

**PWSID IN5240008**

**North Vernon Water Department**

**2021 CONSUMER CONFIDENCE REPORT**

**THE ANNUAL WATER QUALITY REPORT FOR JANUARY 1, 2020 TO DECEMBER 31, 2020**

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo, o hable con alguien que lo entienda bien.

This report is intended to provide you with important information about the quality of the drinking water and the efforts made by North Vernon Municipal Utilities to provide safe drinking water. If you have any questions or need more information about the contents of this report, please contact: William Spencer @ 812-346-2037. Alternatively, you can join us at our Utility Board Meetings, which are regularly held every 1<sup>st</sup> and 3<sup>rd</sup> Mondays at The Carnegie Government Center on 143 East Walnut Street, North Vernon at 6:00 P.M. We encourage you to participate and to give us your feedback.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, reservoirs, springs, ponds 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 human activity. The source of drinking water used by North Vernon Water Department is surface water taken from the Muscatatuck River & supplemented by Brush Creek Reservoir with the North Vernon Quarry as an intermediary reservoir.

**Contaminants that may be present in untreated source of water may include:**

**Microbial Contaminants:** such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural or livestock operations, and wildlife.

**Inorganic Contaminants:** are salts and metals, which can be naturally- occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, and mining or farming operations.

**Pesticides and Herbicides:** have a variety of sources, such as, agriculture, storm water runoff, or residential use.

**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 residential uses.

**Radioactive Contaminants:** which can be naturally- occurring or be the result of oil and gas production and mining activities

**Some of the terms and abbreviations used in this report are:**

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

**Avg. --** Regulatory compliance with some MCLs are based on running annual average of monthly or quarterly samples.

**LRAA:**-- Locational Running Annual Average, the average result for one of a number of sampling locations.

**MCL:**--Maximum Contaminant Level, the highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG:**--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.

**MRDL:**--Maximum Residual Disinfectant Level Goal, the highest level of disinfectant allowed in drinking water.

**ppm:** ---parts per million, a measure for concentration equivalent to milligrams per liter- or one ounce in 7,350 gallons of water.

**ppb:** ---parts per billion, a measure for concentration equivalent to micrograms per liter-or one ounce in 7,350,000 gallons of water.

**pCi/L:** ---picocuries per liter, a measure for radiation.

**Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.**

	Limit(Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.2 NTU	No	Soil runoff
Lowest monthly % meeting limit	0.3 NTU	100.00%	No	Soil runoff

**Inorganic Contaminants**

Contaminant	Collection Dates	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources
Fluoride	2020	0.4	0.254 - .42	4	4	ppm	No	Water additive which promotes strong teeth.
Nitrate (measured as Nitrogen)	2020	1	0 – 1.27	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Lead and Copper								
Collection Dates	Contaminant	AL (Action Level)	Units	90 <sup>th</sup> Percentile	MCLG	#Sites over AL	Violation	Likely Sources
2020	LEAD	15	ppb	3.12	0	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
2020	COPPER	1.3	ppm	0.159	1.3	0	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

**Special note on 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. Our system 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 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>.

Synthetic Organic Compounds								
Contaminant	Collection Dates	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources
Atrazine	2020	1.71	0 – 1.71	3	3	ppb	No	Herbicide runoff

If you would like to learn more about the improvements, issues, and efforts ongoing by your city water utility feel free to contact: William Spencer @ 812-346-2037 or Email: [nvwaterworks@gmail.com](mailto:nvwaterworks@gmail.com)

### Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 set guidelines with appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants which are available from the Safe Drinking Water Hotline at (800) 426-4791. Our water system is working with the community to increase awareness of better waste disposal practices to further protect the sources of our drinking water. We are also working with other agencies and with local watershed groups to educate the community on ways to keep our water safe. Please share this information with people who are new to the community or are non-billed customers so they may know the quality of water they drink.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants that may be present in the water provided by public drinking water systems. FDA regulations establish limits for contaminants that may be present in bottled water, which must provide the same level of protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants that may cause taste, color, or odor problems. The presence of this contaminant does not necessarily indicate that the water poses a health risk or that it is not suitable for drinking. More information about contaminants and their potential health risk can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

**Average MCL Disinfection Byproducts & Precursors**

(Not all sample results may have been used for calculating the Highest Level detected because some were a part of an evaluation to determine where sampling should occur in the future.)

Contaminant	Collection Dates	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources
Chlorine	Continually 2020	1	1 - 1	MRDL G=4	MRDL =4	ppm	No	Water additive used to control microbes.
Total Haloacetic Acids (HAA5)*	Quarterly 2020	78	48.7 - 102	no goal for total	60	ppb	Yes	By-product of drinking water disinfection
Total Trihalomethanes (TTHm)*	Quarterly 2020	83	46.7 - 113	no goal for total	80	ppb	No	By-product of drinking water disinfection

\*Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5). Drinking water containing these by-products in excess of the MCL may lead to adverse health.

**Violation Table**

**Haloacetic Acids (HAA5)\***

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Violation Type	Violation Began	Violation Ended	Violation Explanation:
MCL AVERAGE	07/01/2020	09/30/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	01/01/2020	03/31/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	04/01/2020	06/30/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

**Total Organic Carbon**

Total Organic Carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and Haloacetic Acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Violation Type	Violation Began	Violation Ended	Violation Explanation:
MCL AVERAGE	07/01/2020	09/30/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	04/01/2020	06/30/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	10/01/2020	12/31/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.