

VILLAGE OF RANTOUL

2015 ANNUAL DRINKING WATER REPORT

Dear Customer:

The Village of Rantoul is proud to be your local water service provider and is pleased to present this summary of the quality of the water provided to you between January 1, 2015 and December 31, 2015. The Safe Drinking Water Act of 1996 (SDWA) requires water utilities issue an annual “Consumer Confidence” report to customers, detailing where our water comes from, what it contains, and the risks that our water testing and treatment are designed to prevent. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. We are committed to providing you with the safest and most reliable water supply.

Village of Rantoul – Water Source

The Village of Rantoul receives its water from eight (8) wells. High quality water is pumped from a depth of between 225 to 300 feet to supply our system. Wells #5, #7, #8, #9, #10, #11, #12, and #13 provide an average of 1,420,000 gallons per day to 4,400 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 that supplies all of Champaign County’s 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 pumped to the Village’s water treatment facility through a network of underground pipes. At the water treatment plant, the water is aerated to assist in removing iron, softened to reduce mineral hardness, filtered to remove any other impurities and disinfected to protect against any bacteria.

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 (7) below ground fuel storages, an above ground fuel storage tank, a hardware store, five electrical generators/substations, twelve auto repair shops, an above or below ground fuel storage tank, eight vehicle sales, two auto body shops, two stores/sales, a printing facility, a small engine repair, four manufacturing processes, a former military installation, a former petroleum storage facility, a treated wood/lumber yard, and a dry cleaners.

The Illinois EPA has determined that Rantoul wells #5, #7, #8, #9, #10, #11, #12 and #13 are not susceptible to IOC, VOC and SOC contamination. This 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 the available hydrogeological data for the well.

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Sources of Drinking Water

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, in some cases, 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:

- Microbial contaminants, 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 be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

Contaminant Testing Procedure

To test the drinking water supply for Inorganic Chemicals (IOCs), the water supply is tested each year at each ground water supply entry point. Some inorganic chemicals that the Village tests for are asbestos, fluoride, and nitrate. **The Village of Rantoul is currently not susceptible to IOC contamination.**

To test the drinking water supply for Synthetic Organic Chemicals (SOCs), samples are collected at each ground water supply entry point. Synthetic Organic Chemicals are carbon-based compounds of man-made origin that can get into the water system through runoff from croplands or discharge from factories. **The Village of Rantoul is not currently susceptible to SOC contamination.**

To test the drinking water supply for Volatile Organic Chemicals (VOCs), samples are collected at each ground water supply entry point. Volatile Organic Chemicals are solvents that have been widely used as cleaning agents, degreasers, and as intermediate chemicals in manufacturing. **The Village of Rantoul is not currently susceptible to VOC contamination.**

Lead and Copper Testing Procedure

In order to test the Village water supply for Lead and Copper, a sample is collected from 30 sites every 3 years. The sites chosen are spread out throughout the Village limits, so as to test as much of the water system as feasible. Water samples are collected from taps that have not been used for a minimum of 6 hours. This ensures that the water has not been stirred up in the pipes, allowing for a "worst case scenario" to be tested for lead and copper. The EPA allows for up to 15 parts per billion of lead to exist in the water supply before action must be taken (lead action level). This accounts for inaccurate sampling or other issues that may arise. **In the Village of Rantoul, the 90th percentile value for lead in the water supply was less than 1 part per billion.** This indicates that the Village's drinking water is free from lead contamination. For copper, the action level is set at 1.3 parts per million. **In the Village of Rantoul, the 90th percentile value for copper in the water supply was less than 0.10 parts per billion.** This indicates that the Village's drinking water is also free from copper contamination.

Required Additional Health Information

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 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).

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 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>.

For more information regarding this report, contact the Village of Rantoul Public Works Department at (217) 892-6526.

Additional information can also be found on the Village website: <http://www.myrantoul.com>

Lead and Copper – Village of Rantoul

Substance	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	6/28/2014	1.3	1.3	0.061	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	6/28/2014	0	15	1.4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits

Water Quality Test Results

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.

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 Residual Disinfectant Level Goal or 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 or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

ppb: Micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

Na: Not applicable

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ppm: Milligram per liter or parts per million – or one ounce in 7,350 gallons of water.

Regulated Contaminants – Village of Rantoul

Disinfectants and Disinfection Byproducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2015	0.3	0.2 - 0.3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes
Haloacetic Acids (HAAS)	2015	1	0 - 2.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2015	15	12.19 - 17.26	No goal for the total	80	ppb	N	By-product of drinking water disinfection
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	10/15/2014	1.4	1.4 - 1.4	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	10/15/2014	0.032	0.032 - 0.032	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	10/15/2014	1.21	1.21 - 1.21	4	4	ppm	N	Erosion of natural deposits, water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	10/15/2014	0.027	0.027 - 0.027		1	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	10/15/2014	3.9	3.9 - 3.9	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate (measured as Nitrogen)	2015	2	2 - 2	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	10/15/2014	29	29 - 29			ppm	N	Erosion from naturally occurring deposits: Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	10/01/2014	0.82	0.82 - 0.82	0	5	pCi/L	N	Erosion of natural deposits
Gross alpha excluding radon and uranium	10/01/2014	2.7	2.7 - 2.7	0	15	pCi/L	N	Erosion of natural deposits

Regulated Contaminants – Former Chanute Air Force Base

Lead and Copper

Substance	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	06/25/2014	1.3	1.3	0.105	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

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Disinfectants and Disinfection Byproducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)	08/19/2014	7.85	7.85 – 7.85	No goal for this total	80	ppb	N	By-product of drinking water disinfection

Regulated Contaminants – Village of Rantoul

Violations Table – Village of Rantoul			
Consumer Confidence Rule			
The Consumer Confidence Rule Requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
CCR Report	7/1/2015	7/16/2015	We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.