

## Annual Drinking Water Quality Report

(Village of Noble)

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water. Our water source is purchased from the City of Olney water department. Their source is a surface supply, East Fork Lake, a 950-acre man made reservoir located just North-East of the Olney. Their treatment facility is located on West Mack Ave. just to the outside of the Olney city limits.

In addition, due to the largest portion of this watershed area of their source supply being farm fields, it is more likely that certain contaminants could be detected in this supply. Many tests are performed every year to ensure levels of contaminants remain below recommended levels.

This report shows our water quality and what it means.

If you have any questions about this report or your water utility, please contact Bill Manuel of the Village of Noble, at 723-2212. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled village council meetings. They are held on 2<sup>nd</sup> and 4<sup>th</sup> Monday of each month beginning at 7:00 p.m. at the Noble Village Hall.

The Village of Noble water department routinely monitors for constituents in your drinking water according to Federal and State laws. The first table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2018. **If a date is listed under a level detected then that is the most recent testing done in accordance with E.P.A. regulations.** The second table are results from samples collected from the City of Olney water department. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

In these tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects (ND)* – laboratory analysis indicates that the constituents is no present.

*Parts per million (ppm) or Milligrams per liter (mg/l)* – one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* – one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

*Parts pre quadrillion (ppq) or Picograms per liter (picograms/l)* – one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

*Picocuries per liter (pCi/L)* – A measure of the radioactivity in water.

*Millirems per year (mrem/yr)* – measure of radiation absorbed by the body.

*Million Fibers per Liter (MFL)* – million fibers per liter is a measure of the presence of asbestos fibers that are no longer than 10 micrometers.

*Nephelometric Turbidity Unit (NTU)* – A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

*Treatment Technique (TT)* – (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level* – (mandatory language) The “Maximum Allowed” (MCL) is 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.

*Maximum Contaminant Level Goal* – (mandatory language) The “Goal” (MCLG) is 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.

Not Applicable (NA)

VILLAGE OF NOBLE DETECTED CONTAMINANTS 2018

Contaminant	Violation Y/N	Level Detected	Range of Detection	Unit of Measure	MCLG	MCL	Likely Source of Contamination
<b>DISINFECTANTS &amp; DISINFECTION BY-PRODUCTS</b>							
Total Haloacetic Acids 2018	N	11	3.5-19.6	ppb	No goal for the total	60	By-Product of drinking water disinfection
Total Trihalomethanes 2018	N	42	25-54.5	ppb	No goal for the total	80	By-Product of drinking water disinfection
Chloramines 12/31/2018	N	1.9	1.1-2.8	ppm	MRDLG-4	MRDL-4	Water additive used to control microbes

The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though correct, is more than one year old.

## ABOUT THE DATA

What does this mean?

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

“All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or is man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.”

All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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 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 sources of drinking water (both tap 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 can dissolve naturally occurring minerals and radioactive materials. “The water can also pick up substances resulting from the presence of animals or 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 may be naturally occurring or result from urban storm water run off, 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 run off, and residential areas.

ORGANIC CHEMICAL CONTAMINATES, 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 run off and septic systems.

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 from contaminants in bottled water, which must provide the same protection for public health

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

THE FOLLOWING IS A LIST OF THE CITY OF OLNEY DETECTED CONTAMINANTS FOR 2018, FROM WHERE THE VILLAGE OF NOBLE PURCHASES OUR WATER.

### 2018 DETECTED CONTAMINANTS

Contaminants	Violation Y/N	Highest Level Detected	Range of Detection	Unit of Measure	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
Barium	N	0.027	0.027-0.027	ppm	2	2	Discharge of drilling waste, metal refineries, and erosion of natural deposits
Nitrate (As Nitrogen)	N	0.22	0.22-0.22	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits
Fluoride	N	0.7	0.726-0.726	ppm	4	4	Erosion of natural deposits; Water additive to promote strong teeth; discharge from fertilizer and aluminum factories
Manganese	N	2	1.8-1.8	ppb	150	150	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Sodium	N	16	16-16	ppm	N/A	N/A	Erosion of natural deposits, Used as a water softener
Arsenic	N	1	1.2-1.2	ppb	0	10	Erosion of natural deposits.

								Runoff from orchards. Runoff from glass and electronics production wastes.
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<b>Disinfectants / Disinfection By-Products</b>							
TTHM Total Trihalomethanes	N	44	27.9-46.6	ppb	N/A	80	By-Product of drinking water chlorination
Total Haloacetic acids (HAAs)	N	12	4.22 –17.9	ppb	N/A	60	By-Product of drinking water chlorination
Chloramines	N	2.5	1 – 3	ppm	4	4	Water additive used to control microbial growth

<b>Radioactive Contaminants</b>							
Combined Radium 226/228 04/02/2014	N	1.609	1.609-1.609	pCi/L	0	5	Erosion of natural deposits

<b>Lead and Copper</b>							
	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper 9/12/2017	1.3	1.3	0.11	0	ppm	N	Erosion of natural deposits, leaching from wood preservatives, corrosion of household plumbing systems
Lead 9/12/2017	0	15	4.4	1	ppb	N	Corrosion of household plumbing systems, erosion of natural deposits

<b>Turbidity</b>				
	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.151	N	Soil runoff
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff

<b>Total Organic Carbon</b>
The percentage of Total Organic Carbon (TOC) removal was measured each month and our system met all TOC requirements set.

## ALPHA EMITTERS

Sampling for alpha emitters is done to determine the radioactive of water. The EPA considers 15pCi/L to be a level of concern for alpha particles.

## LEAD

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 Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

#### TURBIDITY

Turbidity is the measure of cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

#### UNREGULATED CONTAMINANTS

A MCL for these contaminants has not been established by either state or federal regulation, nor do they have 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.

#### FLUORIDE

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l.

#### 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.

#### SOURCE WATER ASSESSMENT

The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please call an operator at the Water Treatment Plant at 618-392-3741. 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://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.