

2016 Water Quality Data

Monitoring Performed by Village of Catlin - PWSID # IL1830150

| Contaminant (units) | Collection Date | MCLG | MCL | Level Found | Range of Detections | Violation | Typical Source of Contaminant |
|---------------------------------------|-----------------|----------|---------|-------------|---------------------|-----------|---|
| Disinfectants/Disinfection By-Product | | | | | | | |
| Total Trihalomethanes (ppb) | 2016 | NA | 80 | 17 | 16.9-16.9 | No | By-product of drinking water chlorination |
| Chlorine (ppm) | 12-31-16 | MRLDG =4 | MRDL =4 | 0.3 | .01-0.5 | No | Water additive used to control microbes |
| Haloacetic acids (ppb) | 2016 | NA | 60 | 6 | 5.6-5.6 | No | By-product of drinking water chlorination |

Not all sample results may have been used for calculating the Highest Level Detected because some of the results may be part of an evaluation to determine where compliance sampling should occur in the future.

Monitoring Performed by Aqua Illinois Vermilion County Division - PWSID # IL1835120

| Contaminant (units) | Sample Date | MCLG | MCL | Level Found | Range of Detections | Violation | Major Sources in Drinking Water |
|------------------------|-------------|------|-----|-------------|---------------------|-----------|---|
| Inorganic Contaminants | | | | | | | |
| Barium (ppm) | 2016 | 2 | 2 | .0087 | NA | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Nitrate (ppm) | 2016 | 10 | 10 | 9 (a) | 2.1-8.9 | No | Runoff from fertilizer use; Leaching from septic tanks/sewage |

(a) Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

| Radioactive Contaminants | | | | | | | |
|--------------------------|------|---|----|-------|----|----|-----------------------------|
| Combined Radium, pCi/L | 2014 | 0 | 5 | 0.973 | NA | No | Erosion of natural deposits |
| Gross Alpha | 2014 | 0 | 15 | 2.99 | NA | No | Erosion of natural deposits |

| State Regulated Contaminants | | | | | | | |
|------------------------------|------|----|-------|------|-----------|----|--|
| Sodium (ppm) | 2016 | NA | NA(b) | 3.5 | NA | No | Erosion of naturally occurring deposits, road salt |
| Fluoride (ppm) | 2016 | 4 | 4 | 0.85 | 0.61-0.85 | No | Water additive to promote strong teeth |

(b) There is no 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.

| Turbidity-Regulated at the water treatment plant: 95% of samples must be below 0.3 NTU. | | | | |
|---|--------------------------------|--|-----------|-------------|
| Limit (Treatment Technique) | Lowest monthly % meeting limit | Highest single measurement (1 NTU limit) | Violation | Source |
| 0.3 NTU | 100% | 0.25 | No | Soil Runoff |

| Lead and Copper Results | | | | | | | | |
|-----------------------------------|-----------------|-------------------------|-------------------|-------------------------------------|-----------------|------------------------|-----------|---------------------------------|
| Contaminant & unit of measurement | 90th Percentile | Total number of samples | Samples Exceed AL | Federal/State Standard Action Level | Ideal Goal MCLG | Last Monitoring Period | Violation | Source |
| Copper (ppm) | 0.052 | 30 | 0 | 1.3 | 1.3 | 2014 | No | Corrosion of household plumbing |
| Lead (ppb) | 5.2 | 30 | 2 | 15 | 0 | 2014 | No | |

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 found in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing the line for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about the levels of 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>.

To view a summary version of the completed Source Water Assessments, including: Importance of Clean 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>.

Village of Catlin 2016 Water Quality Report

Prepared by:
FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
1610 Broadmoor Drive
Champaign, Illinois 61821

*With water quality data provided by the source
water company:*

Aqua Illinois, Inc.
1300 Fairchild Street
Danville, Illinois 61834

The Water You Drink

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 City Hall or call our water operator at 217-427-5221. 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>.

Illinois EPA considers all surface water sources of public water supply to be susceptible to potential pollution problems. Hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion.

Aqua Illinois, as the parent company providing water to the Village, is responsible for most of the required contaminant testing performed. You will be happy to know that there were no water quality violations in 2015 and that water supplied by Aqua Illinois is safe, clean and reliable. Aqua Illinois is committed to the continued monitoring of your system and to keeping you apprised of any changes to the system that could alter the quality of the water you drink. This means that you can rest assured that when you turn on your tap that quality water is what you'll get out of it.

Sources of Your Water

The source of water for the Village of Catlin is through a large Aqua Illinois raw water transmission line from Lake Vermilion via the North Fork River. Aqua Illinois has spent a great deal of time and money to improve and safeguard the source of your water. Including raising Lake Vermilion to ensure adequate supply of water.

Treatment and Distribution

The surface water is treated via the new treatment facility on West Fairchild Street which has had \$15 million dollars worth of improvements since 1992. In fact, since 1986, Aqua Illinois has invested over \$30 million in the water system. Besides raising Lake Vermilion, other improvements have included a new treatment facility and upgrade of the distribution system. These improvements through the 3 years help ensure the product meets all state and federal water quality standards.

The distribution system includes both the transmission main and the local water mains carrying water throughout the Village.

General Drinking Water Information

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 materials, 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 source such as agriculture, urban stormwater runoff and residual 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 that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) prescribes regulations which 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.

Unregulated Contaminants

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

Trihalomethanes

Decaying organic matter such as leaves and other natural materials coupled with the chlorination process result in trihalomethane formation. 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 cancer risk.

Sodium

Currently there is not a state or federal MCL for sodium. Monitoring, however, is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If the level of 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.

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).

Questions?

Should you have any questions about this report or concerning your water system, please contact Tim McFadden at (217) 427-5221. We want you to be informed about your water quality. If you would like to learn more, please attend any of the regularly schedule Village Board meetings on the first and third Tuesdays of each month.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. immunocompromised persons, such as persons with cancer undergoing chemotherapy, people 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, 1-800-426-4791 or your local public health district.

Notes:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements. For lead and copper, results listed are 90th per- centile, which means that 90 percent of the test results were below that value. Under the Lead and Copper Rule, a system exceeds an action level if 10 percent of the sample results are above that level.

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. Some levels are based on a running annual average.

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 Residual Disinfectant Level (MRDL): The highest level of a 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.

NA: Not applicable. **ND:** Not detected.

Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice for your health care provider.

NTU: Nephelometric turbidity unit (cloudiness of water).

ppb: A unit of concentration equal to one part per billion or one ounce in 7,350,000 gallons of water.

ppm: A unit of concentration equal to one part per million or one ounce in 7,350 gallons of water.

ppt: A unit of concentration equal to one part per trillion.

pCi/L, picocuries/Liter: A unit of concentration for radioactive contaminants.

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

Turbidity: Monitored as a measure of treatment efficiency for removal of particles.

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