# 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

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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

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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

# DRINKING WATER AND HEALTH INFORMATION FROM THE EPA

ome 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

## 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 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 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.dmww.com, or call (515) 283-8700 to request a printed copy.

# **AREA LEGISLATOR** CONTACT INFORMATION

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

Rep. Ako Abdul-Samad Sen. Matt McCoy Polk County Polk County (515) 283-0987 (515) 245-2959

Sen. Staci Appel Warren County (515) 961-6982

Sen. Dick Dearden Polk County (515) 262-1203

**Rep. Chris Hagenow** Polk County (515) 274-1652

Sen. Larry Noble Polk County (515)-964-7524

**Rep. Jo Oldson** Polk County (515) 255-2805

**Rep. Rick Olson** Polk County rick.olson@legis.state.ia.us 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

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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

## 

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@xeniawater.org

# 2010 CONSUMER CONFIDENCE REPORT

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

upplying central lowa 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

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

# The Treatment You Can Trust for Life

Water plays a key role in your health and Des Moines Water Works (DMWW) plays a key role in providing you with a safe, clean, healthy water supply. DMWW operates two water treatment plants in Central Iowa. The Treatment Plant at Fleur Drive treats water pumped from one of three sources: Raccoon River, Des Moines River and ground water collected through a series of underground pipes situated next to the Raccoon River (located throughout Water Works Park). The L.D. McMullen Treatment Facility at Maffitt Reservoir, located southwest of the metropolitan area, treats water from the Raccoon River. The water is obtained through radial collector wells located horizontally in the coarse sand and gravel formation beneath the river. The shallow groundwater receives natural filtration prior to entry into the wells. The groundwater is pumped to the treatment plant via a series of pipes and pumps that interconnect all six of the wells and the horizontally drilled well. This innovative horizontal well formation was designed and constructed by DMWW staff. A third facility, Saylorville Water Treatment Plant, located at the 6500 block of NW 26th Street in Polk County, will be online late summer 2010, providing water to residents north of Des Moines. This facility will utilize membrane technology to soften and purify the finished water. This will be DMWW's first membrane treatment plant and the largest such facility in Iowa. The Saylorville plant will have an initial



capacity of 10.0 million gallons per day (mgd) and be expandable to 20.0 mgd.

DMWW's chemists and microbiologist test the untreated water daily to determine the best source water. They also test the treated water every day to ensure that it is a healthy and safe product. The tests include bacterial analysis, softening levels and testing for other

contaminants.

Once treated, there are more than 1,000 miles of underground water mains and pipe (iron, concrete and plastic) distributing the water to homes in Des Moines and

Sen. Jack Hatch Polk County (515) 243-2033

**Rep. Erik Helland** Polk County (515) 986-1030

**Rep. Bruce Hunter** Polk County (515) 256-8010

**Rep. Geri Huser** Polk County (515) 967-7846

**Rep. Kevin Koester** Polk County (515) 963-9996

**Rep. Kevin McCarthy** Polk County (515) 953-5221

Dallas County (515) 993-4850

Polk County (515) 276-2025



# Healthy Watersheds = Healthy Water

Des Moines Water Works is actively working on multiple levels to address deteriorating river water quality in the metro rea's watershed. Improving river source water quality has a direct benefit to Des Moines Water Works in ensuring the treatment processes remain effective, efficient, and economical in producing a high quality drinking water. Improving source waters has a direct benefit to lowans' recreational options and to our fisheries and other aquatic life.

A watershed is an area of land that water flows over or through on its way to a stream, lake or river. Within each different watershed, the land "sheds" or gets rid of water into a common body of water. A watershed also includes the people, air, plants and animals that call that land "home."

Residents of the Des Moines metro area live in both the Des Moines River and Raccoon River watersheds, which begin about 200 miles north and west of the city. These rivers serve as the primary sources for our drinking water.

Precipitation, run off, agriculture tile drainage or any other water from farmland and urban areas between the Minnesota border area and Des Moines will eventually end up in one of these two rivers. When it rains or snows, water carries pollutants such as dirt, oil and fertilizers to our rivers and lakes. Controlling pollution is key to improving the quality of our water supply.

There are two types of watershed pollution: pointsource and nonpoint-source. Point-source pollution is an easily identifiable source, like wastewater treatment plant or industrial discharge. Nonpoint sources of pollution are difficult to identify, isolate and control. Examples of non-point source pollution include run off from parking lots,

run off and tile drainage discharge from agricultural fields, feedlots, lawns and failing septic systems.

Everyone, from farmers to urban residents, can contribute to improving watershed health. Even the smallest contribution can make a significant impact in preserving and protecting our water.

**Rep. Peter Cownie** Polk County (515) 664-8341

**Rep. Janet Petersen** Polk County (515) 279-9063

**Rep. Scott Raecker** Polk County (515) 276-5987

**Rep. Kent Sorenson** Warren County

(515) 250-7555 Sen. Pat Ward

Polk County (515) 221-3945

**Rep. Ralph Watts** 

Sen. Brad Zaun



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

Des Moines Water Works collaborates with other utilities and agencies, not only locally, but nationally and internationally, sharing information on monitoring, treatment and distribution methods. Des Moines Water Works' extensive monitoring program allows us to evaluate our ever-challenging source waters, treat it effectively and deliver WATER YOU CAN TRUST FOR LIFE. Your drinking water meets and

exceeds all state and federal standards.

visit www.dmww.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.dmww.com

safe by following these healthy, environmental tips. These can be practiced at home, work and in the community, to enjoy and maintain a healthy living environment!

- No dumping! Do not dump hazardous household chemicals, such as fertilizers, oil-based paint or antifreeze down the drain. Take these chemicals to the Metro Waste Authority's Regional Collection Center in Bondurant for disposal. Call (515) 967-5512 for more information. Yearly neighborhood SCRUB days also offer limited hazardous chemical disposal.
- **Recycle!** Recycle your newspapers, magazines, milk jugs, juice bottles, metal cans, clear glass, and anything else possible to reduce the quantity of garbage you send to the landfill.
- · Love nature! Plant grass, trees and shrubs to prevent soil from eroding.
- Drive smart! Keep your vehicles in good condition to prevent oil and antifreeze leaks from entering storm sewers.
- Don't litter! Pick up after yourself and your pets. You can also volunteer to help clean up area parks.

# **Using Water Wisely**

Although there is a sufficient amount of water in our rivers and reservoir storage to meet our customer needs, these water utility assets can be most efficiently operated during the very hottest of summer days when customers use water wiselv.

Des Moines Water Works, in cooperation with other metropolitan area water utilities, has developed the "Using Water Wisely" program. This is an educational, voluntary customer program aimed at reducing water use during hot,



dry summer days. Customers can do this by eliminating lawn watering during the hottest part of the day (10:00 a.m.-5:00 p.m.) and spreading out water use over several days through ODD - EVEN day watering before 10:00 a.m. and after 5:00 p.m. This watering approachreduces the peak load on our water facilities which extends their capacity and useful life.



You can keep ou watersheds clean and



# WATER QUALITY REPORT 2009

# Water Treatment Plant Monitoring

2009 Lab

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.

Toot DECILLTC								
	YEAR TESTED	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	SOURCE OF CONTAMINANT
WATER CLARITY								
Turbidity (NTU)	2009	TT	-	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

**Fleur Drive** 

Treatment Plant

L.D. McMullen Water

**Treatment Facility** 

	Iolal Olganic Calbon RESULIS									
s	Treatment Plant	Year Tested	Annual Removal Ratio	Minimum Removal Requirement						
	Fleur Drive Plant McMullen Facility	2009 2009	2.6 1.83	1 1						

ania Carbon DECIUTO

**Radioactive Contaminants** which can occur naturally or result from oil and gas production and mining activities.

**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.

<b>2009</b> Lab			LP Moon Well		McMullen Plant Well		Ankeny Well 1			
Test <b>RESULTS</b>	YEAR TESTED	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	SOURCE OF CONTAMINANT
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**

nce 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 <b>RESULTS</b>	Ution 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		Lead From plumbing corrosion Units: ug/L 90% of all samples must be below Action Level of 15 ug/L	<b>Copper</b> From plumbing corrosion Units: mg/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	
SYSTEM	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 <sup>1</sup> Ankeny Ankeny ASR Berwick Bondurant Clive Cumming East Dallas Water Earlham Johnston New Virginia Norwalk Polk Co. Rural Water #1 SE Polk Rural Water <sup>5</sup> Urbandale Warren Water District Waukee Xenia Rural Water District	40 43 50 53 49 39 49 26 23 50 50 62 50 51 50 38 53 38	20-70 23-63 ND-55 33-73 30-65 32-47 49 26 15-28 31-79 39-52 44-82 26-69 39-63 35-74 16-66 39-63 4-67	8 7 5 10 15 8.5 11 8 6 13 13 14 11 11 10 9 10 13	ND-21 ND-15 ND-11 6-13 10-26 7-9 11 8 ND-10 9-18 9-16 7-28 6-14 7-20 7-13 ND-18 6-11 ND-21	ND ND N/A ND 3 ND 15 ND 7 ND 7 ND ND ND ND ND ND ND ND ND 7 11	ND ND N/A 0.06 0.012 ND 0.02 ND ND 0.017 0.02 ND ND ND ND ND ND ND ND ND ND ND ND ND	150 40 N/A 1 3 15 1 1 2 15 1 9 1 5 1 9 1 10 40 19 9 14	$3^{2}$ 0 N/A 0 0 $1^{3}$ 0 0 $1^{4}$ 0 0 $1^{6}$ $2^{7}$ 0 0 0 0	$\begin{array}{c} 1.3 \\ 1.0 \\ N/A \\ 0.8 \\ 2.4 \\ 0.8 \\ 0.70 \\ 1.90 \\ 1.90 \\ 0.6 \\ 1.4 \\ 0.9 \\ 0.7 \\ 1.5 \\ 0.9 \\ 1.8 \\ 0.8 \\ 2.6 \end{array}$	0.07-2.9 0.29-1.66 N/A 0.39-1.86 2.1-2.5 ND-1.85 0.51-0.9 1.3-2.14 1.3-2.3 0.03-1.89 0.45-1.91 0.74-1.15 0.23-1.24 0.2-3.2 0.52-2.2 0.33-20.6 0.26-1.54 0.42-29

<sup>1</sup>Includes Windsor Heights & Pleasant Hill

<sup>2</sup>Three samples collected in December tested positive for total coliforms. One of these samples tested positive for fecal coliforms. Repeat confirmation samples showed no contaminantion present.

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

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

<sup>5</sup>Includes water supplied to Alleman & Runnells

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

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

# **DEFINITION OF TERMS**

### **Action Level**

The concentration of a contaminant that, if exceeded, triggers a treatment or other requirement that a water system must follow.

### Coliform

A bacteria originating in the digestive system of mammals. Its presence in water alerts lab staff that disease-causing agents may be present.

### Compliance

Following all rules and regulations defined in the Safe Drinking Water Act and maintaining water quality below Maximum Contaminant Level (MCL).

#### Contaminant

One of a variety of natural or man-made physical, chemical, biological or radiological substances whose presence in public water systems may cause adverse health effects to consumers

### Cryptosporidium

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.

### Detection

The positive identification of the presence of a particular contaminant. Detection of a contaminant does not neccessarily represent a serious health risk to consumers if the concentration is below the MCL.

#### Disinfection

Killing or deactivation of the larger portion of microorganisms i

# Filtration

A treatment process that physically removes particles from water as the water passes through a medium.

#### Ground water

The supply of fresh water found beneath the Earth's surface, usually in aquifers. Ground water is often used to supply wells and springs.

### Immuno-compromised

A physical condition in which the human immune system become less capable of warding off illness or infection.

### **Level Found**

The highest amount found in the water or the average of all samples analyzed, depending on the regulation. If multiple samples were tested in 2009, the lowest and highest detected values are listed under Range of Detections.

### MCL

The maximum contaminant level, the highest level of a substance allowed in drinking water.

### MCLG

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.

### 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.

### MRDLG

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.

### N/A Not applicable.

ND

Not detected.

# NTU

Nephelometric turbidity units.

# Organic

Of, pertaining to, or derived from living organisms. Organic matter contains carbon, hydrogen and oxygen. Examples include humans, plants and animals.

# pCi/L

Picocuries per liter, a measure of radioactivity.

# Surface water

All water naturally open to the atmosphere and all springs, wells or other collectors that are directly influenced by surface water. Water located close to the Earth's surface.

### TT

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.

### **Turbidity**

Turbidity is a measure of cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

ug/L

Micrograms per liter, or parts per billion.

# Des Moines

# water, with the probability that the disinfecting agent kills all disease-causing bacteria. **mg/L**

Milligrams per liter, or parts per million.

