

VILLAGE OF MONTGOMERY 2011 WATER QUALITY REPORT

The Village of Montgomery is pleased to report that the Village Water Treatment Facilities met all federal and state drinking water quality standards in 2011. The following is our 2011 Water Quality Report. Our system vigilantly safeguards its groundwater supply, and we are working hard to continue providing the best drinking water possible. This report is designed to inform you about the water we delivered to you over the past year. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Our goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We want you to be informed about the quality of the water you drink. If upon reading this report you should have any questions, please contact Director of Public Works Mike Pubentz at (630) 896-1354. You may also attend any of our regularly scheduled Village Board meetings. The meetings are held at the Village Hall, 200 N. River St., at 7:00 p.m. on the second and fourth Mondays of each month. Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien.

Our raw water supply is obtained from a total of eight groundwater wells located within or near the village limits. We withdraw groundwater from a combination of three different aquifer systems. An aquifer is an underground geological formation that contains water. The three aquifers we pump water from are, from shallowest to deepest, the St. Charles Sand and Gravel, the Silurian Limestone, and the Iron-ton-Galesville Sandstone aquifers.

After the raw water is withdrawn from the groundwater wells, it is treated using two different methods. Both our Lime Softening and Ion-Exchange Treatment methods use chemical and physical processes to remove impurities, soften, and chlorinate the finished water. Fluoride is then added to help minimize dental problems for water consumers. The finished drinking water is then pumped into the water distribution system where it is distributed to consumers. The construction of the Lime Softening Treatment Facility was completed in 1990 and our first Ion Exchange Water Treatment Facility was added in 2003. An additional Ion Exchange Water Treatment Facility became operational in 2004. These facilities are a culmination of efforts by the Village's leadership to provide safe, high quality water for everyone that receives Village of Montgomery drinking water.

In an effort to continue to maintain the high quality drinking water we distribute, the Village is currently completing a number of improvement projects throughout the Water Works System. Please keep in mind these improvement projects will help strengthen our system, so the long-term benefits of these improvements should far outweigh any short-term inconveniences.

Based upon Section 141.153(b)2 of the CCR rule, community water supplies are required to report a summary of their source water susceptibility determination, which are compiled by the Illinois EPA. Please see page five of this document for the Village of Montgomery Source Water Assessment Availability Report.

Further information on our community water supply's source water assessment is available on the Illinois EPA web site at <http://www.epa.state.il.us/water/groundwater/source-water-assessment/index.html> or by calling the Groundwater Section of the Illinois EPA at 217-785-4787.

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 (1-800-426-4791).

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 pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

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 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 stormwater 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 stormwater runoff, and septic systems.
- ❖ Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Montgomery is responsible for providing high quality drinking water, but 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 drinking 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>.

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. USEPA/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 (1-800-426-4791).

The Village Board and the Village Staff welcomes comment from our water consumers. We can be reached via telephone, at Village Board meetings, through conventional mail at the address *Village of Montgomery, 200 N. River St., Montgomery, IL 60538*, and on the worldwide web at <http://www.ci.montgomery.il.us>.

The Village of Montgomery routinely monitors for contaminants in your drinking water according to Federal and State Laws. The following tables will give you a detailed review of contaminants which were tested for and the amounts detected, if any, during 2011.

Water Quality Test Results and Definitions

Definitions: The following tables contain scientific terms and measures, some of which may require explanation. Maximum Contaminant Level (MCL): the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal 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. ppm: milligrams per liter or parts per million—or one ounce in 7,350 gallons of water. ppb: micrograms per liter or parts per billion—or one ounce in 7,350,000 gallons of water. pCi/L: picocuries per liter; a measure of radioactivity. na: not applicable. Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples. Maximum Residual Disinfectant level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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.

2011 Regulated Contaminants Detected

Lead and Copper

Definitions:

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

Action Level Goal (ALG): 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.

<u>Lead & Copper</u>	<u>Date Sampled</u>	<u>MCLG</u>	<u>Action Level (AL)</u>	<u>90th Percentile</u>	<u># Sites Over AL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Copper	8/2011	1.3	1.3	0.194	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	8/2011	0	15	0	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

<u>Disinfectants and Disinfection By-Products</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Chlorine	1/1/2011	0.4	0.308 - 0.4887	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes.
<u>Inorganic Contaminants</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Barium	1/13/2010	0.0994	0.0994 - 0.0994	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	1/13/10	0.991	0.991 - 0.991	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	4/18/2011	0.358	0 - 0.358	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	1/13/2010	27.4	27.4 - 27.4	*	*	ppm	No	Erosion from naturally occurring deposits; Used in water softener regeneration.

<u>Radioactive Contaminants</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Combined Radium 226/228	8/10/2011	5	3 – 6.3	0	5	pCi/L	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium	3/15/2011	10.8	6.3 – 10.8	0	15	pCi/L	No	Erosion of natural deposits.
<u>Synthetic organic contaminants including pesticides and herbicides</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Di (2-ethylhexyl) phthalate	1/13/2010	1	0 – 2.5	0	6	ppb	No	Discharge from rubber and chemical factories.
<u>Volatile organic contaminants</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Vinyl Chloride	10/17/2011	1	0 – 0.744	0	2	ppb	No	Leaching from PVC piping; Discharge from plastics factories
cis-1,2-Dichloroethylene	9/21/2011	1	0 – 1.18	70	70	ppb	No	Discharge from industrial chemical factories.

*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.

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.

Iron 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.

Village of Montgomery Source Water Assessment

The Village of Montgomery (Facility Number 0894690) obtains its water from eight active community water supply wells. Wells #3, #4, #8, #10, #11, #12, #13, and #14 supply an average of 2,400,000 gallons per day (gpd) to 8,689 services or a population of 26,600. To determine Montgomery's susceptibility to groundwater contamination, the Illinois Rural Water Association conducted a well site survey in August, 2002. Based on the information obtained in this document, there are 47 potential sources of groundwater contamination that could pose a hazard to groundwater utilized by Montgomery's community water supply. These include 1 above ground fuel storage tank, 1 machine shop, 1 de-icing storage facility, 1 waste recycling facility, 1 well, 1 store, 1 nursery, 1 auto repair shop, 2 metal foundries, 2 treated wood or lumber yard facilities, 2 printing facilities, 2 construction or demolition companies, 2 offices, 2 restaurants, 3 warehouses for storage of pesticides or fertilizers, 5 warehouses, 8 manufacturing

processes of plastics, beverages, tools, electric equipment, etc., and 11 below ground fuel storage tanks. In addition, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated sites with on-going remediation that might be of concern.

Based upon this information, the Illinois EPA has determined that the Montgomery Community Water Supply's source water is susceptible to contamination. As such, the Illinois EPA has provided 5-year recharge area calculations for the wells. The land use within the recharge areas of the wells was analyzed as part of this susceptibility determination. This land use includes urban residential, commercial, industrial properties, and some open spaces. The Illinois Environmental Protection Act provides minimum protection zones of 400 feet for wells #10, #11, #12, and #13 and 200 feet for wells #3, #4, #8, and #14 of Montgomery's community water supply. These minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to the source water, a maximum protection zone may be established, which is authorized by the Illinois Environmental Protection Act and allows county and municipal officials the opportunity to provide additional potential source prohibitions up to 1,000 feet from their wells.

In response to the IEPA's source water assessment, the Village routinely tests for bacteriological quality on a monthly basis. The Village has minimized its risk of source water contamination by developing well sites that are geographically distributed throughout the community. For emergency preparedness, the Village has performed a water system vulnerability assessment for various emergency situations and has developed an emergency response plan to respond appropriately to system threats. The Village's Community Development Department actively coordinates a cross connection control program to minimize the risk of cross connections at treatment sites and distribution points which could negate water protection initiatives. For water protection management, the Village is participating with both Kane and Kendall Counties on groundwater assessment projects to help determine possible groundwater protection methods. Potential impacts from non-point sources related to agricultural land uses are also being assessed.



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