

- ANKENY**
Ankeny City Council
 1st and 3rd Monday of each month at 5:00 p.m.
 410 West 1st Street · Ankeny, Iowa 50021
Customer Service
 210 SW Ankeny Boulevard · Ankeny, Iowa 50021
 Phone: (515) 283-8700 · Fax: (515) 283-8727
 E-mail: jmkenna@ci.ankeny.ia.us
- BERWICK**
Berwick City Council
 1st Monday of each month
 6855 NE Berwick Drive · Ankeny, Iowa 50021
Fred Tomlinson
 Phone: (515) 262-4378 · Fax: (515) 262-1342
- BONDURANT**
Bondurant City Council
 1st and 3rd Monday of each month at 6:00 p.m. Bondurant City Hall · 200 2nd NE Bondurant, Iowa 50035
Patrick F. Collison
 Phone: (515) 971-6856 · Fax: (515) 967-5732
- CLIVE**
Clive City Council
 1st, 3rd, & 5th* Thursdays of each month (*5 week months)
 Clive City Hall · 1900 NW 114th St. · Clive, Iowa 50325
Bart Weller, Director of Public Works
 9289 Swanson Blvd. · Clive, Iowa 50325
 Phone: (515) 223-6231 · Fax: (515) 223-6013
 E-mail: bweller@ci.clive.ia.us
- CUMMING**
Cumming City Council
 2nd and 4th Monday each month
 City Hall · Cumming, Iowa 50061
Kathie Hungerford
 P.O. Box 100 · Cumming, Iowa 50061
 Phone: (515) 981-9214 · Fax: (515) 981-4981
- DES MOINES**
Board of Water Works Trustees
 4th Tuesday each month at 3:30 p.m.
 Des Moines Water Works
 2201 George Flagg Parkway · Des Moines, Iowa 50321
Customer Service
 Phone: (515) 283-8700 · Fax: (515) 283-8727
 E-mail: information@dmww.com

- EARLHAM**
Earlham City Council
 2nd Monday of each month at 7:00 p.m.
 Earlham City Hall · Earlham, Iowa 50072
Bruce Koboldt, Public Works Superintendent
 P.O. Box 518 · Earlham, Iowa 50072
 Phone: (515) 758-2157 or (515) 758-2281
 Fax: (515) 758-2710
- JOHNSTON**
Johnston City Council
 1st and 3rd Monday of each month at 7:00 p.m.
 City Hall · 6221 Merle Hay Road · Johnston, Iowa 50131
Lori Eden
 P.O. Box 410 · Johnston, Iowa 50131-0410
 Phone: (515) 278-0822 · Fax: (515) 727-8092
 E-mail: leden@ci.johnston.ia.us
- NEW VIRGINIA**
New Virginia City Council
 1st Saturday of each month at 8:00 a.m.
 Fire Station meeting room · New Virginia, IA 50210
Brent Baughman
 305 Main Street, P.O. Box 302 · New Virginia, IA 50210
 Phone: (641) 449-3379 · Fax: (641) 449-3310
- NORWALK**
Norwalk City Council
 1st and 3rd Thursday of each month at 7:00 p.m.
 705 North Avenue · Norwalk, Iowa 50211
Dean Yordi, Community Services Director
 Phone: (515) 981-0228 · Fax: (515) 981-0933
 E-mail: deanyordi@ci.norwalk.ia.us
- PLEASANT HILL**
Pleasant Hill City Council
 2nd and 4th Tuesday of each month at 6:30 p.m.
 Pleasant Hill City Hall
 5151 Maple Drive · Pleasant Hill, Iowa 50317
Gary Patterson, Public Works Director
 Phone: (515) 262-9368 · Fax: (515) 262-9570
- POLK COUNTY RURAL WATER DISTRICT #1**
 Annual Meeting in January each year · Call for date
 660 NW 66th Avenue, Suite 2 · Des Moines, Iowa 50313
Clate VanderPool
 Phone: (515) 289-2643

- SOUTHEAST POLK RURAL WATER DISTRICT**
Board of Directors
 3rd Wednesday of each month at 6:00 p.m.
 Southeast Polk Rural Water Office
 6540 NE 12th Avenue · Altoona, Iowa 50009
Shirley J. Bos, General Manager
 Phone: (515) 262-8581 · Fax: (515) 262-4536
 E-mail: seph20@prairieinet.net
- ST. CHARLES**
St. Charles City Council
 1st Monday of each month at 7:00 p.m.
 St. Charles City Hall
 113 S. Lumber St. · St. Charles, Iowa 50240
Randy Gray, Water Superintendent
 Phone: (641) 396-2545 · Fax: (641) 396-2545
 E-mail: stccity@netins.net
- URBANDALE**
Water Board of Trustees
 Meets monthly · Call 278-3940 for information
 Urbandale Water Department
 3720 86th Street · Urbandale, Iowa 50322
Customer Service
 Phone: (515) 278-3940 · Fax: (515) 278-3944
 E-mail: waterdept@urbandale.org
- WARREN WATER DISTRICT**
Board of Directors
 3rd Monday each month at 7:00 p.m.
 Warren Water District Office
 1204 East 2nd Avenue · Indianola, Iowa 50125
Peggy Crabbs, Systems Manager
 Phone: (515) 962-1200 · Fax: (515) 962-9328
 E-mail: warrenwater@warrenwaterdistrict.com
- WAUKEE**
Waukee City Council
 1st and 3rd Monday each month at 7:00 p.m.
 Waukee City Hall · 230 Highway 6 · Waukee, Iowa 50263
John R. Gibson, Director of Public Works
 Phone: (515) 987-4363 · Fax: (515) 987-3979
 E-mail: jgibson@waukee.org
- WINDSOR HEIGHTS**
Windsor Heights City Council
 1st and 3rd Monday each month at 5:00 p.m.
 Windsor Heights City Hall
 1133 66th Street · Windsor Heights, Iowa 50311
Customer Service
 Phone: (515) 283-8700 · Fax: (515) 283-8727
- XENIA RURAL WATER DISTRICT**
Board of Directors
 Thursday of 3rd full week of each month
 2398 141st Street · Bouton, Iowa 50039
Dave Modlin
 Phone: (515) 676-2117 · Fax: (515) 676-2208
 E-mail: dave@xenewater.org

Des Moines Water Works completed a Source Water Assessment in 2001. To obtain a copy of the SWA, visit our website at www.dmww.com, or call (515) 283-8700 to request a printed copy.



A Message from the Environmental Protection Agency

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. 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.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (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.

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.

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical and mental development. Adults who drink this water over many years could develop kidney problems or high blood pressure.

FDA 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.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline.

SAFE DRINKING WATER HOTLINE:
1-800-426-4791
www.epa.gov/OGWDW

Definitions

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

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.

TT - Treatment Technique. The EPA requires DMWW to employ certain treatment processes to reduce turbidity and eliminate microorganisms. Turbidity must not ever exceed 1 NTU, and must be less than 0.3 NTU 95% of the time.

NTU - Nephelometric Turbidity Units.

Contaminants that may be present in the source water include:

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.



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Consumer Confidence Report

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



This annual Consumer Confidence Report is your guide to the quality and safety of the tap water provided by Des Moines Water Works. Supplying Central Iowa with clean, safe drinking water is DMWW's most important function. The treatment process begins by drawing water from the Raccoon River, the Des Moines River, and the infiltration gallery at either of our two treatment plants located on Fleur Drive and at Maffitt Reservoir. The water is lime softened, filtered, fluoridated, and disinfected before delivery to you, our customer. If necessary, DMWW removes any nitrate to keep our water well below the Environmental Protection Agency's (EPA) maximum contaminant level of 10 milligrams per liter.

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 can dissolve naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances from the presence of animals or humans. For this reason, the regular testing of the water is required. Listed on the inside of this publication are test results for DMWW's water supply.

We encourage our customers to stay informed on drinking water and watershed protection issues. Please contact us at (515) 283-8700 or visit our website at www.dmww.com if you have any questions about your drinking water.



WATER QUALITY REPORT 2003

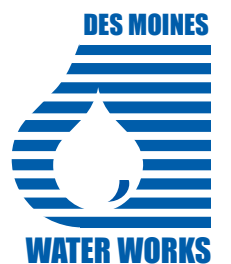
Drinking Water Limits

Regulated substances have Maximum Contaminant Levels (MCLs) set by the Environmental Protection Agency (EPA). This is the highest level allowed in drinking water. Some contaminants also have MCL goals (MCLGs). The MCLG is the amount where there is no known or expected health risk. MCLs allow for a margin of safety and are set as close to MCLGs as feasible using the best available water treatment processes.

Detected Amounts

DMWW produces your drinking water at two different treatment plants, Fleur Drive and Maffitt Reservoir. The level found is sometimes the highest amount of the substance found or may be the average of several samples taken over a set time period, depending on the regulation for the contaminant. If multiple samples were tested during 2003, the lowest and highest detected concentrations are shown.

2003 Lab Test Results					Fleur Drive Treatment Plant		Maffitt Reservoir Treatment Plant		Typical Source of Substance
Year Tested	Units	MCL	MCLG	Level Found	Range of Detections	Level Found	Range of Detections		
Organic Substances									
Total Trihalomethanes (TTHMs)	2003	µg/L	80	-	40.5	36.3-47.8	33.4	25.4-42.5	Byproduct of drinking water disinfection
- Ankeny	2003	µg/L	80	-	49.0	35.0-80.0	-	-	Byproduct of drinking water disinfection
- Clive	2003	µg/L	80	-	28.0	28.0-60.0	28.0	28.0-60.0	Byproduct of drinking water disinfection
- Urbandale	2003	µg/L	80	-	30.0	30.0-74.0	30.0	30.0-74.0	Byproduct of drinking water disinfection
Total Haloacetic Acids (HAA5)	2003	µg/L	60	-	7.9	6.0-10.2	9	7.2-13.2	Byproduct of drinking water disinfection
- Ankeny	2003	µg/L	60	-	11.0	8.0-14.0	-	-	Byproduct of drinking water disinfection
- Clive	2003	µg/L	60	-	8.0	8.0-11.0	9	8.0-11.0	Byproduct of drinking water disinfection
- Urbandale	2003	µg/L	60	-	4.0	4.0-15.0	9	4.0-15.0	Byproduct of drinking water disinfection
Metolachlor	2001	µg/L	-	-	-	-	1.6	-	Runoff from herbicide use on row crops
Atrazine	2000	µg/L	3	3	-	-	0.46	-	Runoff from herbicide use on row crops
Microbiological Substances									
Turbidity	2003	NTU	TT	-	<0.3	0.08-0.22	<0.3	0.04-0.13	Soil runoff
Total Coliform Bacteria	2003	Positive samples	5% of monthly samples	Present in no monthly samples	<1% of monthly samples	-	<1% of monthly samples	-	Naturally present in the environment
Inorganic Substances									
Nitrate as Nitrogen	2003	mg/L	10	10	9.66	0.19-9.66	9.67	0.13-9.67	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion
Fluoride	2003	mg/L	4	4	1.28	0.1-1.28	1.27	0.7-1.27	Additive for strong teeth; erosion of natural deposits; fertilizer
Sodium	2003	mg/L	-	-	48	9.1-48	37.7	7.9-37.7	Erosion of natural deposits
Sulfate	2003	mg/L	-	-	95	32-95	73	28-73	Erosion of natural deposits
Radiological Substances									
Combined Radium	2003	pCi/L	5	0	0.7	-	-	-	Erosion of natural deposits
Beta Emitters	2002	pCi/L	8	0	2.9	-	-	-	Decay of natural and man-made deposits
Alpha Emitters	2001	pCi/L	15	0	0.5	-	-	-	Erosion of natural deposits
Strontium 90	2001	pCi/L	-	-	0.5	-	-	-	Erosion of natural deposits
Disinfectant									
Chlorine	2003	mg/L	MRDL 4	MRDLG 4	0.68	0.62-0.74	0.68	0.62-0.74	Additive to control microbes



Tested Substances

The Iowa Department of Natural Resources monitors both regulated and unregulated substances. DMWW will notify residents if a harmful amount of any contaminant is ever found.

Year Tested

Indicates the year in which testing for that contaminant was conducted. In most cases, DMWW will test every year for a litany of contaminants.

Units of Measure

mg/L: milligrams per liter- equivalent to a single penny in ten thousand dollars.
µg/L: micrograms per liter- equivalent to a single penny in ten million dollars.
pCi/L: picocuries per liter, a measure of radioactivity
NTU: Nephelometric Turbidity Units
TT: Treatment Technique

Sources

Natural and man-made sources of the substance found in the water. Some elements are added, others are a byproduct of the disinfection process, while others are naturally occurring.

2003 Total Organic Carbon Lab Results

Treatment Plant	Year Tested	% Removal From Source Water	Removal Requirements Met
Fleur Drive	2003	31.9-83.4	Yes
Maffitt Reservoir	2003	6.8-43.3	Yes

Utility	COPPER			LEAD		
	Units	Action Level	90th Percentile*	Units	Action Level	90th Percentile*
Ankeny	mg/L	1.3	0.030	µg/L	15.0	17.0
Berwick	mg/L	1.3	0.024	µg/L	15.0	<6.0
Bondurant	mg/L	1.3	<0.030 ²	µg/L	15.0	54.0 ²
Clive	mg/L	1.3	0.032 ²	µg/L	15.0	0.0 ²
Cumming	mg/L	1.3	<0.05	µg/L	15.0	.0035
Des Moines Water Works	mg/L	1.3	0.022	µg/L	15.0	<6.0
Earlham	mg/L	1.3	0.010 ²	µg/L	15.0	7.7 ²
Johnston	mg/L	1.3	0.020	µg/L	15.0	5.0
New Virginia	mg/L	1.3	<0.020	µg/L	15.0	<6.0
Norwalk	mg/L	1.3	0.050 ¹	µg/L	15.0	2.0 ¹
Pleasant Hill	mg/L	1.3	0.000 ²	µg/L	15.0	5.0 ²
Polk Cty Rural WD #1	mg/L	1.3	0.012 ²	µg/L	15.0	0.0 ²
Regency Manor	mg/L	1.3	0.020	µg/L	15.0	6.0
SE Polk Rural Water	mg/L	1.3	0.042	µg/L	15.0	<5.0
St. Charles	mg/L	1.3	0.010 ²	µg/L	15.0	5.0 ²
Urbandale	mg/L	1.3	<0.020	µg/L	15.0	6.3
Warren Water District	mg/L	1.3	0.020 ²	µg/L	15.0	<6.0 ²
Waukee	mg/L	1.3	0.024	µg/L	15.0	8.0
Windsor Heights	mg/L	1.3	0.022 ²	µg/L	15.0	<6.0 ²
Xenia Rural Water	mg/L	1.3	<0.030 ²	µg/L	15.0	<5.0 ²

Lead Samples Above Action Level

7 of 62 samples
 0 of 5 samples
 2 of 20 samples²
 0 of 33 samples²
 0 of 5 samples
 0 of 52 samples
 1 of 10 samples²
 0 of 20 samples
 0 of 5 samples
 0 of 20 samples¹
 0 of 20 samples²
 0 of 10 samples²
 0 of 20 samples
 1 of 21 samples
 0 of 11 samples²
 0 of 30 samples
 1 of 20 samples²
 1 of 21 samples
 0 of 52 samples²
 0 of 20 samples²

Sources of Contamination

Corrosion of home plumbing
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Cryptosporidium

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.



DMWW microbiologist Dennis Hill is shown testing our drinking water for cryptosporidium

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 or for more information about contaminants, please contact Des Moines Water Works or your local water utility. Contact information for each water utility is listed on the back of this publication.

* 90% of samples must be below Action Level ¹ 2001 data - testing not required in 2002 ² 2002 data - testing not required in 2003

Distribution Violations

The following utilities had distribution violations in 2003. The specifics of each violation and corrective actions are provided in detail. If you have any questions, please contact the utility.

City of Ankeny

Violation: Lead.

Corrective Action: Public education, notification and replacement sampling.

City of Johnston

Violation: Monitoring violation. Wrong test performed by new lab.

Corrective Action: Retested and notified lab of correct tests.

Retesting results were satisfactory.

City of Norwalk

Contaminant Violation: Total Coliform. Coliforms are bacteria which 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 during July 2003 and this was a warning of potential problems.

Corrective Action: The system was flushed and samples taken in August were satisfactory.

Cities of Norwalk, Cumming, and Johnston

Monitoring Violations: Failure to monitor and report compliance data in accordance with law. During 2003 the eight monthly coliform bacteria samples were not collected. The samples taken in subsequent months were satisfactory. Adverse health effects, if any, are not known. Monitoring and reporting procedures are being corrected.