

# 2009 WATER QUALITY REPORT

## For Indianola Municipal Utilities

CONTINUING

OUR

COMMITMENT

Indianola Municipal Utilities is proud to present the 2009 Water Quality Report. This edition includes information specific to Indianola's water supply from January 1 through December 31, 2009 as well as general health information. Over the years, IMU has been successful in meeting state and federal drinking water standards and we continue to work hard to provide safe, high quality drinking water to our customers. As future challenges emerge, IMU will remain vigilant in maintaining these standards while continuing to serve the needs of the Indianola community.

INDIANOLA MUNICIPAL UTILITIES



Electric, Water and  
Communications

# SAMPLING RESULTS

This report contains important information regarding the water quality in Indianola's water system. The source of our water is groundwater, which is drawn from the Cambrian-Ordovician aquifer. During the past year the Indianola Municipal Utilities water department has taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows IMU to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken. 💧

SUBSTANCE	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	TYPICAL SOURCE
Copper (ppm)	1.3	AL=1.3	0.0747	7/14/2009	ND-0.119	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (ppm)	4	4	2.0	4/12/2007	N/A	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead (ppb)	0	AL=15	ND	7/14/2009	ND-3	No	Corrosion of household plumbing systems; erosion of natural deposits
Sodium (ppm)	N/A	N/A	136	4/12/2007	N/A	No	Erosion of natural deposits
Chlorine (ppm)	MRDLG=4.0	MRDL=4.0	2.3	RAA 2009	2.0-2.6	No	Water additive used to control microbes
Combined Radium (pCi/L)	0	5	1.4	7/21/2008	N/A	No	Erosion of natural deposits

## 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):** One part substance per billion parts water (or micrograms per liter.)

**Ppm (parts per million):** One part substance per million parts water (or milligrams per liter.)

**pCi/L (picocuries per liter):** A measure of radioactivity.

**N/A:** Not applicable.

**ND:** Not detected. Indicates that the substance was not found by laboratory analysis.

**RAA:** Running Annual Average

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

**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.

**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.



**SOURCE WATER ASSESSMENT INFORMATION** The Indianola Municipal Utility water supply obtains its water from the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. Indianola wells will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of Indianola's source water was completed by the Iowa Department of Natural Resources, and is available from Indianola Municipal Utilities at 961-9444. 💧



## WHAT IS A CROSS-CONNECTION?

A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Indianola Municipal Utilities requires all properties that are considered to be "high hazard" to install and annually test a backflow prevention device. Backflow prevention devices prevent any contaminated water from coming into contact with water in the drinking water line. Some examples of these properties include those with swimming pools, irrigation systems, car washes, fire protection systems and restaurants. A complete list of facilities and requirements are included in the IMU Water Service Plan. Copies of the plan may be obtained from the IMU Administrative Office. 💧

**IMPORTANT HEALTH 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 the water poses 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). 💧

**LEAD** 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. Indianola Municipal Utilities 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>. 💧

## SECURITY INFORMATION

**CONTACT INFORMATION** Please feel free to share your thoughts about any of the information included in this report. It is important to us that we address any questions or concerns our customers may have. For questions regarding this information, or general questions regarding the Indianola water system, please contact IMU Water Superintendent, Lou Elbert. Lou may be reached by phone at 515-961-9446 or by email at lelbert@i-m-u.com Monday-Friday, 8:00 a.m. to 4:00 p.m. 💧

**IMU BOARD OF TRUSTEES** Indianola Municipal Utilities is governed by a five-member board of trustees appointed by the Mayor. Decisions regarding the water system are made at the IMU Board of Trustees meetings on the 2nd and 4th Mondays of each month. Meetings begin at 5:30 p.m. and are held in the city council chambers located at 110 North 1st street. IMU trustee meetings are open to the public and are broadcast on city cable channel 7. Meeting agendas are also available on the IMU web site at [www.i-m-u.com](http://www.i-m-u.com). 💧

### **IMU BOARD MEMBERS:**

Pat Reding, Clark Raney, Bob Lester, Chris Boone and Eric Vander Linden

Indianola Municipal Utilities is making every effort to protect the water system from potential security threats. In addition to 24-hour monitoring of all water facilities, the utility has an emergency disaster plan in place to quickly respond to any security issues that may arise.

You, as customers, can also help. If you see any suspicious activity near the water tower, treatment plant, wells or fire hydrants, please contact IMU immediately at 961-9444 or the Indianola police department at 961-9400. We appreciate your assistance in protecting Indianola's water system. 💧



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