

# VILLAGE OF RANTOUL

## 2002 REPORT TO CONSUMERS ON WATER QUALITY

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**Dear Customer:** We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act of 1996 (SDWA) requires that water utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law, that details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent.

**The Village of Rantoul's drinking water meets or surpasses all federal and state drinking-water standards.** The Village of Rantoul is committed to

providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water.

Call us for information about the next opportunity for public participation in decisions about our drinking water.

Consult our Web site at [www.village.rantoul.il.us](http://www.village.rantoul.il.us) and, for further information, see U.S. Environmental Protection Agency (EPA) water information at [www.epa.gov/safewater](http://www.epa.gov/safewater).

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### Year in Review

During the past year the Village of Rantoul painted and made repairs to the Maplewood Water Tower. This tower has been in service since the late 1950's. This project began in early Spring of 2002 and was completed in the Fall of 2002. The work completed increases the tower's life span.

Additionally, the Village completed pipe and pump modifications at the Water Treatment Plant that improved the management of the lime sludge process (a residue left over from the softening process).

During 2002 the Village underwent a round of lead and copper monitoring, as required by the Illinois Environmental Protection Agency (IEPA). The Village monitors for lead and copper every three years. Results from this sampling are available in this year's Consumer Confidence Report. The Village of Rantoul continues to expand and make improvements to its water system. Currently, the Village is constructing 7050 feet of new water main in the Rantoul Industrial Park. This water main will support the new Meadowbrook

Farms Pork Plant and any future industrial park expansion. The Village's water facilities are located throughout the community. If you see any unusual activity around water utility facilities please contact the Public Works Department (892-2178) or the Rantoul Police Department (892-2103) immediately.

**Troy Sisk, a water plant operator, is operating the new lime sludge pump.**



## Water Source

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What is the source of our water? Eight wells at a depth of 125 to 300 feet in Rantoul supply our system with groundwater of high purity. Wells #5, #7, #8, #9, #10, #11, #12, and #13 provide an average of 1,420,000 gallons per day to 3,400 services or a population of 13,000. The aquifers (underground water sources), which underlay Champaign County and Rantoul, were formed during three successive periods of glaciation. The layers of debris left behind during these periods formed the groundwater aquifers which all of Champaign County derives its water. Collectively they are known as the Mahomet Bedrock Valley Aquifer.

Rantoul's water supply wells are located in the lower two aquifers. The lowest aquifer found at a depth of over 200 feet beneath the ground surface was created during the first glacial age or Kansan age. This aquifer is filled with large quantities of continuous sand and gravel deposits and is capable of producing up to 3000 gallons per minute (gpm) of water.

The following glacial period, or Illinoian age, created the middle aquifer known as the Glasford Formation. This aquifer is located between depths of 50 to 200 feet below the ground surface. Water from the Mahomet Aquifer is pumped out of the ground. This ground water is transmitted to our water treatment facility through a network of underground pipes.

To determine Rantoul's susceptibility to groundwater contamination, a Well Site Survey, published in 1991 by the Illinois EPA, and a potential source inventory conducted by the Illinois Rural Water Association in 2001, were reviewed. Based on the information contained in these documents, forty-nine potential sources of groundwater contamination are present that could pose a hazard to groundwater pumped by the Rantoul community water supply wells. These include seven below ground fuel storages, an above ground fuel storage, a hardware store, five electrical generators/substations, twelve auto repairs, an above or below ground fuel storage, eight vehicle sales, two autobody shops, two stores/sales, a printing, a small engine repair, four manufacturing processes, a military installation, a former petroleum storage facility, a treated wood/lumber yard, and a dry cleaners.

## Water Quality Table

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### How to Read This Table

The table shows the results of our water-quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here and is well below all federal and state drinking water standards. The table contains the name of each substance, the highest level allowed by regulation (MCL); the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.

**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 follow. The data presented in this report is from the most recent testing done in accordance with regulations.

### Key To Table

AL = Action Level  
MCL = Maximum Contaminant Level  
MCLG = Maximum Contaminant Level Goal  
ppm = parts per million, or milligrams per liter (mg/l)  
ppb = parts per billion, or micrograms per liter (µg/l)

## 2002 Water Quality Data

### -Definition of Terms-

**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.*

**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.*

**Level Found:** *This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.*

**Range of Detections:** *This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.*

**Date of Sample:** *If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.*

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

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

**nd:** *Not detectable at testing limits. n/a:* *Not applicable*

### Detected Contaminants

<i>Contaminant (unit of measurement)</i> <i>Typical Source of Contaminant</i>	<i>MCLG</i>	<i>Total Coliform</i> <i>MCL</i>	<i>Highest No. of positive Total</i> <i>Coliform samples in any month</i>	<i>Total no. of Positive E. Coli or Fecal</i> <i>Coliform Samples in 2002</i>	<i>Violation</i>
<b><u>Coliform Bacteria</u></b> Naturally present in the environment	0	1 positive Monthly sample	1	0	No

*Fecal Coliform or E.Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal Coliform or E. Coli positive*

### Detected Contaminants

<i>Contaminant (unit of measurement)</i> <i>Typical Source of Contaminant</i>	<i>MCLG</i>	<i>MCL</i>	<i>Level found</i>	<i>Range of detections</i>	<i>Violation</i>	<i>Date of Sample</i>
<b><u>Inorganic Contaminants</u></b> ARSENIC (ppb) erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.	n/a	10	0.88	N/A		
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.022	N/A		
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	1.3	AL=1.3	0.1	0 exceeding AL		
1 LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits.	0	AL=15	5	0 exceeding AL		
Fluoride (ppm) Erosion of natural deposits; water additive which promotes strong teeth; fertilizer discharge:	4	4	1.07	N/A		

NITRATE & NITRITE (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.200	0.200 - 0.200
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**Disinfectants\Disinfection By-Products**

Total Haloacetic Acids [HAAS] (ppb) By-product of drinking water chlorination.	n/a	60*	2.4	N/A
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TTHMs [TOTAL TRIHALOMETHANES] (ppb) By-product of drinking water chlorination.	n/a	80*	2	N/A
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**State Regulated Contaminants**

SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener.	n/a	n/a	31.000	27.000 - 27.000
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**Unit of Measurement**

ppm - Parts per million, or milligrams per liter

ppb - Parts per billion, or micrograms per liter

0195637 CHANUTE AFB

**Former Chanute Air Force Base**

***Detected Contaminants***

<i>Contaminant (unit of measurement) Typical Source of Contaminant</i>	<i>MCLG</i>	<i>MCL</i>	<i>Level found</i>	<i>Range of detections</i>	<i>Violation</i>	<i>Date of Sample</i>
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None

**Water-Quality Table Footnotes**

**UNREGULATED CONTAMINANTS:**

A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

1. 1 exceeding AL. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791)

2. 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 the level is greater than 20 mg/l , and you are on a sodium restricted diet, you should consult a physician.

\* Detected Level Description: Although we ran many tests, only the listed substances were found. They are all below the MCL required. The values are maximums except for lead. Compliance with the Lead and Copper Rule is based on 90 percent of the results being less than or equal to the action level. Monitoring results show excellent quality. Village of Rantoul drinking water met or exceeded all state and federal water quality for public health protection.

\*MCL Statement: The maximum contaminent level (MCL) for TTHM and HAAS 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 will become effective 01/01/2004 for all groundwater supplies and surface supplies serving less

than 10,000 people. Until 01/01/2004, surface water supplies serving less than 10,000 people, any size water supply that purchase from a surface water source , and groundwater supplies serving more than 10,000 people must meet a state imposed TTHM MCL of 100 ppm. 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.

## Other Monitoring

In addition to the items listed in the previous table, our water system 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 Peter Passarelli at the Village's Department of Public Works at (217) 892-2178.

## Additional Information

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The Village of Rantoul does not test for Cryptosporidium. This parasite can cause outbreaks of intestinal disease, but scientists have not yet determined the best testing methods, or the levels at which a public health danger occurs. Because the

Village's source of water is ground water not directly influenced by surface water sources, Cryptosporidium does not pose a risk to our drinking water. Therefore we do not need to test for it.

## Required Additional Health Information

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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 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, which 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, storm water 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 storm water runoff and septic systems. (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is 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* are available from the Safe Drinking Water Hotline (800-426-4791).

### **Questions?**

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For more information, call the Village of Rantoul's Public Works Department at (217) 892-2178.

You can learn more about the Village of Rantoul water system at **[www.village.rantoul.il.us](http://www.village.rantoul.il.us)**.