

Water Source

The City of Dixon Water Department is supplied by groundwater from seven wells at a depth from 1600 to 1800 feet at various locations throughout the city. Two of the wells are located on the Northside and the others are located on the Southside.

Explanation of Violations

As of 10/01/02, Combined Radium 8.3, Gross Alpha 15.4, and as of 01/01/08, Arsenic 12 Maximum Contaminant Levels were exceeded. As a means of resolving these violations, water treatment is being implemented. **As of 2010, the City of Dixon Water Department is in compliance with all EPA standards.**

Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

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

The sources of drinking water (both tap water 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 dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, can be naturally

occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organics, which are by products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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, people 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 are available from the Safe Drinking Water Hotline (800-426-4791).

Other Monitoring

In addition to testing we are required to perform, our water system voluntarily tests for hundreds of additional substances and microscopic organisms to make certain our water is safe and of high quality. If you are interested in a more detailed report, contact Superintendent Willard Cox.

This report was prepared by CCR builder and technical assistance provided by the American Water Works Association.

We'll be happy to answer any questions about the City of Dixon Water Department and our water quality. The Source Water Assessment Summary is available upon request. Call Superintendent Willard Cox at 815-288-3381.

We encourage public interest and participation in our community's decisions affecting drinking water. City Council meetings occur the first and third Mondays of each month at 6:30 p.m. in the council chambers at City Hall. Public is welcome.

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2009
Annual

Water Report



Dixon
Illinois



Violation Table

Arsenic: Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problem with their circulatory system, and may have an increased risk of getting cancer. (Public notification for arsenic MCL violation for period 7/01/08 - 9/30/09 was mailed late).

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, average	01/01/2009	03/31/2009	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, average	4/01/2009	6/30/2009	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, average	7/01/2009	9/30/2009	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

Combined Radium 226/228: Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, average	01/01/2009	03/31/2009	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, average	4/01/2009	06/30/2009	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

City of Dixon
Water Department
121 West 2nd St.
Dixon, IL 61021

Key to Table

AL=Action Level
MCL=Maximum Contaminant Level
MCLG=Maximum Contaminant Level Goal
MFL=million fibers per liter
MRDL=Maximum Residual Disinfectant Level
MRDG=Maximum Residual Disinfectant Goal
mrem/year=millirems per year
 (a measure of radiation absorbed by the body)
pCi/L=picocuries per liter (a measure of radioactivity)
ppm=parts per million, or milligrams per liter (mg/l)
ppb=parts per billion, or micrograms per liter (ug/l)

*MCL Statement: The maximum contaminant level (MCL) for trihalomethanes (TTHM) and Haloacetic Acids (HAA5) is 80 ppm and 60 ppm respectively and is currently only applicable to surface water supplies that serve 10,000 or more people. These MCLs have become effective as of 01/01/2004 for supplies and surface supplies serving less than 10,000 people. Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their livers, kidneys, or central nervous systems, and may have increased risk of getting cancer.

What Does this Table Mean?

This report is based upon tests conducted from 1995 to 2007 by the City of Dixon Water Department. Terms used in the Water-Quality Table in other parts of this report are defined here.

Maximum Contaminant Level or 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 or 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.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must comply with.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions. The data presented in this report is from the most recent testing done in accordance with regulations.

Water Quality Data Table Footnotes

Beta/Photon Emitters - The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be a level of concern for beta particles.

Fluoride - Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l.

Iron - This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

Manganese - This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

Sodium - There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at 815-288-3381. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Based on information obtained in a Well Site Survey published in 1990 by the Illinois EPA, several potential secondary sources are located within 1,000 feet of several of the wells. The Illinois EPA has determined that the Dixon Community Water Supply's source water is not susceptible to contamination. The determination is based on a number of criteria including; monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and available hydrogeologic data on the wells. Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Dixon Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper siting conditions; a hydraulic barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this system ground water supply.

Lead and Copper

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. 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. We are responsible for providing high quality drinking water, but we 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 ex-

Water Quality Table for the City of Dixon

Lead & Copper	Date Tested	Unit	MCLG	Action Level-AL	90th Percentile	# Sites over AL	Major Source	Violation
Copper	2009	ppm	1.3	1.3	.4783	0	Erosion of natural deposits, Leaching from wood preservatives; Corrosion of household plumbing systems	NO
Lead	2008	ppb	0	0	.4783	0	Same	NO

Contaminant	Date Tested	Unit	MCL	MCLG	Highest Level*	Range	Major Source	Violation
Inorganic Contaminants								
Lead	2008	ppb	AL=15	0	3.5	N/A	Corrosion of household plumbing systems; Erosion of natural deposits	NO
Arsenic	2009	ppb	10	0	12	2.95 - 10.9	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	YES
Barium	2009	ppm	2	2	.173	.173 - .173	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	NO
Chromium	2009	ppb	100	100	184	0 - 184	Discharge from steel and pulp mills, of natural deposits	NO
Flouride	2009	ppm	4	4	1.06	1.06 - 1.06	Water additive which promotes strong teeth	NO
Nitrate (As N)	2006	ppm	10	10	.05	0 - .05	Natural, Industrial, and Agricultural Sources	NO
Selenium	2005	ppb	50	50	4	0 - 4	Discharge from petroleum and metal refineries; Erosion of natural deposits	NO
Radioactive Contaminants								
Combined Uranium	2008	ppb	30	0	.4619	.108 - .46	Erosion of natural deposits	NO
Uranium	2009	ug/l	30	0	.3427	.11473-.3427	Erosion of natural deposits	NO
Alpha Emitters	2007	pCi/L	15	0	17.2	4.3 - 17.2	Erosion of natural deposits	YES
Gross Alpha excluding Radon and Uranium	2009	pCi/L	15	0	15	.53 - 16.3	Erosion of natural deposits	NO
Combined Radium	2009	pCi/L	5	0	8	.26 - 6.9	Erosion of natural deposits	YES
Beta Emitters	2003	mrem/Yr	50	0	11	6 - 11	Erosion of natural deposits	NO
Disinfectants and Disinfection By-Products								
Chlorine	2009	ppm	MRDL=4	MRDLG=4	2.7	.1 - 2.7	Disinfectants & By-Products	NO
Haloacetic Acids (HAA5)*	2006	ppb	1000	N/A	430	N/A	Erosion of natural deposits	NO
Synthetic Organic Contaminants								
Benzo (A) Pyrene	2004	ppm	200	0	.027	N/A	Pesticides and Herbicides	NO
State Regulated Contaminants								
TTHMs {Total	2009	ppb	80	N/A	22	22.3 - 22.3	By-product of drinking water chlorination	NO
Iron	2009	ppm	1	0	1.3	0 - 1.34	Erosion of natural deposits	NO
Manganese	2009	ppb	150	150	16.3	16.3 - 16.3	Erosion of natural deposits	NO
Sodium	2009	ppm	N/A	N/A	6.6	6.6 - 6.6	Erosion of natural deposits; Used as water softener	NO
Zinc	2005	ppm	5	5	.47	0 - .47	Naturally occurring; Discharge from metal factories	NO

posure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.