



City of Beloit

Mitchell County, Kansas

Water System News

This issue includes the 2012 Consumer Confidence Report



The Plant

The City of Beloit Water Treatment Plant, in its current location, has been providing the community with safe, clean and affordable drinking water since 1950. The plant utilizes a lime – soda ash softening technique to treat up to 1,500,000 gallons of surface water per day. The plant is in operation 365 days a year, with the hours of operation dictated by customer demand. Its staff consists of the Director of Water/Wastewater Operations and 3 operators. Three of which hold a Class IV operator certification, the highest certification allowed by the State of Kansas, while 1 holds a Class I operator certification.

The District Engineer from the KDHE Office in Salina inspects the plant at scheduled times.

A Message From EPA

***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 lesson the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).*

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hot Line (1-800-426-4791).

Governing Body

The City Governing Body is made up of a Mayor, **Tom Naasz**, and 8 City Council members; **Matt Otte** (Council President), **Lloyd Littrell**, **Rick Brown**, **Bob Richard**, **Patricia Struble**, **Bob Petterson**, **Frank Delka** and **Kent Miller**.

This newsletter provides information about your water system, and the water quality that the City provides to its patrons. Your water system provides safe drinking water and is tested regularly by the Kansas Department of Health and Environment.

The City invites you to review this entire newsletter and know that **your water is safe**. **To learn more about your drinking water, please attend any of the regularly scheduled city council meetings which are held: 1st & 3rd Tuesdays of each month, at the Municipal Building, 119 North Hersey, at 7:00pm.** For more information please contact, Beloit City Administrator at (785) 738-3551.

We hope as you read this newsletter, you will consider that having a good supply of water for drinking and other uses around your home and property is essential. Safe drinking water is essential for public health, safety and welfare. Your Mayor, Council, Water Plant and System Staff take the challenge of ensuring that the capacity of your system meets today's needs with an eye to the future and the potential to serve an increased population base.

Table of Contents

<u>Subject</u>	<u>Page #</u>
About The Plant	1
EPA Message & the Governing Body	1
Beloit Water Facts...	2
Meet the Staff...	2
Definitions...	2
Water Quality Information...	3
Monitoring Water Quality...	4

Beloit Water Facts...

- The City of Beloit gets 100% of its water from the Solomon River.
- Beloit's water system had a total of 1865 metered accounts in 2012.
- The system treated 222,456,250 gallons of water at the plant for the reporting period.
- The system sold 20,512,100 gallons of treated water to Mitchell County Rural Water District #1, for the reporting period.

Dedicated staff ensures quality water and service...

The water department is divided into two separate staffs; Plant, whose goal is to provide the community with the safest, most aesthetically pleasing water possible, and System, who is charged with all aspects of water system maintenance. They are supported by an administrative staff, which handles all billing and collection.

Plant Staff

Kendal Francis, Director of Water/Wastewater Operations, Class IV; James Bentz, Foreman/Operator Class IV; Loran Chism, Operator Class IV; and Jerry Leonard, Class I.

System Staff

Bob Holway, System Foreman; Bart Snyder, System Operator; Warren Jermark, System Operator.

Administrative Staff

Glenn Rodden, City Administrator; Amanda Lomax, City Clerk/Finance Director; Jessica Rosebaugh, Deputy City Clerk; Rachelle Anderson, Utility Billing Clerk; and Ilean Garman, Administrative Assistant.

Your Water Comes From

Source Name	Source Water Type
INTAKE 999	Surface Water

Contaminants that may be present in source water before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, 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 storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water runoff, and septic systems.

Definitions...

We provide the following definitions so that you can better understand terms used in the following report:

Parts per million (ppm): one part per million corresponds to one minute in two years or a single penny in \$10,000.00 dollars

Parts per billion (ppb): one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.00 dollars

Action Level (AL): the concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow

Treatment Technique (TT): a treatment technique is a required process intended to reduce the level of a contaminant in drinking water

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 Contaminant Level (MCL): the maximum allowed is 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.

Secondary Maximum Contaminant Level (SMCL): Recommended level for a contaminant that is not regulated and has no MCL.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water and an indicator of filtration performance. Turbidity in excess of 5 NTU is just noticeable to the average person.

Picocuries per liter (pCi/L): a measure of the radioactivity in water.

Million fibers per liter (MFL): a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

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.

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

2012 Testing Results for Beloit Water System, Beloit, Kansas

The sources of drinking water (both tap 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.

Microbiological	Result	MCL	MCLG	Typical Source
Coliform (TCR)	In the month of November, 1 sample(s) returned as positive	MCL: Systems that Collect Less Than 40 Samples per Month – No more than 1 positive monthly sample	0	Naturally present in the environment

Regulated Contaminants	Range	Highest Value	Unit	MCL	MCLG	Collection Date	Typical Source
Arsenic	1.3	1.3	ppb	10.00	0	4/10/12	Erosion of natural deposits
Atrazine	.54-.95	.95	ppb	3	3	5/14/12	Runoff from herbicide used on row crops
Barium	0.016	0.016	ppm	2.0	2.0	04/10/12	Discharge from metal refineries
Chromium	2.6	2.6	ppb	100	100	04/10/12	Discharge from steel and pulp mills
Nitrate (N)	0.29-1.7	1.7	ppm	10	10	04/10/12	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	4.3	4.3	ppb	50	50	04/11/12	Erosion of natural deposits

Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
Copper, Free	2009-2011	0.064	0.0037-0.1	ppm	1.3	0	Corrosion of household plumbing
Lead	2009-2001	2	1.4 – 2.5	ppb	15	0	Corrosion of household plumbing

Disinfection Byproducts	Monitoring Period	Your Highest RAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	2012	33	21-30	ppb	60	0	By-product of drinking water disinfection
TTHM	2012	66	40-91	ppb	80	0	By-product of drinking water disinfection

Total Organic Carbon Lowest Month for Removal	Number of Samples	Lowest Monthly Removal Ratio	Actual Removal Ratio	Required Removal Ratio
12/1/12-12/31/12	12	1.18	1.51	1.0

Secondary Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
Alkalinity	11/13/2102	276	57.6-276	MG/L	300
Aluminum	4/10/2012	0.12	0.12	MG/L	0.05
Calcium	4/10/2012	30	30	MG/L	200
Carbon, Total	4/10/2012	8.5	2.5-8.5	Ppm	
Chloride	4/10/2012	73	73	MG/L	250
Conductivity @ 25 C UMHOS/CM	4/10/2012	910	910	UMHO/CM	1500
Corrosivity	4/10/2012	0.63	0.63	LANG	0
Hardness, Total (as CaCO ₃)	4/10/2012	87	87	MG/L	400
Magnesium	4/10/2012	2.8	2.8	MG/L	150
Manganese	4/10/2012	0.0015	0.0015	MG/L	.05
Nickel	4/10/2012	0.0012	0.0012	MG/L	0.1
pH	4/10/2012	9	9	pH	8.5
Phosphorus	4/10/2012	0.44	0.44	MG/L	5
Potassium	4/10/2012	15	15	MG/L	100
Silica	4/10/2012	12	12	MG/L	50
Sodium	4/10/2012	140	140	MG/L	100
Sulfate	4/10/2012	240	240	MG/L	250
TDS	4/10/2012	560	560	MG/L	500

Please Note: Because of sampling schedules, results may be older than 1 year.

During the 2012 calendar year, we had no violation(s) of drinking water regulations.

Additional Required Health Effects Language:

- 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.
- Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
- Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
- **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. Your water system is responsible for providing high quality drinking water, but 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>.**

A word about monitoring water quality...

Your water is treated to remove several contaminants and a disinfectant is added to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) required states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of source water. For results of the assessment, please contact us or view on-line at:
<http://www.kdheks.gov/nps/swap/SWreports.html>.

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

Our water system tested a minimum of 4 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

Thank you for allowing the Beloit water system to continue providing your family with clean, quality water. To maintain a safe and dependable water supply, the water system sometimes needs to make improvements that will benefit all of the City's customers. These improvements are sometimes reflected as rate structure adjustments.

The Beloit water system works around the clock to provide top quality water to every tap. The system and its customers, working together, can help protect our water resources, our way of life and our children's future.

Questions? Please Contact:

Kendal Francis
Director of Water/Wastewater Operations
(785) 738-2275