

# City of Jerseyville, IL

## Water Quality Report –2016

### January 01 to December 31, 2015

This year, as in the past, The City of Jerseyville has continued to monitor your drinking water as required by the EPA and State drinking water health standards. Our system vigilantly safeguards its groundwater supply, and we have prepared this report detailing where your water comes from and how it compares to standards set by regulatory agencies. We are committed to providing you with this information because well informed customers are our best allies. We were issued a MCL violation notice for exceeding the allowable number of samples indicating Total Coliform in June. We resampled the indicated sites along with sites upstream and downstream of the affected sites. These additional samples showed no Total Coliform present.

If you have any questions about this report or concerning your water system, please contact **Mr. Robert Kincade at (618) 498-3312 or Water Treatment Plant at (618) 376-4946.** 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 City Council Meetings at 6:00 PM, every other Tuesday at the City Municipal Building, 115 East Prairie Street. Please call City Hall for a list of scheduled meetings.

Jerseyville uses ground water provided by one of or a combination of three wells drilled into the Illinois River Valley aquifer. An aquifer is a geological formation that contains water.

Well #1 is located in the well field near Nutwood, IL. Well #2 is located 700 feet West of Well #1. Well #3 is a new well installed in 1994 and located 700 feet South of Well #2. Wells #1, #2 and #3 can supply water at a rate of 1600 GPM to our Treatment Facility.

A source water assessment completed in 2003 by the Illinois EPA identifies the following as potentials for sources of contamination. City owned Emergency Generator and fuel storage tank for the generator. Non-point source contamination due to agricultural of the surrounding land.

The City Water Department has source water tested at required time intervals for possible contaminants. Efforts to protect our source water including a 1000 feet setback and farmer awareness programs are in effect to reduce the potential for source water contamination. In 2011, Jerseyville received a Non-Compliance Advisory (NCA) for bacteriological detections in Well #3. Maintenance at this sample location served to remedy this issue. While the NCA has been resolved at this time, monthly monitoring data is continually being tracked in regards to all active potable wells at the facility; further deficiencies would result in additional enforcement.

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 people, and infants can be at 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).**

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 the 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).

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 home 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 is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or 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 in 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 may also come from gas stations, urban storm water runoff and septic systems; and

Radioactive contaminants, which may 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, USEPA prescribes regulations that 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.

Attached are tables containing test results on the water, source and finished, provided to our customers. These tables will give you a better picture of the contaminants that we test for and the levels of each that were detected. There were several contaminants that were tested for and were not detected; these contaminants are listed in the tables for your information.

## 2016 Water Quality Data

Definitions: MCLG: Maximum Contaminant Level Goal, or 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. MCL: Maximum Contaminant Level, or 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. AL: Action Level, or the concentration level of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. TT: Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

Abbreviations: nd -- not detectable at testing limits. n/a -- not applicable. ppm -- parts per million or milligrams per liter. ppb -- parts per billion or micrograms per liter. ppt -- parts per trillion, or nanograms per liter. ppq -- parts per quadrillion, or picograms per liter. NTU -- Nephelometric Turbidity Unit, used to measure cloudiness in drinking water. %<0.5 NTU -- Percent samples less than 0.5 NTU. MFL -- Million fibers per liter, used to measure asbestos concentration. #pos/mo -- number of positive samples per month. %pos/mo -- percent positive samples per month. pCi/l -- picocuries per liter, used to measure radioactivity. mrem/yr -- millirems per year, used to measure radiation absorbed by the body

In most cases, the "Level Found" column represents an average of sample result data collected during the CCR calendar year. The "Range of Detections" column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year. If a date appear in the "Date of Sample" 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 CCR calendar year.

Contaminant (units)	Typical Source of Contamination	MCLG	MCL	Level Found	Range of Detection	Violation	Date of Sample
<b>Microbial Contaminants</b>							
Total Coliform Bacteria (# pos/mo)	Naturally present in the environment	3	>1	0		Yes	6/2016
<b>Inorganic Contaminants</b>							
Arsenic (ppb)	Erosion of natural deposits; Runoff from orchards; Runoff from glass & electronics production wastes.	n/a	50	1	N/A	NO	27-Oct-04
Barium (ppm)	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.	2	2	0.0057	0.0057 - 0.0057	NO	2015
Copper (ppm)	Corrosion of household plumbing systems; Erosion of natural deposits.	1.3	AL=1.3	0.13	0 exceeding AL	NO	31-Jul-14
Chromium (ppb)	Discharge from steel and pulp mills; Erosion of natural deposits	100	100	5	6	NO	25-Oct-06
Fluoride (ppm)	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from Fertilizer and Aluminum factories	4	4	1.09	1.09 - 1.09	NO	2015
Lead (ppb)	Corrosion of household plumbing system Erosion of naturally occurring deposits	0	AL=15	2.5	0 exceeding AL	NO	31-Jul-14
Nitrate as Nitrogen	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits	10	10	0.06	0.06 - 0.06	NO	2015
Selenium (ppb)	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.	50	50	1	N/A	NO	13-Oct-09
<b>Disinfectants\Disinfection By-Product</b>							
TTHMs [Total Trihalomethanes] (ppb)	By-product of drinking water chlorination	n/a	80	45	43.29 - 46.92	NO	2015
Total Haloacetic Acids(5) (ppb)	By-product of drinking water disinfection	n/a	60	3	2.9 - 3.6	NO	2015
Chlorine ppm	Water additive used to control microbes	MRDLG=4	MRDL=4	1	0.9-1.0545	NO	12/31/15
<b>State Regulated Contaminates</b>							
Sodium (ppm)	Erosion of naturally occurring deposits; Used as water softener.	n/a	n/a	22	22 - 22	NO	2015
Manganese (ppb)	Erosion from naturally occurring deposits.	150	150	4.7	4.7 - 4.7	NO	2015
Iron (ppm)	Erosion of naturally occurring deposits	n/a	1	0.012	0.012 - 0.012	NO	2015
<b>Radioactive Contaminates</b>							
Combined Radium 226/228 pCi/L	Erosion of natural deposits	0	5	0.47	0.47 - 0.47	NO	2015
Gross Alpha excluding Radon and Uranium pCi/L	Erosion of natural deposits	0	15	0.868	0.868 - 0.868	NO	2015

Units of measure: ppm - parts per million, or milligrams per liter      ppb - parts per billion, or micrograms per liter      # pos/mo - Number of positive samples per month

### About Data

**Lead**      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 (800-426-4791).

**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.

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

**Total Coliform Bacteria**  
Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Additional samples collected at these test sites and adjacent taps on either side of the original test site were reported free of total coliforms.

## 2016 Violation Summary Table

Violations occurring in 2015

Rule or Contaminant		Violation type	Violation Duration	
<b>Total Coliform Rule Maximum Contamination Limit</b>	Coliforms are bacteria that are naturally present and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Total coliform bacteria were found in our drinking water during the periods indicated in enough samples to violate a standard.	MCL (TCR), Monthly	Violation Start      End	
			6/1/2015	6/30/2015
<b>Resolution</b>	Additional samples were collected at the indicated sites and adjacent sites. The samples collected were clean of total coliforms.			