### **PWSID IN5240008**

# North Vernon Water Department 2013 CONSUMER CONFIDENCE REPORT THE ANNUAL WATER QUALITY REPORT FOR JANUARY 1, 2012 TO DECEMBER 31, 2012

Este informe contiene información muy importante sobre el agua que usted bebe. Traduzcalo, 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: Michael Hess @ 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 @ 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 <u>and</u> 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.

#### 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.

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. 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.

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 has 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.

North Vernon Water is continually striving to deliver water that is safe, affordable and there when you need it. We go to great lengths to insure the highest quality water possible. In addition to the data in this report, here are some stats that show how we stack up:

\*Our tap water is constantly checked for biological and chemical contaminants while bottled water is not.

\*Most brands of bottled water are essentially tap water. In the U.S., bottled water costs between \$0.25 and \$2 per bottle, while tap water costs less than \$0.01.

\*Drinking tap water will reduce the almost 1.5 million tons of plastic waste created each year by bottled water. As well as reducing greenhouse gas emissions, air pollution, and the fossil fuel consumption required to transport bottled water.

\*sources Wikipedia Mother Nature Network and U.S. FDA

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

*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.

Regulated Contaminants Detected									
Contaminant	Collection Dates	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources.	
Fluoride	2012	1.2	.2 – 1.2	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Barium	2012	.0308	003	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits	

## **Radioactive Contaminants**

Radioactive Contaminants	Collection Dates	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources.
Beta / Photon	2/17/09	2	2 - 2	0	4	mrem/	No	Decay of natural and man-made
						yr		deposits
Gross alpha excluding radon and uranium	2/17/09	0.6	.6 – .6	0	15	pCi/L	No	Erosion of natural deposits
Uranium	2/17/09	0.7	.77	0	30	ppb	No	Erosion of natural deposits

## **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

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 2012	2.2	.9 – 2.2	MRDL G=4	MRDL =4	ppm	No	Water additive used to control microbes.	
Total Haloacetic Acids (HAA5)*	February, May, August, and November 2012	51	16 – 51	no goal for total	60	ppb	No	By-product of drinking water disinfection	
Total Trihalomethan es (TThm)*	February, May, August, and November 2012	63	29 -75	no goal for total	80	ppb	No	By-product of drinking water disinfection	

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

#### **Lead and Copper Definitions:**

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. *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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Lead and Copper									
Collection Dates	Contaminant	AL (Action Level)	Units	90 <sup>th</sup> Percentile	MCLG	#Sites over AL	Violation	Likely Sources.	
August 2011	LEAD	15	ppb	4.4	0	1	No	Corrosion of household plumbing systems; Erosion of natural deposits	
August 2011	COPPER	1.3	ppm	.096	1.3	0	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems	

Turbidity									
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 Level Detected Violation Likely Source of Contamination									
	Technique)								
Highest single measurement	1 NTU	.23 NTU	No	Soil runoff					
Lowest monthly % meeting limit 0.3 NTU		100%	No	Soil runoff					