

# Annual Drinking Water Quality Report

## Village of South Barrington (#IL0310200)

### January 1 – December 31, 2016

#### **Introduction**

The Village is pleased to present the Annual Drinking Water Quality Report. The Environmental Protection Agency (EPA) requires us to issue this report annually describing the quality of your drinking water. The Village routinely conducts tests for contaminants in drinking water and results have always been below all State and Federal maximum allowable levels. 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. Information on future public meetings can be found on the Village website at [www.southbarrington.org](http://www.southbarrington.org).

#### **Source of Water**

Drinking water for The Woods of South Barrington is provided by two 1,300 foot deep wells. The ground takes care of a large part of the initial treatment process. As rainwater seeps through the ground, it is filtered by the different layers of soil, sand, and gravel. By the time the water is drawn up through one of the wells, nearly all the contaminants have already been removed. The only necessary treatment is to process the water through an ion exchanger to remove any remaining contaminants and to soften the water. After this step, chlorine is added before it is piped to homes and businesses.

#### **Water Distribution**

After leaving the treatment plant, drinking water is stored in a 600,000 gallon tank for emergencies and periods of high demand. The water then flows through water mains and is delivered to the homes and businesses located in the subdivision.

#### **Drinking Water Assessment Summary**

During the past year, the drinking water quality met or exceeded State and Federal standards in all areas. Test results are summarized in the table on the following page. Items which do not have a Maximum Contaminant Level (MCL) or Maximum Contaminant Level Goal (MCLG) listed are not regulated and are provided for reference only.

#### **Additional Information from The Environmental Protection Agency**

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 (1-800-426-4791) or visit the EPA website [www.epa.gov/safewater](http://www.epa.gov/safewater).

We are advised by the EPA that 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 (Center for Disease Control) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (1-800-426-4791) or visit the EPA website [www.epa.gov/safewater](http://www.epa.gov/safewater).

The treatment plant is owned by the Village of South Barrington. The treatment plant is operated and maintained by Sheaffer & Roland Inc. Should you have any questions regarding the information presented in this Water Quality Report, please contact Michelle Bodie, Finance Officer for the Village of South Barrington.

#### **OWNER**

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#### **OPERATOR**

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**South Barrington drinking water meets or exceeds all state and federal standards for maximum contaminant levels.**

2016 Water Quality Data							
Contaminant (units)	MCLG	AL	90 <sup>th</sup> Percentile	# Sites over AL	Units	Violation	Likely Source of Contamination
<b>Lead and Copper (sample date)</b>							
Copper (9/1/16)	1.3	1.3	.403	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing
Lead (9/1/16)	0	15	0	1	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits
Contaminant (units)	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Units	Violation	Likely Source of Contamination
<b>Disinfectants and Disinfection By-Products (sample date)</b>							
Chlorine (Various 2016 test dates)	MRDLG=4	MRDL = 4	.8	0.2 – 1.5	ppm	No	Water additive used to control microbes
Total Trihalomethanes (8/16/16)	None	80	7.36	7.36 – 7.36	ppb	No	By-product of drinking water chlorination
<b>Inorganic Contaminants (sample date)</b>							
Barium (4/1/14)	2	2	0.81	0.81 – 0.81	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (4/1/14)	4	4	0.826	0.826 – 0.826	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Iron (4/1/14)		1.0	0.073	0.073 – 0.073	ppm	No	Erosion from naturally occurring deposits
Manganese (4/1/14)	150	150	1.4	1.4 – 1.4	ppb	No	Erosion from naturally occurring deposits
Nitrate (measured as Nitrogen) (2/10/15)	10	10	0	0	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (4/1/14)			110	110 – 110	ppm	No	Erosion from naturally occurring deposits; used in water softener regeneration
Zinc (4/1/14)	5	5	0.006	0.006 – 0.006	ppm	No	Naturally occurring deposits; discharge from metal
<b>Radioactive Contaminants (sample date)</b>							
Combined Radium 226/228 (8/19/16)	0	5	4.18	4.18 – 4.18	pCi/L	No	Erosion of natural deposits
Gross alpha excluding radon and uranium (8/19/16)	0	15	2.85	2.85 – 2.85	pCi/L	No	Erosion of natural deposits

### Definitions and Terms

**MCLG or Maximum Contaminant Level Goal:** 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 or Maximum Contaminant Level:** 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.

**MRDLG or Maximum Residual Disinfectant Level Goal:** 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.

**MRDL or Maximum Residual Disinfectant Level:** 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.

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

**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.

### Additional Notes

Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the 2014 calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.

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 stormwater 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 byproducts 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, EPA proscribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration 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. We are 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 EPA's Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.