tert-butylbenzene; hexachlorobutadiene; isopropylbenzene; 1,1-dichloroethylene; para-isopropyltoluene; naphthalene; para-dichlorobenzene; 1,1-trichloroethylene; carbon tetrachloride; dichloromethane; 1,1,1-trichloroethane; 1,2-dichloropropane; trans-1,2-dichloroethylene; 2,2-dichloropropane; 1,1-dichloropropene; 1,2-dichloropropane; 1,1,2-trichloroethane; 1,1,1,2-tetrachloroethane; 1,1,2,2-tetrachloroethane; 1,2,3-trichloropropane; n-propylbenzene; sec-butylbenzene; dichlorodifluoromethane; fluorotrichloromethane; 1,2,4-trichlorobenzene; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; 1,3-dichoropropene; alachlor; aldrin; benzopyrene; bulachor; butylate; chlordane; chlorpyrifos; cyanazine; dieldrin; endrin; dyfonate; gamma-BHC; hepachlor; heptachlor epoxide; hexachlorobenzene; hexachlorocylclopentadiene; methoxychlor; metribuzin; propachlor; simazine; trifluralin; aldicarb; aldicarb sulfone; aldicarb sulfoxide; carbaryl; carbofuran; 3-hydroxycarbofuran; methomyl; oxamyl(vydate); ethylene dibromide; dibromochloropropane; PCBs; 2,4-D; 2,4,5-TP; pentachlorophenol; dalapon; dicambe; dinoseb; picloram; acifluorfen; glyphosate; diquat; paraquat; endothall; dioxin; antimony; cadmium; mercury; thallium; beryllium; cyanide; metolochlor; chloromethane; perchlorate; EPTC; 2,6-dinitrotoluene; 2,4-dinitrotoluene; molinate; terbacil; acetochlor; 4,4-DDE; MtBE; nitrobenzene; trichloroethene; toluene; 1,1-dichloroethane; benzene; total DCPA; combined radium.

MCL (Maximum Contaminant Level): 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.
MCLG (Maximum Contaminant Level Goal): 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.
AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
PPB: Parts per billion **PPM:** Parts per million **pCi/L:** Picocuries per liter (measurement of radioactivity) **<RL**: Less than reporting limit

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. If you are caring for an infant, ask advice from your health care provider.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data may be more than one year old.