



2007 annual water quality report



Quad Cities District

PWS ID: IA8222001



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

Our Customer Charter

We Are...

- dedicated to service excellence
 - focused on personalized solutions
 - committed to our customers' health and welfare
- therefore...**

We Will...

- partner with our customers
- treat them with dignity and respect
- enhance their quality of life
- earn their loyalty
- exceed their expectations

Dear Iowa American Water Customer,

You are our top priority. And delivering reliable, high-quality water to you all day, every day is our mission. We deliver – at about a penny per gallon.

Each year, Iowa American Water publishes reports on the quality of your drinking water. Our expertise allows us to deliver drinking water that meets or exceeds state and federal drinking water requirements. In addition to ensuring we are following current standards, we work closely with federal agencies to anticipate future regulations and issues.

Your community is our community. We work with local and state governments to make sure your water service needs are being met. From upgrading existing systems to developing new ones, from pitching in at local events to sponsoring school programs, we are your neighbors and take your water quality personally.

We encourage you to review this report either in this printed form or on our website at www.iawater.com. If you ever have any questions, please reach out to our professional customer service representatives at 1-866-641-2108. After all, you are our first priority.

Thank you for being an Iowa American Water customer.

Sincerely,

Brock Earnhardt
President

What is a Water Quality Report?

To comply with state and U.S. Environmental Protection Agency (U.S. EPA) regulations, Iowa American Water issues a report annually describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and the need to protect your drinking water sources. This report provides an overview of last year's (2007) water quality. It includes details about where your water comes from and what it contains.

Where Does My Water Come From?

Water for the Iowa Quad Cities is taken from the Mississippi River and treated in Iowa American Water's state-of-the-art East River Station treatment facility. Our high-tech water treatment plant uses some of the best equipment and technology available to the water industry. The treatment process utilizes conventional coagulation and settling processes, followed by granular activated carbon filtration. The granular activated carbon filtration process is cited by the U.S. Environmental Protection Agency as one of the most effective treatment technologies for the removal of organic chemicals, such as farm pesticides and industrial wastes. It is also highly effective in eliminating many taste and odor problems.

Protecting Your Water Source

The Source Water Assessment Program (SWAP) is a result of the 1996 amendments to the Federal Safe Drinking Water Act (SDWA). Those amendments require all states to establish a program to assess the vulnerability of public water systems to potential contamination. The Iowa Department of Natural Resources (DNR) has prepared Source Water Assessment Reports and Summaries for all public water systems.

In 2003, the Iowa DNR completed an assessment of the Mississippi River watershed in this area. Rivers, streams, and reservoirs are highly susceptible to contamination because of surface run-off. Our water source is considered most vulnerable to contaminants from agricultural and urban run-off. These contaminants include nutrients such as nitrate and phosphorus, and other man-made and natural contaminants. A summary report is available upon request from Iowa American Water by contacting David Kull at (563) 322-8814 or david.kull@amwater.com.

Investing In Our Communities

Delivering quality water service requires continued infrastructure investment. In the last few years, Iowa American Water has invested nearly \$24 million dollars in water system improvements in the Iowa Quad Cities to continue to preserve water quality, maintain reliability and continue to meet the needs of customers. Some of the larger projects include:

- \$10.3 million for normal, recurring installation and replacement of water pipelines, meters and hydrants.

- \$4.7 million to construct a new, one-million-gallon elevated storage tank and 4.1 miles of pipeline replacements and reinforcements to enhance service and fire protection flows in a large area of western Davenport.
- \$1.6 million to replace and relocate pipelines in Kimberly Road to enhance customer service and ready the area for upcoming road expansion.
- \$1 million to rehabilitate a clearwell storage tank and replace several critical pumps at our East River Station treatment facility to further enhance the safety and reliability of water production.
- \$600,000 to modify the Middle Road Booster Pumping Station to assure ample water pressures and further increase fire protection flows in a large area of northern Bettendorf and LeClaire.

Iowa American Water is proud of its professional and dedicated workforce. Our commitment to customer service and operational integrity remains (and always will be) paramount.

Educational Information

Cryptosporidium

Cryptosporidium is a protozoan found in the surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of the protozoan in the Mississippi River water, however our testing has also shown this organism to be consistently absent in our drinking water. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks.

However, people with severely weakened immune systems have a risk of developing life-threatening illness. We encourage such people to consult their doctors regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it is spread through means other than drinking water.

For additional information regarding cryptosporidiosis and how it may impact those with weakened immune systems, please contact our Customer Service Center at 866-641-2108 or speak with your personal health care provider.

Partnership for Safe Drinking Water Program

Iowa American Water's Quad Cities District was the first water utility in Iowa to be awarded the Partnership for Safe Water Program's Director's Award for



achievements in high quality drinking water and continual improvements. We remain the only Iowa water utility to be recognized with this prestigious award and have maintained this honor for seven consecutive years. The Partnership for Safe Water is a voluntary initiative developed by the U.S. EPA and other water organizations for water suppliers wanting to provide their communities with drinking water that is far better than required by federal standards. Iowa American Water joined the partnership in 1995, and is one of only three utilities in Iowa to participate. Currently the Partnership includes 235 water utilities across the nation committed to the enhancement of drinking water quality and operational excellence in water treatment. Iowa American Water prides itself in being an industry leader that proactively joins initiatives and water research efforts to promote high quality water, reliability and exceptional service to customers.

How to Contact Us

Our customer service line is available to serve you 24 hours a day, every day at (866) 641-2108 or visit our website at www.iawater.com. For more information about this report or for any questions related to your drinking water, please call David Kull, Water Quality Supervisor, at (563) 322-8814.

What's in My Water?

The source of drinking water (both tap water and bottled water) includes 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.

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.

Turbidity measurement can be an effective tool to determine removal efficiency of particles, some of which may include microbial contaminants. Turbidity is a measurement of the cloudiness in the water caused by suspended particles. We continuously monitor turbidity because it is a good indicator of water quality and the effectiveness of our filtration system.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

Trihalomethanes and Haloacetic Acids, also known as Disinfection By-Products (DBPs), are formed by the reaction of the chlorine disinfectant with naturally occurring organics found in the source water. Some people who drink water containing DBPs in excess of the MCL over many years experience problems with their livers, kidneys, or central nervous systems, and may have increased risk of getting cancer.

To ensure that tap water is of high quality, US EPA prescribes regulations limiting the amount of certain substances in water provided by public water systems. Iowa American Water's advanced water treatment processes are designed to reduce any such substances to levels well below any health concerns.

Important Health Information

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 at (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or by calling our 24-hour customer service line at (866) 641-2108 for more information.

How to Read This Table

Iowa American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the data tables. For help with interpreting these tables, see the Table Definitions and footnotes.

Definitions of Terms Used in This Report

- **Action Level:** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- **Amount Detected:** Unless otherwise noted in the footnotes, an average of all sample results for the year, or results from a single sample if only one was collected. With multiple entry points to the distribution system, the data from the entry point with the highest value is reported. Amount detected for distribution samples represents an average of all samples collected.
- **Compliance Achieved:** Indicates that the levels found were all within the allowable levels as determined by the EPA.

- **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.
- **MRDL (Maximum Residual Disinfectant Level):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **MRDLG (Maximum Residual Disinfectant Level Goal):** The level of 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 contamination.
- **NA:** Not applicable
- **ND:** Not detected
- **NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of the water.
- **pH:** A measurement of acidity or alkalinity, 7.0 being neutral.
- **ppm (parts per million):** One part substance per million parts water, or milligrams per liter.
- **ppb (parts per billion):** One part substance per billion parts water, or micrograms per liter.
- **SS:** Single sample
- **Range of Detections:** The range of individual sample results, from lowest to highest, that were collected during the sample period.
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
- **Typical Source:** Indicates where the substance usually originates.

Water Quality Results

Iowa American Water conducts thousands of water quality analyses annually to ensure that your water meets all water quality standards. The following tables show what substances were detected in our drinking water in 2007. Many more contaminants are tested for each year, but fall below laboratory detection limits. Although all of the substances listed below are under the maximum contaminant level (MCL) set by US EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water. For help interpreting this table, see the "How to Read This Table" section.

Regulated Substances (Measured on the Water Leaving the Treatment Facility)

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range of Detections	Compliance Achieved	Typical Source
Atrazine (ppb)	2007	3	3	0.2	SS	YES	Runoff from herbicide used on row crops
Barium (ppm)	2007	2	2	0.05	SS	YES	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm) ¹	2007	4	4	1.00	0.75 – 1.20	YES	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate as Nitrogen (ppm) ²	2007	10	10	3.37	1.50 – 5.88	YES	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite as Nitrogen (ppm)	2007	1	1	0.01	ND – 0.01	YES	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Organic Carbon (ppm) ³	2007	TT = 25% Removed	NA	40% Removed	32% – 48% Removed	YES	Naturally present in the environment

Turbidity – A Measure of the Clarity of the Water (at the Treatment Facility)

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range of Detections	Compliance Achieved	Typical Source
Turbidity (NTU) (percent less than 0.3 NTU)	2007	NA	TT <= 0.30 NTU in 95% of the samples each month	100% less than 0.3 NTU	100% – 100%	YES	Soil runoff
Turbidity (NTU)	2007	NA	TT = 1 NTU max	0.14	0.03 – 0.14	YES	Soil runoff

Other Compounds (Measured in the Distribution System)

Substance (units)	Year Sampled	MRDLG or MCLG	MRDL or MCL	Amount Detected	Range of Detections	Compliance Achieved	Typical Source
Chloramines (ppm) ⁴	2007	4	4	2.83	0.43 – 3.38	YES	Water additive to control microbes
TTHMs [Total trihalomethanes] (ppb)	2007	NA	80	56	38 – 92	YES	By-product of drinking water chlorination
HAA5 [Haloacetic acids] (ppb)	2007	NA	60	29	17 – 42	YES	By-product of drinking water chlorination

Bacterial Results (Measured in the Distribution System)

Substance (units)	Year Sampled	MCLG	MCL	Highest Monthly Amount Detected	Range of Detections	Compliance Achieved	Typical Source
Total Coliforms (% Positive/month)	2007	0	5%	1.25%	ND – 1.25%	YES	Naturally present in the environment

Tap Water Samples: Lead and Copper Results⁵

Substance (units)	Year Sampled	Action Level	MCLG	Amount Detected in 90th Percentile Sample	Number of Samples Collected	Compliance Achieved	Number of Samples Above Action Level	Typical Source
Copper (ppm)	2006	1.3	1.3	0.101	53	YES	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2006	15	0	3	53	YES	0	Corrosion of household plumbing systems; Erosion of natural deposits

Other Substances of Interest (Measured on the Water Leaving the Treatment Facility)

Substance (units)	Year Sampled	Amount Detected	Range of Detections	Typical Source
Alkalinity (ppm as CaCO ₃)	2007	154	121 – 183	Erosion of natural deposits
Hardness (ppm as CaCO ₃)	2007	245	188 – 305	Erosion of natural deposits
Hardness (gpg)	2007	12.5	11.0 – 17.8	Erosion of natural deposits
pH	2007	7.4	7.3 – 7.5	–
Sodium (ppm) ⁶	2007	16	13 – 22	Erosion of natural deposits
Sulfate (ppm)	2007	34	SS	Erosion of natural deposits
Zinc (ppb)	2007	110	SS	Erosion of natural deposits; Water additive for corrosion protection

¹ Fluoride is added to the water to help promote strong teeth.

² Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than 6 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 advice from your health care provider.

³ Total organic carbon (TOC) has no health effects. However, TOC contributes to the formation of disinfection by-products. Reduction of TOC can help to minimize disinfection by-product formation.

⁴ Chloramine is a disinfecting agent added to control microbes that otherwise could cause waterborne diseases or other water quality concerns. Most water systems are required by law to add disinfecting agents, such as chloramine. The values reported reflect multiple locations in the service area.

⁵ Compliance with the Lead and Copper Rule (LCR) is determined by the levels of lead and copper found in samples taken from customer's taps. LCR requirements are met if the 90th percentile of all samples taken does not exceed the action level of 15 ppb for lead or 1.3 ppm for copper. Infants and young children 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 lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

⁶ There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.