

CONSUMER CONFIDENCE REPORT

WATER

City of Dubuque

CONSUMER CONFIDENCE REPORT



Bob Green
Water Department Manager

Welcome to the City of Dubuque Water Department's Consumer Confidence Report. This special report has been designed to inform you, the citizen, about the quality of water we have in this city. Our water, contrary to popular belief, does not come from the Mississippi River, but is pumped from nine area wells located near the Eagle Point Water Plant. Processes such as aeration, softening, and filtration give our water the clean, refreshing taste that we all enjoy. It is a distinction that we are proud to have called our own for the past 100 years. The dedicated staff at the Eagle Point Water Plant and water distribution operations at the new Municipal Services Center works diligently to guarantee that the water from these wells arrives in your home clean and free of undesirable tastes, odors, and debris.

If you would like more information about the water quality in the city of Dubuque, or would like to schedule a complimentary tour of our water plant facilities, please do not hesitate to contact me at 589-4291.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bob Green'.

Bob Green
Water Department Manager



CONSUMER CONF

BACKGROUND

This report, required by the 1996 Safe Drinking Water Act Amendments, provides background information, definitions, and monitoring results which summarize the water quality.

These reports are an annual requirement. Each year, the report will describe the water quality from the previous calendar year.

The City of Dubuque Water Department has always obtained its drinking water from wells. It now has five shallow and four deep wells in service. Both yield a very high quality water but the shallow wells are used as the primary source since they are more energy efficient.

The shallow alluvial wells are located on the new A.Y. McDonald Park peninsula of the Mississippi River. A hydrological study found that a significant portion of their recharge water actually comes from the underlying bedrock aquifers despite their close proximity to the river. Well depths vary from 127 feet to 200 feet and all are cased to 100 feet. Individual well capacities range from 1.55 to 3.30 MGD and the theoretical combined capacity of all five wells at 14.15 MGD.

The four deep wells are located within a 1500-foot radius of the treatment plant. These wells are all cased to 500 feet and individual well depths vary from 1,560 feet to 1,800 feet. The Cambrian aquifer system is their primary source of water. The theoretical combined capacity of the deep wells is 9.6 MGD and individual well production range from 0.9 to 3.25 MGD.

The City of Dubuque obtains a portion of its water from the Cambrian-Ordovician and Cambrian aquifers. These aquifers were determined to be not susceptible to contamination because the characteristics of the aquifers and overlying materials prevent easy access of contaminants to the aquifers. The Cambrian-Ordovician and Cambrian wells will not be susceptible to most contaminant sources except through pathways to the aquifers such as abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available from the Eagle Point Water Plant at (563) 589-4291.

ANALYTICAL REPORT

< = less than; ug/L = ppb; mg/L = ppm

Dubuque Water Treatment Plant
Report Date: 9-30-05
Dubuque, IA 52001
PWS ID 3126052

Definitions:

- MCLG: The Maximum Contaminate Level Goal is the level of a contaminant in drinking water below which there is no known or expected risk to health. The maximum contaminant level goal allows for a margin of safety.
- MCL: The Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using best available treatment technology.
- AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

Abbreviations:

- mg/L (ppm): milligrams per liter or parts million
- ug/L (ppb): micrograms per liter or parts per billion
- N/A: not applicable
- NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.
- ND: not detectable at testing limits
- MGD: million gallons per day
- TT: treatment technique

CONFIDENCE REPORT

CHEMICAL ANALYSIS

Detectable Microbial Contaminant	MCLG	MCL	Level	Range of Detection	Violations?	Typical Sources of Contamination
Barium (ppm)	2.00	2.00	.01		No	Discharge of drilling wastes and metal refineries; erosion of natural deposits
Copper (ppm)	1.30	AL=1.30	.018	No samples above action level	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	0	AL>15.00	13.2	8 sites above the AL out of 65 sites sampled	No	Corrosion of household plumbing systems
Fluoride (ppm)	4.00	4.00	1.02		No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Sodium (ppm)			9.93		No	Erosion of natural deposits
Sulfate (ppm)	400.00	400.00	23.80		No	Erosion of natural deposits
Turbidity (NTU)	N/A	TT	0.07	0.01-0.20	No	Typical groundwater
Total Trihalomethane (TTHM) (ppb)	0	80.00	46.8	33.00-78.00	No	By-product of drinking water chlorination
Gros Alpha Activity (pCi/L)	N/A	15.00	2.60	1.00	No	Erosion of natural deposits

VIOLATION REPORT

Compliance Period		Violation Type	Contaminant	Violation
Begin Date	End Date			
7/1/2005	7/31/2005	Monitoring (DBP), Major	Chlorine	200600850

INFORMATION

GENERAL INFORMATION

How can I get involved? City Council meets the first and third Monday of each month at 6:30 p.m. in the Public Library Auditorium. Please feel free to participate in these meetings or you can call Bob Green or Bob Ervolino at the Eagle Point Water Plant at (563) 589-4291 or Jon Brown, City of Dubuque Laboratory, at (563) 589-4176.

Are we in compliance? The City of Dubuque Water Department has met all rules and regulations except for a chlorine reporting violation (see Violations Report).

Is our water system meeting other rules that govern our operations? 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. The State and EPA require us to test our water on a regular basis to ensure its safety.

Do I need to take special precautions? 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 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).

Why are there contaminants in my water? 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water 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.

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, agriculture 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 agriculture, 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 stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

ABOUT THE DATA

1. Most of the data presented in this table is from testing done between January 1 to September 30, 2005. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from a year to year.
2. Lead: In Dubuque, lead in drinking water is only found in homes with lead service lines and/or lead plumbing fixtures. Flushing your service line for one to two minutes will minimize exposure to lead in your drinking water. For more information, call us at (563)589-4334 or you can call the EPA hotline at 800-425-4791.
3. Turbidity: Turbidity does not present any risk to your health. We monitor turbidity, which is a measure of the cloudiness of water, because it is a good indicator of the quality of water and the effectiveness of disinfectants.