

2009 Water Quality Report

For the period of Jan. 1 to Dec. 31, 2009

A word from your water supplier

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. We hope this report looks familiar to you. Every year we plan to mail a copy of this report to each customer.

The sources of drinking water both tap & bottled, include rivers, lakes, ponds, reservoirs, streams, 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 human activity.

Our water source is derived and purchased from the City of Blair, which draws surface water from the Missouri River. Chlorine is added to your water supply in precise amounts through an automatic feeder. Chlorine destroys bacteria and is a vital step in ensuring the health of our community.

All District employees responsible for operating and maintaining the system are trained and licensed by the State. The District welcomes your comments; the Board of Directors meets at 7 P.M. on the second Thursday of every month at 8901 S. 154th Street, Omaha, NE. For a copy of the agenda, call the District at (402) 444-6222 or visit the District's web site at www.papionrd.org

About this Report

This report is meant to show substances that were detected in your water during the past calendar year. The U.S. Congress revised the Safe Drinking Water Act in 1996, requiring public water systems to send annual water quality reports to all customers served, or by advertising in a local paper. This report is paid by water customers through current water rates. If you have any questions about your water quality, contact Dick Sklenar, Project Manager, (402) 315-1706.

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

What you should know: Contaminants found in your drinking 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. Some people may be more vulnerable to contaminants in drinking water than the general population.

All drinking water, including bottled water, may reasonably be expected to contain naturally occurring minerals and at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Contaminants that may be present in the source water include:

- A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- B) 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.
- C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- D) 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.
- E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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 your service lines and home plumbing. 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 ½ to 2 minutes before using the 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>

Notice to immuno-compromised persons

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, those 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. The EPA and Center 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 at 1-800-426-4791

How to read the report

The table on the back page shows substances detected in your water from January 1 to December 31, 2009.

Maximum Contaminant Level (MCL) Highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. **Maximum Contaminant Level Goal (MCLG)** 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. **N/A** means not applicable. **NTU** means nephelometric turbidity units. **AL** (action level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. **PPM** (*parts per million*) **PPB** (*parts per billion*) **PPT** (*parts per trillion*) **PCi/L** (picocuries per liter - a measure of radiation)
< means less than. > means more than.

Lead & Copper*(2009)										
Lead MCLG	Lead Action Level (AL)	Lead 90 th Percentile	Sites Over Lead AL	Violation	Copper MCLG	Copper Action Level (AL)	Copper 90 th Percentile	Sites Over Copper AL	Violation	Likely Source of Contamination
0 PPB	15 PPB	1.2 PPB	0	NO	1.3 PPM	1.3 PPM	.686 PPM	0	NO	Erosion of natural deposits; corrosion of household plumbing systems

Inorganic Contaminants									
Contaminant	Collection Date	Violation	Highest Level Detected	Range of Levels Detected	Unit of measurement	MCLG	MCL	Likely source of Contamination	
Fluoride	2009	NO	2.01	.36 - 2.01	PPM	4	4	Water additive which promotes strong teeth; discharge from fertilizer; erosion of natural deposits	
Nitrate-Nitrite	2009	NO	1.8	1.8 – 1.8	PPM	10	10	Runoff from fertilizer; leaching from sewage; erosion of natural deposits	
Barium	7/2/07	NO	.0235	.0234 -.0235	PPM	2	2	Discharge of drilling wastes, metal refineries. Erosion of natural deposits.	
Chromium	7/2/07	NO	1.36	1.29 - 1.36	PPB	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.	

Synthetic Organic Contaminants (including pesticides & herbicides)									
Atrazine	2009	NO	.11	0 - .11	PPB	3	3	Runoff from herbicides used on row crops	

Disinfectants & Disinfectant By-Products*									
Total Haloacetic Acids (HAA5) *	1/09, 5/09, 8/09, 12/09	NO	20	16.90 – 48.40	PPB	No goal for the total	60	By-product of drinking water chlorination	
Total Trihalomethane (TTHMs) *	1/09, 5/09, 8/09, 12/09	Yes	53	51.82 – 107.42	PPB	No goal for the total	80	By-product of drinking water chlorination	

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Microbiological Contaminants*							
MCLG	Total Coliform MCL	Highest # of Total Coliform Samples in 1 Month	Violation	Fecal Coliform or E. Coli MCL	Total # of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	0	NO	Fecal or E. Coli MCL; a routine sample & a repeat sample are total coliform positive, and 1 is also fecal coliform or E. Coli positive	0	NO	Naturally present in the environment

Cryptosporidium

Our water supplier, the City of Blair, has tested for cryptosporidium (Crypto) in the raw water that is treated and used to provide treated water for the City's water system. The testing was conducted from May to December in 2009, and the average of the results of these tests was 0.066 oocysts/L. Testing will continue through April 2010, after which time the City will evaluate the combined results and submit a plan to address Crypto identified in the source water to the Nebraska Department of Health and the EPA. The testing was performed by the University of Iowa's Health Laboratory in Iowa City, Iowa.

Crypto, a protozoan parasite and 1-celled animal, is too small to be seen without a microscope. It is common in surface waters (rivers & lakes), especially when these waters contain sewage or animal waste. Crypto must be ingested to cause infection. Symptoms include diarrhea, nausea & abdominal cramps. Most healthy individuals can overcome the infection within a few weeks.

We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Crypto may be spread through other means other than drinking water.

* = Collected by Washington County RW #2. All others by City of Blair.

Information about Violations/Exemptions of the Nebraska Safe Drinking Water Act for 2009:

Rule or Contaminant	Violation Type	Violation Duration	Violation Explanation
Total Trihalomethanes (TTHM)	MCL, Average	4/1/09 – 6/30/09 7/1/09 – 9/30/09	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
Health Effects:	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.		

The WASHINGTON CO RW #2 has taken the following actions to return to compliance with the Nebraska Safe Drinking Water Act:

Subsequent testing of the water supply has indicated that the average total trihalomethanes concentration has fallen below the MCL established by the Environmental Protection Agency. All other water quality standards continue to be met.

Note: 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 our data may be more than one year old.