

City of Vermilion 2019

Drinking Water Consumer Confidence Report

“Your Drinking Water Has Met All of The Ohio EPA Standards”.

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.cityofvermilion.com/consumer-confidence-report

Water Source

The Vermilion Water Plant draws its drinking water from Lake Erie. 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. These connections are used for emergencies and planned maintenance. In 2019 these connections were used occasionally while making system repairs. This report does not contain information on the water quality received from Lorain Water Dept. and the Erie County Water Dept., but a copy of their consumer confidence report can be obtained by going to:

Lorain Water Dept. website: cityoflorain.org
Erie County Water Dept. website: eriecounty.oh.gov

Water Source Assessment Susceptibility Analysis

The Ohio EPA performed a risk assessment of our water source. For the purposes of source water assessments, all surface waters are susceptible to contamination. By their nature surface waters are accessible and can be readily contaminated by chemicals and pathogens with relatively short travel times from source to intake. The source water assessment for the City of Vermilion Public Water System indicates that the Lake Erie source water is susceptible to potential future contamination. Based on information compiled for this assessment, the City of Vermilion Public Water System drinking water protection area is susceptible to contamination from municipal wastewater treatment discharges, industrial waste water discharges, air contamination deposition, runoff from residential and urban areas, contaminated river sediments, and accidental releases and spills from vehicular traffic as well as from commercial shipping operations and recreational boating. For more detailed information or to obtain a copy of this report call:

Water Plant Superintendent Eugene Baker at: office: 440-204-2450 Cell: 440-320-4490

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 by calling:

EPA Safe Drinking Water Hotline (1-800-426-4791)

About Your Drinking Water

The EPA requires regular sampling to ensure drinking water safety. During 2019 the City of Vermilion Water Dept. collected over 200 samples and tested for over 50 different contaminants including: bacteria, inorganic chemicals, synthetic organic chemicals, volatile organic chemicals, and lead and copper. Most of these contaminants were not detected. Those that were detected were within the limits set by the EPA. 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.

2019 Monitoring & Reporting Violations & Enforcement Actions and Drinking Water Notices

We are required to monitor your drinking water for specific contaminants on a regular basis. The results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the week of September 8, 2019 through September 21 we did not monitor for or report the results for the presence of Cyanobacteria, as required by the Ohio EPA, and therefore cannot be sure of the quality of our drinking water during that time.

What Should I do?

You do not need to take any action in response to this notice.

What is Being Done?

The City of Vermilion Water Dept. will take steps to ensure that adequate monitoring will be performed in the future. Regular sampling was resumed on September 24, 2019.

"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."

Additional Information May Be Obtained By Contacting:

Water Plant Superintendent Eugene Baker at: Office: 440-204-2450 Cell: 440-320-4490
Vermilion Water Dept., 5511 Liberty Ave., Vermilion, OH, 44089

On the following page is a table containing information regarding the contaminants that were found in the City of Vermilion's drinking water.

All levels found were within the standards established by the Ohio and U.S. EPA.

2019 CCR Table of Contaminants for City of Vermilion's drinking water.

| Contaminants (Units) | MCLG | MCL | Level Found | Range of Detect | Violation | Sample Year | Typical Source of Contaminants |
|--|-------------------|--------------------------------|-----------------------------------|-----------------|-----------|-------------|---|
| Microbial Contaminants | | | | | | | |
| Turbidity (NTU) | NA | TT | 0.25 | 0.04-0.25 | No | 2019 | Soil Runoff |
| Turbidity (% meeting the 0.3 Std) | NA | TT | 100 | 100 | No | 2019 | Soil Runoff |
| Total Organic Carbon (Compliance Value) | NA | TT | 1.72 | 1.29-2.20 | No | 2019 | Naturally present in the environment |
| Inorganic Contaminants | | | | | | | |
| Fluoride (mg/L) | 4 | 4 | 1.07 | 0.72-1.40 | No | 2019 | Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Barium (mg/L) | 2 | 2 | 0.018 | 0.018 | No | 2019 | Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits |
| Nitrate (mg/L) | 10 | 10 | 1.35 | <0.10-1.35 | No | 2019 | Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits |
| Residual Disinfectants | | | | | | | |
| Total Chlorine (mg/L) | MRDL=4 | MRDLG=4 | 1.49 | 1.1-1.6 | No | 2019 | Water additive used to control microbes |
| Disinfection Byproducts | | | | | | | |
| Total THM's (ug/L) | N/A | 80 | 69.8 | 26.0-88.2 | No | 2019 | By-product of drinking water chlorination |
| HAA5's (ug/L) | N/A | 60 | 32.8 | 13.1-39.9 | No | 2019 | By-product of drinking water chlorination |
| 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 | 62 | <2 | <2.0-62 | No | 2019 | Corrosion of household plumbing systems; Erosion of natural deposits |
| 1 out of 31 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 | 0.052 | 0.012-0.130 | No | 2019 | Corrosion of household plumbing systems; Erosion of natural deposits |
| 0 out of 31 samples was found to have a copper level in excess of the copper action level of 1.3 mg/L. | | | | | | | |

Unregulated Contaminant Monitoring Rule Round 4 Sampling (UCMR4)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2019 the City of Vermilion Water Dept. participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4).

| Contaminants listed in parts per billion (ppb or ug/L) | Sample Year | Average Level Found | Range of Detections | Sample Location |
|---|-------------|---------------------|---------------------|---|
| Haloacetic Acid 5's (HAA5's) | 2019 | 17.80 | 7.55-36.10 | Various Points in the Distribution System |
| Haloacetic Acid 6's (HAA6's) | 2019 | 9.04 | 4.88-14.00 | |
| Haloacetic Acid 9' (HAA9's) | 2019 | 25.95 | 14.01-47.70 | |
| 1-Butanol | 2019 | 1.22 | N/D-2.52 | Entry to Distribution First Tap |
| Manganese 55 | 2019 | 0.80 | N/D-2.01 | |
| Bromide | 2019 | 25.45 | 23.50-27.10 | |
| Total Organic Carbon (TOC's) in parts per million (ppm or mg/L) | 2019 | 3.46 | 2.80-5.12 | |

Note: Under the Public Notice Rule, a PWS participating in UCMR4 sampling must make available all the unregulated contaminant monitoring results whether or not contaminants are detected. For a copy of the results please call:

Eugene Baker at: Office: 440-204-2450 Cell: 440-320-4490

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 1 NTU at any time. As reported above, the Vermilion Water Plant's highest recorded turbidity result for 2019 was 0.25 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%. All samples were under the Ohio EPA limit for turbidity.

Lead Educational Information

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 City of Vermilion Water Dept. 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>.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

TOC Results: The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between percent of TOC removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.

Definitions of Terms Used in 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.

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.

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.

N/A: Not applicable.

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.

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 (ug/L): are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

PWS: Public Water System.

In 2019 The Vermilion Water Dept. had a conditioned license to operate our public water system. The conditions require us to address ongoing violations. All of those deficiencies have been corrected and The City of Vermilion was issued an unconditional license to operate for 2020. For more information on these violations, contact:

Water Plant Superintendent Eugene Baker at: Office: 440-204-2450 Cell: 440-320-4490

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: Office: 440-204-2450 Cell: 440-320-4490