



2010 WATER QUALITY REPORT FOR POLK CITY, IOWA

P.O. Box 426 • Polk City, IA 50226

This report contains important information regarding the water quality in our water system. 50% of our water is purchased from the Des Moines Water Works. The source of that water is surface water. The surface water is drawn from the Raccoon River, the Des Moines River, and the Maffitt Reservoir. 50% of our water is groundwater. Our groundwater is drawn from the pleistocene aquifer. This report has two parts. The first is information about the water that we provide you, our customers based on the samples we take in Polk City. The second part contains data provided by the Des Moines Water Works about the water that they provide to us.

Our water quality testing shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Chlorine (ppm)	MRDLG 4.0	MRDL 4.0	1.11	Monthly	0.37-2.15	NO	Water additive used for control of microbes
Lead (ppb)	0	AL = 15	97 at 90th percentile	7/27/10	ND-97	NO	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	0	AL = 15	97 at 95th percentile	07/27/10	ND-97	NO	Corrosion of household plumbing systems; erosion of natural deposits
Total Coliform	0	Presence of coliform bacteria is <5% of monthly samples	0	3 samples per month	NA	NO	Naturally present in the environment
Copper (ppm)	1.3	AL=1.3	0.761 at 90th percentile	07/27/10	0.110-0.872	NO	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride (ppm)	4	4	1.06	24 samples during 2010	1.0-1.3	NO	Water additive which promotes strong teeth;
Total Trihalomethanes (ppm)	NA	80	68.2	Quarterly during 2010	49-82	NO	By-products of water decontamination
Total Haloacetic Acids	N/A	60	11.4	Quarterly during 2010	7-20	NO	By-products of water decontamination deposits
Nitrate [as N] (ppm)	10	10	0.7	10/06/10	NA	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	N/A	N/A	16.9	4/07/10	NA	NO	Erosion of natural deposits; Added to water during treatment process

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS

- Maximum Contaminant Level (MCL) - 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.
- Maximum Contaminant Level Goal (MCLG) - 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.
- ppb - parts per billion.
- ppm - parts per million.
- pCi/L - picocuries per liter
- N/A - Not applicable
- ND- Not detected
- Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- NTU- Nephelometric Turbidity Units.
- Maximum Residual Disinfectant Level Goal (MRDLG) - The level of drinking water contaminant 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.
- Maximum Residual Contaminant Level (MRDL) - 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.
- MRDLs are set for chloramines, chlorine, chlorine dioxide.

GENERAL 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 posed a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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/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).

CONTAMINANT VIOLATIONS -NONE

OTHER VIOLATIONS - NONE

CONTACT INFORMATION

For questions regarding this information, please contact Mike Schulte at (515) 984-6035. Decisions regarding the water system are made at the City Council meetings held at 6:30 p.m. on the second and fourth Monday of each month in the meeting room adjacent to City Hall. These are open to the public.

SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains water from one or more groundwater aquifers. Every aquifer has a degree of susceptibility to contamination because of the characteristics of the aquifer, overlying materials, and human activity. Susceptibility to contamination generally increases with shallower aquifers, increasing permeability of the aquifer and overlying material, nearby development or agricultural activity, and 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 this water supply.

Aquifer Name	Susceptibility
Pleistocene	High

Polk City obtains some of its water from another public water supply. It is a consecutive water supply, where an originating parent supply provides drinking water to one or more downstream supplies.

Original Supply ID	Original Supply Name
IA7727031	Des Moines Water Works

ADDITIONAL HEALTH INFORMATION

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. The Polk City Water Department 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>.

WATER QUALITY REPORT 2009

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 2009 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. The treated drinking 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.

2009 Lab Test RESULTS	YEAR TESTED	MCL		Fleur Drive Treatment Plant		L.D. McMullen Water Treatment Facility		SOURCE OF CONTAMINANT
		MCL	MCLG	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	
WATER CLARITY								
Turbidity (NTU)	2009	11	-	0.09	0.03-0.09	0.29	0.04-0.29	Soil runoff
INORGANIC SUBSTANCES								
Nitrate as Nitrogen (mg/L)	2009	10	10	8	0.92-8	8.2	0.64-8.2	Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits
Fluoride (mg/L)	2009	4	4	1.3	0.18-1.3	1.27	0.80-1.27	Additive for strong teeth; erosion of natural deposits; fertilizer
Sodium(mg/L)	2009	-	-	15	12-30	11	8-21	Erosion of natural deposits
ORGANIC SUBSTANCES								
Atrazine (ug/L)	2009	3	3	-	-	0.1	-	Agriculture runoff

Total Organic Carbon RESULTS			
Treatment Plant	Year Tested	Annual Removal Ratio	Minimum Removal Requirement
Fleur Drive Plant	2009	2.6	1
McMullen Facility	2009	1.83	1

DES MOINES WATER WORKS AND THE CITY OF ANKENY operate wells known as an 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.

2009 Lab Test RESULTS	YEAR TESTED	MCL		LP Moon Well		McMullen Plant Well		Ankeny Well 1		SOURCE OF CONTAMINANT
		MCL	MCLG	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	
Alpha Emitters (pCi/L)	2009	15	0	--	--	--	--	8.6	--	Erosion of natural deposits
Arsenic (ug/L)	2009	10	--	2	--	--	--	2	--	Erosion of natural deposits
Atrazine (ug/L)	2009	3	3	0.2	--	0.1	--	--	--	Runoff from fertilizer
Combined Radium (pCi/L)	2009	15	0	--	--	--	--	1.6	--	Discharge from rubber and chemical factories
Di (2-ethylhexyl) phthalate	2009	6	0	--	--	0.6	--	--	--	Discharge from rubber and chemical factories.
Fluoride (mg/L)	2009	4	4	1.45	--	1.17	--	1.17	--	Water additive which promotes strong teeth; erosion of natural deposits
Sodium (mg/L)	2009	--	--	28	--	15	--	27	--	Erosion of natural deposits
Nitrate (as N) (mg/L)	2009	10	10	4.93	3.88-4.93	4.77	3-4.77	4.22	--	Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits

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>

2009 Distribution RESULTS	Total Trihalomethanes (TTHM)		Haloacetic Acids (HAA5)		Lead	Copper	Coliform Bacteria		Chlorine Disinfectant	
	Level Found	Range of Detections	Level Found	Range of Detections	90% of Samples Below this Level	90% of Samples Below this Level	Monthly Samples	Positive Samples	Running Annual Average	Range
Des Moines ¹	40	20-70	8	ND-21	ND	ND	150	3 ¹	1.3	0.07-2.9
Ankeny	43	23-63	7	ND-15	ND	ND	40	0	1.0	0.29-1.66
Ankeny ASR	50	ND-55	5	ND-11	N/A	N/A	N/A	N/A	N/A	N/A
Berwick	53	33-73	10	6-13	ND	0.06	1	0	0.8	0.39-1.86
Bondurant	49	30-65	15	10-26	3	0.012	3	0	2.4	2.1-2.5
Clive	39	32-47	8.5	7-9	ND	ND	15	1 ¹	0.8	ND-1.85
Cumming	49	49	11	11	15	0.02	1	0	0.70	0.51-0.9
East Dallas Water	26	26	8	8	ND	ND	1	0	1.90	1.3-2.14
Earlham	23	15-28	6	ND-10	7	ND	2	0	1.90	1.3-2.3
Johnston	50	31-79	13	9-18	ND	0.017	15	1 ¹	0.6	0.03-1.89
New Virginia	50	39-52	13	9-16	ND	0.02	1	0	1.4	0.45-1.91
Norwalk	62	44-82	14	7-28	ND	ND	9	0	0.9	0.74-1.15
Polk Co. Rural Water #1	50	26-69	11	6-14	ND	ND	1	0	0.7	0.23-1.24
SE Polk Rural Water ⁵	51	39-63	11	7-20	ND	ND	10	1 ²	1.5	0.2-3.2
Urbandale	50	35-74	10	7-13	ND	ND	40	2 ⁷	0.9	0.52-2.2
Warren Water District	38	16-66	9	ND-18	ND	ND	19	0	1.8	0.33-20.6
Waukee	53	39-63	10	6-11	7	ND	9	0	0.8	0.26-1.54
Xenia Rural Water District	38	4-67	13	ND-21	11	0.046	14	0	2.6	0.42-29

¹Includes Windsor Heights & Pleasant Hill

²Three samples collected in December tested positive for total coliforms. One of these samples tested positive for fecal coliforms. Repeat confirmation samples showed no contamination present.

³One sample tested positive for total coliform bacteria, but repeat confirmation samples showed no contamination present.

⁴One sample tested positive for total and fecal coliform, but repeat confirmation samples showed no contamination.

⁵Includes water supplied to Alleman & Runnells

⁶One sample tested positive for total coliform bacteria, but repeat confirmation samples showed no contamination.

⁷One sample tested positive for total coliform bacteria, but repeat confirmation samples showed no contamination.

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.

AREA LEGISLATOR CONTACT INFORMATION

If you wish to have your questions or concerns about water quality in your watershed heard, contact the following area legislators.

Rep. Ako Abdul-Samad Polk County (515) 283-0987	Sen. Matt McCoy Polk County (515) 245-2959
Sen. Staci Appel Warren County (515) 961-6982	Sen. Larry Noble Polk County (515)-964-7524
Sen. Dick Dearden Polk County (515) 262-1203	Rep. Jo Oldson Polk County (515) 255-2805
Rep. Chris Hagenow Polk County (515) 274-1652	Rep. Rick Olson Polk County rick.olson@legis.state.ia.us
Sen. Jack Hatch Polk County (515) 243-2033	Rep. Peter Cownie Polk County (515) 664-8341
Rep. Erik Helland Polk County (515) 986-1030	Rep. Janet Petersen Polk County (515) 279-9063
Rep. Bruce Hunter Polk County (515) 256-8010	Rep. Scott Raecker Polk County (515) 276-5987
Rep. Geri Huser Polk County (515) 967-7846	Rep. Kent Sorenson Warren County (515) 250-7555
Rep. Kevin Koester Polk County (515) 963-9996	Sen. Pat Ward Polk County (515) 221-3945
Rep. Kevin McCarthy Polk County (515) 953-5221	Rep. Ralph Waits Dallas County (515) 993-4850
	Sen. Brad Zaun Polk County (515) 276-2025

Des Moines :
Water Works
Water You Can Trust for Life

2010 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.

DES MOINES WATER WORKS

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

Public Meeting & Utility Contact Information

ALLEMAN

2nd Monday of the month at 7:00 p.m.
Alleman City Council
14000 NE 6th Street • Alleman, Iowa 50007
Mayor Bill Bodensteiner
(515) 685-3666
Des Moines Water Works Customer Service
Phone: (515) 283-8700 • Fax: (515) 283-8727
E-mail: customerservice@dmww.com

ANKENY

1st & 3rd Monday of each month at 5:30 p.m.
410 West 1st Street • Ankeny, Iowa 50023
Customer Service
220 West 1st Street • Ankeny, Iowa 50023
Phone: (515) 963-3565 • Fax: (515) 963-3535
www.ankenyiowa.gov

BERWICK WATER ASSOCIATION

Annual meeting and as needed
5825 NE Berwick Drive • Berwick, Iowa 50032
Tom O'Donnell
PO Box 187 • Berwick, Iowa 50032
Phone: (515) 266-8668 • Fax: (515) 266-4402

BONDURANT

1st & 3rd Monday of each month at 6:00 p.m.
Bondurant City Hall
200 2nd Street NE • Bondurant, Iowa 50035
Patrick F. Collison
Phone: (515) 971-6856 • Fax: (515) 967-5732
E-mail: pcollison@cityofbondurant.com

CLIVE

1st, 3rd, & 5th Thursday of each month at 7:00 p.m.
Clive City Hall
1900 NW 114th Street • Clive, Iowa 50325
Bart Weller, Public Works Director
2123 NW 111th Street • Clive, Iowa 50325
Phone: (515) 223-6231 • Fax: (515) 223-6013
E-mail: bweller@cityofclive.com

CUMMING

2nd & 4th Monday each month
City Hall • Cumming, Iowa 50061
City Clerk
P.O. Box 100 • Cumming, Iowa 50061
Phone: (515) 981-9214 • Fax: (515) 981-4981
E-mail: cityclerk@cumming-iowa.com
Des Moines Water Works Customer Service
Phone: (515) 283-8700 • Fax: (515) 283-8727
E-mail: customerservice@dmww.com

DES MOINES

4th Tuesday each month at 3:30 p.m.
Des Moines Water Works
2201 George Flagg Parkway • Des Moines, Iowa 50321
Des Moines Water Works Customer Service
Phone: (515) 283-8700 • Fax: (515) 283-8727
E-mail: customerservice@dmww.com

EARLHAM

2nd Monday of each month at 7:00 p.m.
Earlham City Hall
140 South Chestnut Avenue • Earlham, Iowa 50072
Gary Coffman
Phone: (515) 758-2281 • Fax: (515) 758-2710
E-mail: earlhamcityhall@mchsi.com

JOHNSTON

1st & 3rd Monday of each month at 7:00 p.m.
Johnston City Hall
6221 Meile 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 WATER WORKS

1st Saturday of each month at 7:30 a.m.
Fire Station meeting room • New Virginia, IA 50210
Brent Baughman
506 West Street, P.O. Box 302 • New Virginia, IA 50210
Phone: (641) 449-3492 • Fax: (641) 449-3310
E-mail: bjbaughman@iowatelecom.net

NORWALK

1st and 3rd Thursday of each month at 6:00 p.m.
Norwalk Easter Library • Norwalk, Iowa 50211
Tim Hoskins, Public Works Director
705 North Avenue • Norwalk, Iowa 50211
Phone: (515) 202-2540 • Fax: (515) 981-0933
E-mail: timhoskins@ci.norwalk.ia.us

PLEASANT HILL

2nd & 4th Tuesday of each month at 6:30 p.m.
Pleasant Hill City Hall
515 Maple Drive • Pleasant Hill, Iowa 50317
Dave Leonard
Phone: (515) 309-9460 • Fax: (515) 262-9570
E-mail: dleonard@ci.pleasant-hill.ia.us
Des Moines Water Works Customer Service
Phone: (515) 283-8700 • Fax: (515) 283-8727

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.

E-mail: customerservice@dmww.com

POLK COUNTY RURAL WATER DISTRICT #1

Meetings as needed
660 NW 66th Avenue, Suite 4 • Des Moines, Iowa 50313
Clate Vanderpool
Phone: (515) 289-2643

RUNNELLS

2nd Tuesday of each month at 7:00 p.m.
Runnells City Hall
Carol Elam, City Clerk
Phone: (515) 966-2042
Des Moines Water Works Customer Service
Phone: (515) 283-8700 • Fax: (515) 283-8727
E-mail: customerservice@dmww.com

URBANDALE

Meets monthly • Call 278-3940 for information
Urbandale Water Utility
3720 86th Street • Urbandale, Iowa 50322
Dale Acheson
Phone: (515) 278-3940 • Fax: (515) 278-3944
E-mail: dacheson@urbandalewater.org

WARREN WATER DISTRICT

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: peggy@warrenwaterdistrict.com

WAUKEE

1st & 3rd Monday each month at 5:00 p.m.
Waukee City Hall
230 Highway 6 • Waukee, Iowa 50263
Andy Fish
Phone: (515) 710-9469 • Fax: (515) 987-3979
E-mail: afish@waukee.org

WINDSOR HEIGHTS

1st and 3rd Monday each month at 5:00 p.m.
Windsor Heights City Hall
133 66th Street • Windsor Heights, Iowa 50311
Marketa George-Oliver
(515) 279-3622
Des Moines Water Works Customer Service
Phone: (515) 283-8700 • Fax: (515) 283-8727
E-mail: customerservice@dmww.com

XENIA RURAL WATER DISTRICT

Thursday of 3rd full week of each month
2398 141st Street • Bouton, Iowa 50039
Mark Christianson, Operations Manager
PO Box 39 • Bouton, Iowa 50039
Phone: (515) 676-2117 ext. 201 • Fax: (515) 676-2208
E-mail: mchristianson@xeniamwater.org