



# 2012 Water Quality Report

## Village of Romeoville

Where Community Matters

January 1 to December 31, 2012

# Water Quality Report

The Safe Drinking Water Act (SDWA), promulgated by Congress in 1974, amended in 1986 and 1996, establishes a Federal program to monitor and increase the safety of the nation's drinking water supply. The SDWA authorizes the U.S. Environmental Protection Agency (EPA) to set and implement health based standards to protect against both naturally occurring and man-made contaminants in the drinking water. The EPA is also responsible for assessing and protecting drinking water sources, protecting wells and collection systems, making sure water is treated by qualified operators, ensuring the integrity of distribution system and making information available to the public on the quality of their drinking water.

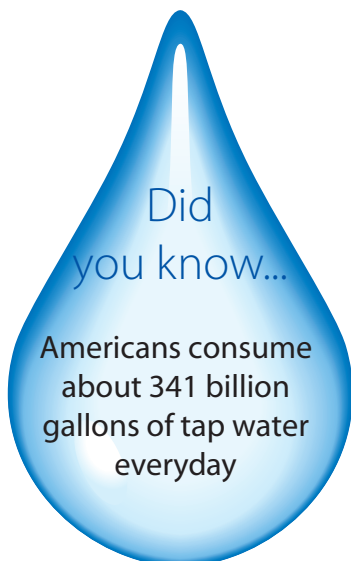
The Village of Romeoville analyzes over 1,300 water samples a year, for more than 120 different substances including microbial organisms, inorganic compounds, (including lead and copper), organic compounds (including pesticides and herbicides) and radioactive material. Our licensed staff, along with state and federal regulators, routinely monitor our operations, compliance and testing protocols to ensure that we deliver safe, high quality drinking water to our customers.

This report provides information regarding the quality of the drinking water delivered to you by the Village of Romeoville in 2012. Included are details about where your water comes from, what it contains and how it compares to standards set by regulatory agencies.

**For more information regarding this report please contact The Village of Romeoville Public Works Department at (815) 886-1870. Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.**

## Where does your water come from?

The kitchen sink, that's easy! It often feels that simple, but the water supply provided by the Village has somewhat of a more complicated route before you actually use it in your home or business.



The Village of Romeoville draws its groundwater supply from 5 deep wells (pumping water from 1,000 ft. below the surface) and 7 shallow wells (pumping from 80 ft. below the surface) located throughout the Village. We provide water to the residents of the Village of Romeoville and portions of unincorporated Plainfield and Bolingbrook.

Once the raw water is pumped, chlorine is added for disinfection. This treated water is then transported to various storage tanks throughout the Village. Through a maze of mains, the water is then pumped to all areas of the Village. Feeding off the main line is each individual service line leading into your residence or business. A curb stop is installed at the beginning of the service line just off the main which serves as the primary access to terminate and restore water service. As the service line feeds into the home, there is a shut-off valve just prior to the water meter. This valve is owned and maintained by the resident and allows them to terminate the supply of water feeding into the home when needed.

The Village of Romeoville monitors the tank levels, pressures, and flow through a centralized computer system called SCADA (Supervisory Control and Data Acquisition) used for gathering and analyzing real time data. Levels in the storage tanks do not remain constant

throughout the day. During the night and early morning hours, the tank levels are at their highest. As the usage throughout town increases, the tank levels decrease. This cycle allows constant pumping rates and minimizes the number of starts and stops on the pumping equipment.

The Village of Romeoville is continuing to install water meters with remote registers called Orion that can be read with a device that does not require an employee the need to gain access to your residence (phone service is no longer required for this device). If you are interested in scheduling an appointment to have the Orion meter installed in your home or you would like more information relating to this device please call (815) 886-7200.

## Source Water Assessment

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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 pickup substances resulting from the presence of animals or from human activity.

### **Possible contaminants consist of:**

- 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 may 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 may be naturally occurring or be the result of oil and gas production and mining activities

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 the Public Works Facility, 615 Anderson Drive or call the Public Works Department at (815) 886-1870. 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 by the Illinois EPA, eight potential sources or possible problem sites were identified within the survey area of Romeoville's wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated several additional sites with ongoing remediations that may be of concern. The Illinois EPA has determined that the source water obtained from Romeoville's Wells #4, #7, #9, #10, #11, and #13 is not susceptible to contamination. However, the source water obtained from Wells 1, #3, #5, #8, and #12 is susceptible to 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 hydrogeologic data on the wells.



# Water Quality

Did  
you know...

From foods and beverages to toothpastes and perfumes, water is the primary ingredient in hundreds of thousands of everyday products.

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 USEPA's Safe Drinking Water Hotline at (800) 426-4791. 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 people with cancer undergoing chemotherapy, those 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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (800) 426-4791.

## Water Quality Test Results

### 2012 Regulated Contaminants Detected

The following tables contain scientific terms and measures, some of which may require explanation. In addition to the following contaminants that were detected in the water supply, **over 100 contaminants were tested for and were NOT DETECTED in the water supply.**

#### LEAD & COPPER

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. The Village of Romeoville is 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 exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

#### Results of Monitoring for Lead & Copper

*Results meet or surpass state and federal drinking water regulations.*

Collection Date	Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	Number of Sites over	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	Number of Sites Over Copper AL	Likely Source of Contamination	Violation
2012	0	15 ppb	<5 ppb	1	1.3 ppm	1.3 ppm	0.114 ppm	0	Corrosion of household plumbing systems; erosion of natural deposits	No

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

## Results of Monitoring for Coliform Bacteria

*Results meet or surpass state and federal drinking water regulations.*

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest Number of Positive	Total Number of Positive E Coli or Fecal Coliform Samples	Likely Source of Contamination
0	5% of monthly samples are positive	0	0	Naturally present in the environment

## Results of Monitoring Synthetic Organic Contaminants

*Results meet or surpass state and federal drinking water regulations.*

Synthetic Organic Contaminants (including pesticides and herbicides)	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Di(2-Ethylhexyl) Phthalate	2012	.74	0 - .74	0	6	ppb	No	Discharge from rubber and chemical factories
Benzo (a) Pyrene	2012	0	0	0	200	ppt	No	Leaching from linings of water storage tanks and distribution lines

## Results of Monitoring the Volatile Organic Contaminants

*Results meet or surpass state and federal drinking water regulations*

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Ethylbenzene	2012	0.56	0 - 0.56	700	700	ppb	No	Discharge from petroleum
Xylenes	2012	0.001	0 - 0.00356	10	10	ppt	No	Discharge from petroleum from chemical factories.

## DISINFECTANTS & DISINFECTION BY-PRODUCTS

Disinfection of drinking water is one of the major public health advances in the 20th century. One hundred years ago, typhoid and cholera epidemics were common throughout American cities and disinfection was a major factor in reducing these epidemics. However, the disinfectants themselves can react with naturally-occurring materials in the water to form unintended by-products which may pose health risks.

## Results of Disinfectants & Disinfection By-Products Monitoring

*Results meet or surpass state and federal drinking water regulations.*

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
TTHMs [Total Trihalomethanes]	2012	18	11.91 - 23.16	No goal for the total	80	ppb	No	By-product of drinking water chlorination
Total Haloacetic Acids (HAA5)	2012	5	1.32 - 4.56	No goal for the total	60	ppb	No	By-product of drinking water chlorination
Chlorine	2012	.5	.4187 - .5873	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes

## INORGANIC CHEMICALS

Inorganic chemicals (IOCs) include salts, metals, minerals and nutrients which can be naturally occurring or which can result from storm water runoff, wastewater discharges, or farm activities. Because our source of drinking water is groundwater, a significant amount of naturally occurring minerals are dissolved in the water.

### Results of Monitoring for Inorganic Chemicals

*Results meet or surpass state and federal drinking water regulations*

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Fluoride	Monthly	.988	.988 - .988	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
Barium	2012	.0299	.0299 - .0299	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (measured as Nitrogen)	2012	1	0 - .808	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Mercury	2011	.281	0 - .281	2	2	ppb	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland

## RADIONUCLIDES

Radionuclides are man-made or natural elements that emit radiation. A picocurie per liter(pCi/L) is a unit of radioactivity. A curie is the amount of radioactivity in a gram of radium. A picocurie is one trillionth of a curie.

### Results of Monitoring for Radionuclides

*Results meet or surpass state and federal drinking water regulations*

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Gross Alpha (excluding radon and uranium)	2012	7.1	7.1 - 7.1	0	15	pCi/L	No	Erosion of natural deposits
Combined Radium	2011	1.5	1.5 - 1.5	0	5	pCi/L	No	Erosion of natural deposits

## STATE REGULATED CONTAMINANTS

In addition to enforcing the Safe Drinking Water Act, the Illinois EPA enforces state regulations. Iron and manganese stain bathroom fixtures and impart objectionable tastes to water in high concentrations. Sodium in drinking water with a concentration greater than 20 mg/l is of concern to persons on a sodium restricted diet of 500 mg per day or lower. For these reasons, the Illinois EPA has elected to regulate these contaminants.

### Results of Monitoring for State Regulated Contaminants

*Results meet or surpass federal drinking water regulations*

State Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Iron This contaminant is not currently regulated by USEPA. However, the state regulates.	2012	.0111	.0111 - .0111	N/A	1.0	ppb	No	Erosion from naturally occurring deposits
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.	2012	137	54 - 137	N/A	N/A	ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration

## Water Quality Table Definitions:

<b>Active Level (AL):</b> The concentration of contaminants that, if exceeded, trigger treatment or other required actions by the water supply
<b>Action Level Goal (ALG):</b> The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety
<b>Maximum Contaminant Level (MCL):</b> The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology
<b>Maximum Contaminant Level Goal (MCLG):</b> The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety. mg/l: milligrams per litre or parts per million - or one ounce in 7,350 gallons of water. ug/l: micrograms per litre or parts per billion - or one ounce in 7,350,000 gallons of water
<b>N/A:</b> Not applicable
<b>Avg:</b> Regulatory compliance with some MCLs are based on running annual average of monthly samples
<b>Maximum Residual Disinfectant Level (MRDL):</b> The highest level of disinfectant allowed in drinking water
<b>Maximum Residual Disinfectant Level Goal (MRDLG):</b> The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety
<b>Parts Per Billion (ppb):</b> One part per billion (or micrograms per liter)
<b>Parts Per Million (ppm):</b> One part per million (or milligrams per liter)
<b>Picocuries per liter (pCi/L):</b> A measure of radioactivity

# Water Conservation and a Healthy Lawn



Know what's below.  
Call before you dig. •



## Water Conservation Ordinance

### *Odd-Even Watering in effect May 10th through September 10th*

Addresses ending in even numbers may water on even number calendar days.  
Addresses ending in odd numbers may water on odd number calendar days.

**Hours:** 6 to 9 a.m. & 7 to 10 p.m.

### Lawn Watering Tips —

- DO NOT WATER THE PAVEMENT! Position sprinklers to water the lawn and garden only.
- Water early in the day when lawns are normally wet from dew. Avoid midday watering due to evaporation and at night due to potential increased chances of some diseases.
- Longer grass means less evaporation. Let grass grow taller in hot, dry weather. Set your mower one notch higher than normal.
- Do not drizzle – a light sprinkling is the least effective method of watering. A good soaking gets to the root. Let the water sink in slowly. A lot of water applied quickly runs off onto the street. Use a kitchen timer as a reminder.
- For more information on water conservation and lawn care for your yard, please refer to following website presented by University of Illinois Extension called Lawn Talk at [www.urbanext.uiuc.edu/lawntalk](http://www.urbanext.uiuc.edu/lawntalk)