

City of Vermilion 2017

Drinking Water Consumer Confidence Report

The Vermilion Water Dept. has prepared the following report to provide you, the consumer, information on the quality of our drinking water. Included within this report is general health information, water quality test results and information on how you can participate in decisions concerning your drinking water. This report is also available online at: www.vermilion.net “Your drinking water has met all Ohio EPA Standards”

Water Source

The Vermilion Water Plant draws its drinking water from Lake Erie and, if necessary, we can draw water from the Vermilion River. Also, we have emergency connections with the City of Lorain Water Dept. and the Erie County Water Dept.

Water Source Assessment

The Ohio EPA performed an assessment of our water source. Surface waters are, by their nature, susceptible to contamination and there are numerous potential contamination sources, including agricultural runoff, oil/gas wells, inadequate septic systems, leaking underground storage tanks and road and rail crossings. As a result, the surface water supplied to the water plant is considered to have a high susceptibility to contamination. For more detailed information or to obtain a copy of this report call: **Water Plant Superintendent Eugene Baker at: 440-204-2450**

What Are Sources Of Contamination To Drinking Water

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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses; (D) 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; (E) 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, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same 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 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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Who Needs To Take Special Precautions?

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 infection. 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).

About Your Drinking Water

The EPA requires regular sampling to ensure drinking water safety. During 2016 the City of Vermilion Water Dept. collected over 200 samples testing for over 50 different contaminants of which most were not detected. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, may be more than one year old.

2017 Monitoring & Reporting Violations & Enforcement Actions

Drinking Water Notices

Reporting requirements were not met for the City of Vermilion PWS during September 2017.

A September 2017 source water sample for turbidity was not reported by the deadline as established by rule. We are required to collect this sample to determine if additional water treatment at the Vermilion Water Treatment Plant is needed. Although this incident is not an emergency, as our customers, you have a right to know what happened and what we are doing to correct this situation.

What Should I Do? There is nothing you need to do at this time. You do not need to boil your water or take other corrective action.

What is being done? Upon being notified of this violation, the water City of Vermilion Water Dept. was directed to report the turbidity value for September 2017 source water sample and to take steps to ensure that adequate reporting will be performed in the future.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information contact Eugene Baker: office: 440-204-2450 or cell: 440-320-4490 By mail: Vermilion Utility Dept. 5511 Liberty Ave., Vermilion, OH 44089

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. The Vermilion Water plant 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.**

How Do I Participate In Decisions Concerning My Drinking Water?

Public participation and comments are encouraged at meetings of the Vermilion City Council which meets on the 1st and 3rd Monday of the month at 7:00 p.m.

Council meets at: **685 Decatur Street, Vermilion, Ohio 44089.** For more info contact Water Plant Superintendent Eugene Baker at: **204-2450.**

Listed Below Is Information On Those Contaminants That Were Found In The City Of Vermilion Drinking Water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Microbial Contaminants							
Turbidity (NTU)	NA	TT	0.29	0.04-0.29	No	2017	Soil Runoff
Turbidity (% meeting the 0.3 Std)	NA	TT	100	100	No	2017	Soil Runoff
Total Organic Carbon (Compliance Value)	NA	TT	1.53	1.26-2.13	No	2017	Naturally present in the environment
Inorganic Contaminants							
Fluoride (mg/L)	4	4	1.04	0.25-1.26	No	2017	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Barium (mg/L)	2	2	0.016	0.016	No	2017	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Nitrate (mg/L)	10	10	1.33	<0.10-1.33	No	2017	Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits
Residual Disinfectants							
Total Chlorine (mg/L)	MRDL=4	MRDLG=4	1.46	1.10-1.60	No	2017	Water additive used to control microbes
Disinfection Byproducts							
Total THM's (ug/L)	0	80	63.3	18.5-103.1	No	2017	By-product of drinking water chlorination
HAA5's (ug/L)	0	60	30.4	7-45	No	2017	By-product of drinking water chlorination
Synthetic Organic Chemicals							
Atrazine (ug/L)	3	3	0.40	0.40	No	2017	Runoff from herbicide use on crops
Simazine (ug/L)	4	4	0.56	0.56	No	2017	Herbicide runoff
Unregulated Contaminants Sampled in 2015 UCMR3 (Unregulated Contaminants Monitoring Rule Round Three)*							
*Unregulated contaminants monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.							
Name (units)	Average Result	Range					
		Low	High				
Chromium (ug/L)	0.31	0.27	0.35				
Molybdenum (ug/L)	1.6	1.3	1.7				
Strontium (ug/L)	193	150	260				
Valadium (ug/L)	0.25	0.21	0.33				
Chlorate (ug/L)	40.8	40.6	41.0				
Chromium Hex. (ug/L)	0.006	0.043	0.072				
Lead and Copper							
Contaminant (units)	Action Level (AL)	Individual results over the AL	90% of the test levels were below	Range	Violation		
Lead (ug/L)	15	24	6.5	ND-24	No	2015-2016	Corrosion of household plumbing systems; Erosion of natural deposits
1 out of 51 samples was found to have a lead level in excess of the lead action level of 15 ug/L.							
Copper (mg/L)	1.3	0	0.12	<10-.130	No	2015-2016	Corrosion of household plumbing systems; Erosion of natural deposits
1 out of 51 samples was found to have a copper level in excess of the copper action level of 1300 ug/L.							

Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 5 NTU at any time. As reported above, the Vermilion Water Plant's highest recorded turbidity result for 2017 was 0.29 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100 %. All samples were under the Ohio EPA limit for turbidity.

Definitions of some terms contained within this report.

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Contaminant Level (MCL): 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.

Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter ($\mu\text{g/L}$) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of 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.

Maximum Residual Disinfectant Level (MRDL): 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.

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): A required process intended to reduce the level of a contaminant in drinking water.

The "<" symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Picocuries per liter (pCi/L): A common measure of radioactivity.

In 2017 The Vermilion water dept. had a conditioned license to operate our public water system. The conditions require us to address ongoing violations. For more information on these violations, contact: **Water Plant Superintendent, Eugene Baker at 440-204-2450**