

# 2005 WATER QUALITY REPORT FOR NORTH LIBERTY WATER DEPARTMENT

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our groundwater is drawn from the Silurian and Cambrian Jordan Sandstone aquifers. Our water quality testing shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Copper (ppm)	1.3	AL=1.3	1.0	7/03	0.11 – 1.3	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	0	AL=15	2	7/03	1-3	No	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate [as N] (ppm)	10	10	1.3	10/11/05		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Combined radium (pCi/L)	0	5	2	4/2/03		No	Erosion of natural deposits
Alpha emitters (pCi/L)	0	15	4.5	4/2/03		No	Erosion of natural deposits
Sodium (ppm)	N/A	N/A	260	2005	120 - 260	No	Erosion of natural deposits; Added to water during treatment process
TTHM (ppb) [Total trihalomethanes]	N/A	100	18	7/7/04		No	By-products of drinking water disinfection
Chlorine (ppm)	MRDLG=4.0	MRDL=4.0	0.62	2005	0.17 – 1.39	No	Water additive used to control microbes

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.
- 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 s disinfectant allowed in drinking water. There is convincing that addition of a disinfectant is necessary for control of microbial contaminants.

## **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).

## **OTHER VIOLATIONS**

Failure to report compliance data in accordance with the law. In the first quarter of 2005, we failed to calculate the MRDL running annual average. Adverse health effects, if any, are not known. Reporting procedures have been corrected to avoid future violations.

## **SOURCE WATER ASSESSMENT INFORMATION**

The North Liberty water supply obtains its water from the Silurian and Cambrian Jordan Sandstone aquifers. The Silurian and Cambrian Jordan Sandstone aquifer were determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The 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 your source water was completed by the IDNR, and is available from the North Liberty Water Department at 319/626-5719.

## **CONTACT INFORMATION**

For questions regarding this information, please contact the North Liberty Water Department at 319/626-5719 during the following hours: 7:00 am – 3:30 pm.

Decisions regarding the water system are made at the city council meetings held on the second Tuesday at 7 p.m. at 25 W. Cherry Street and are open to the public.