

CONSUMER CONFIDENCE REPORT

CENTRAL IOWA WATER ASSOCIATION

JUNE · 2010

WATER

Definitions

Action Level (AL) The concentration of a contaminant that, if exceeded, triggers a treatment or other requirement that a water system must follow.

Inorganic Chemicals Chemical substances of mineral origin, such as lead and copper.

Maximum Contaminant Level (MCL) The 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) The level of a contaminant in drinking water below which there is no known or expected risk to health.

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.

Microbiological Contaminants Very small organisms, such as bacteria, algae, virus, plankton, and fungi.

NA Not applicable.

ND Not detected at testing limit.

NTU Nephelometric Turbidity Units.

Organic Contaminants Naturally occurring or synthetic substances containing mainly carbon, hydrogen, nitrogen, and oxygen. This includes most pesticides and industrial chemicals.

pCi/l Picocuries per liter.

ppb Parts of contaminant per billion parts of water. One part per billion (ppb) is equivalent to a single penny in ten million dollars. "PPB" may also be referred to as µg/l or micrograms per liter.

ppm Parts of contaminant per million parts of water. One part per million (ppm) is equivalent to a single penny in ten thousand dollars. "PPM" may also be referred to as mg/l or milligrams per liter.

Radionuclides Contaminants giving off ionizing radiation.

TOC Total organic carbon in untreated water.

Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking water.

RAA Running Annual Average

Chlorine Disinfectant

The most common drinking water treatment is disinfection. Disinfection is considered to be the primary mechanism to kill bacteria and other germs to prevent the spread of waterborne diseases. Chlorine is the most widely used disinfectant. Disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts. EPA sets standards for controlling the levels of disinfectants and disinfection byproducts in drinking water. The chart on the last page reflects these standards and the utility's ability to meet those standards.

Unregulated Contaminants

EPA requires systems of our size to take samples in an assessment monitoring phase for Unregulated Contaminant Monitoring Regulations (UCMR). There were no detectable levels in our drinking water. For more information about unregulated contaminants see our contact information on page one.

TTHMs (Total Trihalomethanes)

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 system and may have an increased risk of getting cancer.

Lead

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. Central Iowa Water Association 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>.

Cryptosporidium

Cryptosporidium is a microscopic organism found in rivers and streams that can cause diarrhea, fever, and gastrointestinal symptoms if ingested. It finds its way into the watershed through animal wastes. Cryptosporidium is effectively eliminated by treatment processes that include sedimentation, filtration, and disinfection. EPA is developing regulations to address the risk from cryptosporidium in drinking water.

Central Iowa Water Association is pleased to provide you the 2009 Consumer Confidence Report. The purpose of this report is to provide our members with accurate facts concerning the quality of our water supply compared to the Environmental Protection Agency (EPA) regulations. The chart included in this report lists the EPA water quality regulations and the level of substances detected in our water during 2009. Central Iowa Water Association (CIWA) makes it a priority to supply a safe, clean, high quality supply of water to its customers. This priority was established with the founders of our Association, volunteers who had a vision of safe, softened water delivered to farms and rural residences in central Iowa through a dependable piped distribution system. This vision continues as our Board of Directors considers further upgrades and expansions to our rural water system.

In 2009, CIWA established its first water treatment plant serving customers in northeast Iowa. In addition to this new source, CIWA purchases water through bulk connections with Newton Waterworks, Marshalltown Water Works, and Pella Water Works. These sources have been chosen for the quality of water they are able to provide CIWA and in turn we provide you. Each source of water has been analyzed by the Iowa Department of Natural Resources and the source water assessment is provided using the following mandatory language as provided by the Iowa Department of Natural Resources.

CENTRAL IOWA WATER ASSOCIATION WATER TREATMENT PLANT Central Iowa Water Association began operation of a state-of-the-art reverse osmosis water treatment plant during 2009. Source water for this facility is provided by two wells located in the Cedar Valley aquifer. Geological studies, conducted prior to constructing these wells, indicated the location just west of Waverly would provide an ample supply of water. A pilot study of the source water concluded reverse osmosis as the treatment process best suited for this water. A reverse osmosis treatment plant was constructed and began providing water to members in July 2009. Additional information regarding the source water vulnerability is being prepared by the Geological Survey Bureau (GSB); however, was not prepared in time for this report.

During a recent water taste test competition, water from this facility was awarded the "Best Tasting Water" award for the state of Iowa. This water will serve customers throughout northeast Iowa and some customers in CIWA's existing service area.

NEWTON SOURCE The Newton Waterworks' supply is pumped from 21 wells located in the alluvial sand and gravel aquifer of the Skunk River Valley and one Jordan well. The alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer fairly quickly. The alluvial wells will be most susceptible to activities such as permitted air release sites.

The City of Newton also obtains a portion of its water from the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The Cambrian-Ordovician well will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of Newton's source water was completed by the Iowa Department of Natural Resources, and is available from Newton Water Works at (641) 792-2003.

MARSHALLTOWN SOURCE The Marshalltown Water Works' supply is pumped from nine deep wells located on the north side of the Iowa River drawing from the Mississippian aquifer. The Mississippian aquifer was determined to be susceptible to contamination because the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer fairly quickly. The Mississippian wells were susceptible to activities such as leaking underground storage tanks and hazardous waste generators.

The City of Marshalltown also receives water from the Pleistocene aquifer. The Pleistocene aquifer was determined to be susceptible to contamination because the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer fairly quickly. The Pleistocene wells will be susceptible to activities such as leaking underground storage tanks and hazardous waste generators. A detailed evaluation of the Marshalltown source water was completed by the Iowa Department of Natural Resources, and is available from the Marshalltown Water Works at (641) 753-7913.

PELLA SOURCE The Pella Water Works' supply is pumped from the Cambrian-Jordan Sandstone aquifer and from alluvial wells along the Des Moines River. The alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer fairly quickly. The alluvial wells will be most susceptible to activities such as pipelines and quarries.

The City of Pella also obtains a portion of its water from the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The Cambrian-Ordovician well will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of the city of Pella's source water was completed by the Iowa Department of Natural Resources, and is available from the city of Pella at (641) 628-2464.

Central Iowa Water Association's mission, "To provide quality, reliable water and other appropriate services to improve the quality of life of our members and enhance rural economic development," is the central focus of all we do. Provision of service to an increasing number of rural residents, small communities and businesses is essential in maintaining the continued vitality of Iowa's rural population. In the center pages, are the results of the monitoring done on the drinking water we provided you for the period of January 1, 2009 through December 31, 2009. The purpose of this data is to inform customers of what exactly is in the tap water you are consuming and to heighten awareness of the need to preserve and protect our drinking water resources.

Check out CIWA on the Web at: www.ciawa.com!

Board Meeting Information

Decisions regarding Central Iowa Water Association's rural water system are made by the Association's Board of Directors during their monthly meetings. Customers who desire to speak with the Board of Directors regarding the water utility should contact the office at:

Central Iowa Water Association

3801 Iowa Speedway Drive
Newton, IA 50208
Phone: (641) 792-7011 • Web site: www.ciawa.com

For Additional Information

For more information regarding this Consumer Confidence Report or water quality, please contact:

Dan McGinnis

Water and Treatment Supply Manager
Central Iowa Water Association
Phone: (641) 792-7011
Fax: (641) 792-6982 • e-mail: dmcginnis@ciawa.com

2009 DRINKING WATER QUALITY REPORT

CENTRAL IOWA WATER ASSOCIATION

SUBSTANCE	VIOLATION YES/NO	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST DETECTED LEVEL	UTILITY RANGE	EPA MCLG (EPA GOAL)	SOURCES OF CONTAMINANT
ORGANIC CONTAMINANTS						
Total Haloacetic Acids (ppb) (2009) Stage 1 (Combined)	No	60	9.1	ND-12.5	NA	Discharge from rubber and plastic factories; leaching from landfills
Total Haloacetic Acids (ppb) (2009) Stage 1 (Pella)	No	60	12.9	10-16	NA	Discharge from rubber and plastic factories; leaching from landfills
Total Haloacetic Acids (ppb) (2009) Stage 2 (Combined)	No	60	NA	5-10	NA	Discharge from rubber and plastic factories; leaching from landfills
Total Trihalomethane (ppb) (2009) Stage 1 (Combined)	No	80	44.6	ND-62.4	NA	Byproduct of drinking water chlorination.
Total Trihalomethane (ppb) (2009) Stage 1 (Pella)	No	80	60.9	39-95	NA	Byproduct of drinking water chlorination.
Total Trihalomethane (ppb) (2009) Stage 2 (Combined)	No	80	NA	2-37	NA	Byproduct of drinking water chlorination.
INORGANIC CONTAMINANTS						
Chlorine (ppm)	No	4 MRDL	1.65	1.27-1.65	4 MRLDG	Water additive to control microbes.

SUBSTANCE	VIOLATION YES/NO	# SAMPLES TESTED	MAX. 90% DETECTION (AL)	# SAMPLES OVER AL	RANGE	EPA MCLG (EPA GOAL)	SOURCES OF CONTAMINANT
LEAD & COPPER - Regulated at Customer Tap							
Lead (2007) (ppb)	No	32	163	1	ND-163	0	Corrosion of home plumbing; Erosion of natural deposits
Copper (2007) (ppm)	No	32	0.018	0	ND-0.144	0	Corrosion of home plumbing; Erosion of natural deposits

CENTRAL IOWA WATER ASSOCIATION WATER TREATMENT PLANT

SUBSTANCE	VIOLATION YES/NO	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST DETECTED LEVEL	UTILITY RANGE	EPA MCLG (EPA GOAL)	SOURCES OF CONTAMINANT
ORGANIC CONTAMINANTS						
Total Trihalomethane (TTHM) (ppb) (2009)	No	80	1.1	ND-2.1	NA	Byproduct of drinking water chlorination.

CENTRAL IOWA WATER ASSOCIATION WELL FIELD

SUBSTANCE	VIOLATION YES/NO	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST DETECTED LEVEL	UTILITY RANGE	EPA MCLG (EPA GOAL)	SOURCES OF CONTAMINANT
RADIOACTIVE CONTAMINANTS						
Combined Radium (pCi/L) and Radionuclides (RAD) (2007)	No	5	0.8	NA	4 MRDLG	Erosion of natural deposits.
Gross Alpha (pCi/L)	No	15	4.3	NA	0	Erosion of natural deposits.
INORGANIC CONTAMINANTS						
Barium (2009)	No	2	0.1	NA	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate as N (ppm) (2009)	No	10	3.9	3.4-3.9	10	Runoff from fertilizer use; leaching from septic tanks; sewage.
ORGANIC CONTAMINANTS						
Atrazine (ppm) (2007)	No	3	0.1	NA	3	Runoff from herbicide used on row crops.

MARSHALLTOWN

SUBSTANCE	VIOLATION YES/NO	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST DETECTED LEVEL	UTILITY RANGE	EPA MCLG (EPA GOAL)	SOURCES OF CONTAMINANT
INORGANIC CONTAMINANTS						
Chlorine (ppm)	No	4 MRDL	2.2	1-2.5	4 MRLDG	Water additive to control microbes.
Fluoride (ppm) (2009)	No	4	1.2	0.9-1.2	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Sodium (ppm) (2007)	No	NA	20.3	NA	NA	Erosion of natural deposits;

NEWTON

SUBSTANCE	VIOLATION YES/NO	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST DETECTED LEVEL	UTILITY RANGE	EPA MCLG (EPA GOAL)	SOURCES OF CONTAMINANT
INORGANIC CONTAMINANTS						
Chlorine	No	4 MRDL	1.29	0.1-1.29	4 MRDLG	Water additive to control microbes.
Fluoride (2009)	No	4	1.33	1.08-1.33	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate as N (ppm) (2009)	No	10	4.8	4.8	10	Runoff from fertilizer use; leaching from septic tanks; sewage.
Sodium (ppm) (2008)	No	NA	54.9	NA	NA	Erosion of natural deposits.

PELLA

SUBSTANCE	VIOLATION YES/NO	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST DETECTED LEVEL	UTILITY RANGE	EPA MCLG (EPA GOAL)	SOURCES OF CONTAMINANT
MICROBIOLOGICAL CONTAMINANTS						
Turbidity (NTU) (2009)	No	TT	0.13	.02-.13	NA	Soil runoff.
Chlorine	No	4 MRDL	1	0.7-1.4	4 MRDLG	Water additive used to control microbes.
Fluoride (ppm) (2009)	No	4	1.3	0.8-1.3	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate as N (ppm) (2009)	No	10	5	3.4-5	10	Runoff from fertilizer use; leaching from septic tanks; sewage, erosion of natural deposits.
Sodium (ppm) (2009)	No	NA	15.3	NA	NA	Erosion of natural deposits.
TOTAL ORGANIC CARBON (TOC)						
% Removal (2009)	No	TT	44.5%	32.03-44.55%	NA	Naturally present in the environment

Note: The EPA requires monitoring of over 80 drinking water contaminants. Those listed above are the only contaminants detected in your drinking water. For a complete list contact Central Iowa Water Association.

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 Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline.

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.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Any bottled water that is labeled "drinking water" has to meet EPA's drinking water regulations. 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline.

Safe Drinking Water Hotline:
1-800-426-4791
www.epa.gov/OGWDW

AWWA Safe Drinking Water
Web Site:
www.drinktap.org