

Des Moines Water Works completed a **SOURCE WATER ASSESSMENT (SWA)** in 2001. To obtain a copy of the SWA, go to www.dmw.com, or call (515) 283-8700 to request a printed copy.

DES MOINES WATER WORKS CUSTOMER SERVICE
 E-mail: deonard@ci.pleasant-hill.ia.us
 Phone: (515) 309-9460 • Fax: (515) 262-9570
Dave Leonard
 Pleasant Hill City Hall
 515 Maple Drive • Pleasant Hill, Iowa 50317

PLEASANT HILL

2nd & 4th Tuesday of each month at 6:30 p.m.
 E-mail: deanord@ci.norwalk.ia.us
 Phone: (515) 202-2540 • Fax: (515) 981-0933
 705 North Avenue • Norwalk, Iowa 50211
Dean Nord, Community Services Director

NORWALK

Utility Advisory Board meets quarterly
 Norwalk City Hall • Norwalk, Iowa 50211
 E-mail: bjbaughman@lowatelecom.net
 Phone: (641) 449-3737 • Fax: (641) 449-3310
 506 West Street, P.O. Box 302 • New Virginia, IA 50210
Brent Baughman

NEW VIRGINIA WATER WORKS

1st Saturday of each month at 8:00 a.m.
 Fire Station meeting room • New Virginia, IA 50210
 E-mail: leden@ci.johnston.ia.us
 Phone: (515) 278-0822 • Fax: (515) 727-8092
 P.O. Box 410 • Johnston, Iowa 50131-0410
Lori Eden

JOHNSTON

1st & 3rd Monday of each month at 7:00 p.m.
 Johnston City Hall
 6221 Merle Hay Road • Johnston, Iowa 50131
 E-mail: earthamcityhall@mchs.ia.com
 Phone: (515) 758-2281 • Fax: (515) 758-2710
Gary Coffman

EARLHAM

2nd Monday of each month at 7:00 p.m.
 Earlham City Hall
 140 South Chestnut Street • Earlham, Iowa 50072
 E-mail: customerservice@dmww.com
 Phone: (515) 283-8700 • Fax: (515) 283-8727
Des Moines Water Works Customer Service

DES MOINES

4th Tuesday each month at 3:30 p.m.
 Des Moines Water Works
 2201 George Flagg Parkway • Des Moines, Iowa 50321

Phone: (515) 283-8700 • Fax: (515) 283-8727
Des Moines Water Works Customer Service
 E-mail: cityclerk@cumming-iowa.com
 Phone: (515) 981-9214 • Fax: (515) 981-4981
 P.O. Box 100 • Cumming, Iowa 50061
City Clerk
 City Hall • Cumming, Iowa 50061

CUMMING

2nd & 4th Monday each month
 E-mail: bwellier@cihyofclive.com
 Phone: (515) 223-6231 • Fax: (515) 223-6013
 2123 NW 11th Street • Clive, Iowa 50325
Barl Wellier, Public Works Director

CLIVE

1st, 3rd, & last Thursday of each month at 7:00 p.m.
 Clive City Hall
 1900 NW 11th Street • Clive, Iowa 50325
 E-mail: pcollison@cihyofbondurant.com
 Phone: (515) 971-6856 • Fax: (515) 967-5732
Patrick F. Collison

BONDURANT

1st & 3rd Monday of each month at 6:00 p.m.
 Bondurant City Hall
 200 2nd Street NE • Bondurant, Iowa 50035
 Phone: (515) 266-8668 • Fax: (515) 262-1342
John Tomlinson

BERWICK WATER ASSOCIATION

Annual meeting and as needed
 5825 NE Berwick Drive • Berwick, Iowa 50032
 www.ankenyiowa.gov
 Phone: (515) 963-3564 • Fax: (515) 963-3535
Customer Service

ANKENY

1st & 3rd Monday of each month at 5:30 p.m.
 410 West 1st Street • Ankeny, Iowa 50023
 Phone: (515) 283-8700 • Fax: (515) 283-8727
Des Moines Water Works Customer Service

ALTEMAN

2nd Monday of the month at 7:00 p.m.
 Allaman City Council
 14000 NE 6th Street • Allaman, Iowa 50007
 (515) 685-3666
Mayor Bill Bodensteiner

Public Meeting & Utility Contact Information

DRINKING WATER AND HEALTH INFORMATION FROM THE 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. The EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the national Safe Drinking Water Hotline (800) 426-4791.

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. Des Moines Water Works uses a variety of strategies to keep the treated tap water below 10 ppm. These strategies include source water blending, and if necessary, removal of nitrate using an expensive treatment process known as ion exchange. Des Moines Water Works' treated water has not exceeded the 10 ppm standard since nitrate removal was implemented in 1992. If you are caring for an infant, you should ask for advice from your health care provider.

Many customers wish to know if bottled water is safer than regular tap water. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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. Research repeatedly shows bottled water to be no safer than conventional tap water provided by public water systems in the U.S.

More information about contaminants and potential health effects can be obtained by contacting the EPA's Safe Drinking Water Hotline at (800) 426-4791 or by visiting www.epa.gov/OGWDW.

CRYPTOSPORIDIUM is a microscopic organism found in rivers and streams that can cause diarrhea, fever and gastrointestinal distress if ingested. It finds its way into the watershed through animal and human wastes. *Cryptosporidium* is rarely found in the rivers from which we draw water and is effectively eliminated by a treatment process that includes sedimentation, filtration, and disinfection. *Cryptosporidium* has **NEVER** been found in your drinking water.

DEFINITIONS OF TERMS

Action Level is the concentration of a contaminant that, if exceeded, triggers a treatment or other requirement that a water system must follow.

IDSE (Initial Distribution System Evaluation) a required one-time study to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs).

Level Found is the highest amount found in the water or the average of all samples analyzed, depending on the regulation. If multiple samples were tested in 2008, the lowest and highest detected values are listed under Range of Detections.

MCL is the maximum contaminant level, the highest level of a substance allowed in drinking water

MCLG is the MCL Goal, the level of a substance where there is no known or expected health risk. MCLGs allow for a margin of safety. MCLs are set as close to MCLGs as feasible using the best available treatment processes.

mg/L is milligrams per liter, or parts per million.

NTU is nephelometric turbidity units.

pCi/L is picocuries per liter, a measure of radioactivity.

ug/L is micrograms per liter, or parts per billion.

N/A is not applicable.

ND is not detected.

MRDL is 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.

MRDLG is the level of 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.

TT is treatment technology. Certain treatment processes are required to reduce the level of turbidity in the drinking water. Turbidity must not ever exceed 1 NTU, and must be less than 0.3 NTU 95% of the time.



2009 CONSUMER CONFIDENCE REPORT

A publication on quality water and quality service presented by **DES MOINES WATER WORKS**

Supplying central Iowa with clean, safe drinking water is Des Moines Water Works' mission. In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. This annual Consumer Confidence Report is your guide to the quality and safety of the tap water provided by Des Moines Water Works.

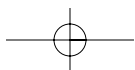
Employees of the utility have an obligation to protect its assets for its owners – our customers – and the source water is perhaps the most important asset. We also believe our customers deserve to have a clean source of drinking water, regardless of how adept we are at making it drinkable.

Des Moines Water Works encourages customers to stay informed on drinking water and watershed protection issues. Please contact us at (515) 283-8700 or visit www.dmw.com if you have any questions about your drinking water.

For more than 15 years, water supplied by Des Moines Water Works meets and surpasses all state and federal drinking water standards. Please read this annual Consumer Confidence Report – because it's important to understand the facts about the **QUALITY WATER** delivered to you. Last year, **Forbes.com** rated Des Moines water the best in the United States, and the test results show why – no bacteria or lead was detected in the treated drinking water, and what few other substances were detected, all were below maximum limits set by EPA.

DES MOINES WATER WORKS

2201 George Flagg Parkway | Des Moines, IA 50321 | (515) 283-8700 | www.dmw.com



WATER QUALITY REPORT 2008

Water Treatment Plant Monitoring

Before water can be delivered to your home, it must first be analyzed by certified laboratories at Des Moines Water Works' Fleur Drive Plant and at the University of Iowa Hygienic Laboratory in Iowa City. Results for 2008 in this report include those for samples taken as water leaves Des Moines Water Works' two treatment plants, and from samples obtained from the various water distribution systems supplied with water by Des Moines Water Works. The L.D. McMullen Water Treatment Facility serves southwest Des Moines; parts of the Xenia and Warren Rural Water Systems; Waukee; and parts of West Des Moines, Clive, and Urbandale west of I-35. All other areas receive water from the Fleur Drive Plant. Some test results shown in the table are from samples analyzed prior to 2008. This is because annual monitoring is not required for all contaminants, and the data represents the last time a substance was detected. The source water is tested for the following parameters:

- **Microorganisms** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic Contaminants** such as salts and metals, which can occur naturally or come from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and Herbicides** which may come from agriculture, urban stormwater runoff, and residential uses.
- **Organic chemicals** including synthetic and volatile organic chemicals, which are industrial and petroleum process byproducts and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive Contaminants** which can occur naturally or result from oil and gas production and mining activities.

2008 Lab Test RESULTS	YEAR TESTED	MCL	MCLG	Fleur Drive Treatment Plant		L.D. McMullen Water Treatment Facility		SOURCE OF CONTAMINANT
				LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	
WATER CLARITY								
Turbidity (NTU)	2008	TT	-	0.18	0.02-0.18	0.26	0-0.26	Soil runoff
INORGANIC SUBSTANCES								
Nitrate as Nitrogen (mg/L)	2008	10	10	8.1	0.5-8.1	9.5	0.7-9.5	Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits
Nitrite as Nitrogen (mg/L)	2008	1	1	0.08	ND-0.08	0.29	ND-0.29	Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits
Fluoride (mg/L)	2008	4	4	1.49	0.18-1.49	1.32	0.72-1.32	Additive for strong teeth; erosion of natural deposits; fertilizer
Sodium (mg/L)	2008	-	-	36	11-36	15	6-15	Erosion of natural deposits
Sulfate (mg/L)	2008	-	-	130	28-130	60	21-60	Erosion of natural deposits
ORGANIC SUBSTANCES								
Atrazine (ug/L)	2007	3	3	-	-	0.1	-	Agriculture runoff

THE CITY OF ANKENY operates a well known as the Aquifer Storage and Recovery (ASR) Well. Treated drinking water is injected into the well during cold-weather months, and recovered for use during warm-weather months. Testing data unique to this water can be seen below.

SUBSTANCE	YEAR TESTED	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST DETECTED LEVEL	RANGE	EPA MCLG (EPA GOAL)	SOURCE OF CONTAMINANT
Alpha Emitters (pCi/L)	2007	15	8.6	NA	15	Erosion of natural deposits
Combined Radium (pCi/L)	2007	5	1.6	NA	0	Erosion of natural deposits
Arsenic (ug/L)	2007	10	2	NA	NA	Erosion of natural deposits
Fluoride (mg/L)	2008	-	1.42	NA	4	Water additive which promotes strong teeth; erosion of natural deposits
Sodium (mg/L)	2008	NA	26	NA	NA	Erosion of natural deposits; added to water during treatment process
Nitrate (as N) (mg/L)	2008	10	5.65	2.88-5.65	10	Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits

Total Organic Carbon RESULTS

Treatment Plant	Year Tested	Annual Removal Ratio	Minimum Removal Requirement
Fleur Drive Plant	2008	2.17	1
McMullen Facility	2008	1.94	1

Distribution System Monitoring

Once the water leaves the water treatment facilities, it is regularly monitored throughout the numerous distribution systems served by Des Moines Water Works for disinfectant, disinfectant byproducts, bacteria, lead and copper. The table below shows the results of this monitoring.

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. Des Moines Water Works 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 are available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

SYSTEM	Total Trihalomethanes (TTHM) Byproducts of chlorination. Units: ug/L MCL=80 ug/L MCLG=no limit set.		Haloacetic Acids (HAA5) Byproducts of chlorination. Units: ug/L MCL=60 ug/L MCLG=no limit set.		IDSE Range of Detections Byproducts of chlorination. Units: ug/L		Lead From plumbing corrosion. Units: ug/L 90% of all samples must be below Action Level of 15 ug/L.	Copper From plumbing corrosion. Units: ug/L 90% of all samples must be below Action Level of 1.3 mg/L.	Coliform Bacteria Naturally present in the environment. Units: positive samples. No more than 5% of monthly samples can be positive.	Chlorine Disinfectant Added to prevent bacterial growth. Units: mg/L. Maximum limit for annual average: 4.0 mg/L. (see MRDL and MRDLG in definitions)		
	Level Found	Range of Detections	Level Found	Range of Detections	TTHM	HAA5	90% of Samples Below this Level	90% of Samples Below this Level	Monthly Samples	Positive Samples	Running Annual Average	Range
Des Moines ¹	37	20-70	8	ND-14	15-57	ND-15	ND	ND	150	0	0.80	0.08-4
Ankeny	45	27-70	10	6-15	18-95	ND-25	ND	ND	40	0	0.69	0.3-1.17
Ankeny ASR	53	53-64	5	5-11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Berwick	48	29-65	10	7-12	47-72	6-18	ND	0.03	1	0	0.70	0.32-1.23
Bondurant	43	35-52	14	12-17	33-49	11-14	ND	ND	3	0	2.40	1.9-3.9
Clive	48	20-71	12	ND-22	18-65	ND-23	ND	ND	15	1 ³	0.80	ND-1.85
Cumming	69	69	12	12	N/A	N/A	4	0.02	1	0	0.50	0.13-0.75
East Dallas Water	33	33	11	11	N/A	N/A	ND	0.16	1	0	1.70	1.27-2.03
Earlham	33	16-55	13	6-21	23-27	8-9	7	ND	2	0	1.80	1.1-2.4
Johnston	52	30-79	13	9-18	29-83	9-21	ND	ND	15	0	0.50	0.07-1.38
New Virginia	76	62-90	21	11-30	N/A	N/A	ND	0.02	1	0	0.90	0.45-1.45
Norwalk	66	41-82	14	7-28	24-67	6-14	ND	ND	9	1	0.85	0.1-1.16
Polk Co. Rural Water #1	46	28-65	9	7-12	28-54	7-11	ND	ND	2	0	0.60	0.43-1.08
SE Polk Rural Water ²	54	39-68	12	7-20	39-63	7-16	ND	ND	9	0	1.40	0.23-2.8
Urbandale	49	29-84	10	8-12	24-66	ND-19	ND	ND	40	2 ⁴	0.80	0.37-1.68
Warren Water District	46	24-75	12	ND-19	14-94	ND-22	ND	ND	16	0	1.60	0.33-4.6
Waukee	56	47-71	12	10-13	34-75	ND-15	7	ND	9	0	0.80	0.2-1.44
Xenia Rural Water District	48	33-72	18	11-41	15-50	9-24	11	0.046	14	0	2.40	0.42-2.9

¹Includes Windsor Heights & Pleasant Hill

²Includes water supplied to Cities of Alleman & Runnells

³Resample showed no bacteria present and water safe for consumption.

⁴Two samples collected during March tested positive for total and fecal coliforms. Repeat samples indicated coliform bacteria were not present, and the water was determined to be safe for consumption.