

Water Quality Report for Village of Nashville August 2017

This report covers the drinking water quality for the Village of Nashville for the calendar year 2016. This information is a snapshot of the quality of the water we provided to you in 2016. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

The water we supply you comes from three groundwater wells located on Sherman Street and Water Alley. The State of Michigan will be performing an assessment of our source water by 2017. We will inform you how to get a copy of this assessment report when it becomes available.

*** *Contaminants and their presence in water:***

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 the 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 at 1-800-426-4791**.

*** *Vulnerability of sub-populations:***

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 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 at 1-800-426-4791**.

*** *Sources of Drinking Water:***

The sources of drinking water (both tap water and bottled water) include: rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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 operations and wildlife.

*** *Inorganic contaminants***, such as salts and metals, which can be naturally-occurring or result from 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 agricultural and urban storm water run-off.

* **Radioactive Contaminants**, which may be naturally occurring or the result of oil and gas production and mining activities.

* **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 storm water runoff, and septic systems.

In order to ensure tap water is safe to drink, EPA prescribes 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 provide the same protection for public health.

Information about 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. Nashville 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 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>.

The attached table lists all drinking water contaminants that we detected during the 2016 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 - December 31, 2016. The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used in the table:

Maximum Contaminant Level Goal (MCLG) : The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

N/A: Not applicable

ND: Not detectable at testing limit

ppb: parts per billion or micrograms per liter

ppm: parts per million or milligrams per liter

pCi/l: Pico curies per liter (a measure of radiation)

Action level: The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which water systems must follow.

Maximum Residual Disinfectant Level(MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for the control of microbial contaminants.

Maximum Residual Disinfection Level Goal (MRDLG):The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Regulated Samples Collected from the Wells or Plant Tap						
Contaminant	Our Highest Water Results	MCL	MCLG	Date	Violation Yes or No	Likely Source of Contaminant
Fluoride (mg/l)	0.2	4	4	9/12/2016	No	Water additive which promotes strong teeth; Erosion of natural deposits.
Arsenic * (ug/l)	2	10	10	7/18/2011	No	Erosion of natural deposits; Runoff from orchards, and glass & electronics production waste.
Barium (mg/l)	0.132	2	2	2/23/2000	No	Erosion of natural deposits; Discharge of drilling waste, and from metal refineries.
Nitrate	1.2	10	10	9/12/2016	No	Erosion of natural deposits; Leaching of septic tanks, run off from fertilizer.
* These arsenic values are effective January 23, 2006. Until then, the MCL is 50 ppb and there is no MCLG.						
Radiological Contaminants Sampled from the Wells or Plant Tap						
Gross Alpha (IRP # 1 & # 2) pCi/l	-0.12	15	0	10/6/2016	No	Erosion of natural deposits from certain minerals that are radioactive.
Radium 226/228 (IRP # 1 & # 2) pCi/l	2.18	5	0	10/6/2016	No	Erosion of natural deposits.
** Unregulated Samples Collected from the Wells or Plant Tap						
Sodium (mg/l)	ND	NA	NA	9/12/2016	NA	Erosion of natural deposits.
Haloacetic Acids		NA	NA		NA	Byproduct of drinking water disinfection.
** Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.						
Regulated Samples Collected from the Distribution System						
Maximum Residual Disinfectant (Chlorine) Level (mg/l)	2.2	4	4	4/3/2016	No	Water additive used to control microbes.
Total Trihalomethanes (ug/l)	0.9	80	NA	9/16/2016	N/A	Byproduct of drinking water disinfection.*
Haloacetic Acids (ug/l)	9	60	NA	7/6/2016	N/A	Byproduct of drinking water disinfection.**
More Regulated Samples Collected from the Distribution System						
Contaminant	90th Percentile of Our Water	Action Level (AL)	# of sites over the Action Level (AL)	Date	Typical source of contaminant	
Lead (ug/l)	2	15	0	7/1/2011	Corrosion of Household plumbing;	
Copper (ug/l)	540	1300	0	7/1/2011	Erosion of natural deposits.	
Bacteriological Samples Collected from the Distribution System						
Contaminant	Our # Detected	MCL	MCLG	Violation Yes or No	Typical source of contaminant	
Total Coliform Bacteria	0	1 positive monthly sample (or 5% of monthly samples)	0	No	Naturally present in the environment.	
*Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.						
** Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer						