

*This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide a safe, clean, and reliable supply of drinking water. We want to assure you that we will continue to monitor, improve, and protect the water system and deliver a high quality product. 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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).*

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 may 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, (sewage plants, septic systems, livestock operations, or wildlife); Inorganic contaminants, such as salts and metals, (naturally occurring or from storm water runoff, wastewater discharges, oil and gas production, mining, or farming); Pesticides and herbicides storm water runoff, (agriculture or residential uses); Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production or from gas stations, storm water runoff, or septic systems); and Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 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 (800-426-4791).



***The Electric Plant Board of the City of Vanceburg is located at 191 Front Street in Vanceburg, Kentucky. Questions and inquiries are welcomed.***

#### ADDITIONAL INFORMATION

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers.

We at the Electric Plant Board of the City of Vanceburg work diligently to provide top quality water to every tap. Our water operators are highly trained, tested and certified by the State of Kentucky. The Board's licensed operator, who has 14 years experience in the water treatment profession, asks that all customers help us protect our water resources, which are the heart of our community, our way of life, and our children's future.

A copy of this report is available at the Electric Plant Board of the City of Vanceburg's administrative office and will be mailed upon request or by visiting our website at: <http://www.epb-vanceburg.com>



# WATER QUALITY REPORT FOR YEAR 2023



[www.EPB-Vanceburg.com](http://www.EPB-Vanceburg.com)

Water System ID: KY-0680438  
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Meeting Location & Time: ***Electric Plant Board  
Administrative Office on  
the Second Tuesday of  
Each Month at 6:00 p.m.***



The data in the report is from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by the EPA, the State has reduced monitoring requirements for certain contaminants to less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Unless otherwise noted, the report level is the highest level detected.

### Inorganic Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Sample Date	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2.0	2.0	0.059	0.059 to 0.06	August 2021	No	Drilling wastes; Metal refineries; Erosion of natural deposits
Chromium [1020] (ppb)	100	100	0.50	0.5 to 0.5	August 2021	No	Discharge from steel and pulp mills, Erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.682 (90 <sup>th</sup> Percentile)	0.035 to 1.4	June 2021	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10.0	10.0	2.72	2.72 to 2.72	Sept. 2023	No	Fertilizer runoff, leaching from septic tanks, sewage; erosion of natural deposits
Fluoride [1025] (ppm)	4.0	4.0	0.8	0.79 to 0.8	March 2023	No	Water additive which promotes strong teeth
Lead [1030] (ppb) Sites Exceeding Action Level 0	15.0	0	0	0 to 0	June 2021	No	Corrosion of household plumbing systems

### Disinfectants/Disinfection Byproducts and Precursors

Chlorine (ppm)	MRDL = 4	MRDL = 4	0.94 (highest average)	0.42 to 1.37	2023	No	Water additive used to control microbes.
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	6 (high site average)	3 to 6 (individual site range)	August 2023	No	Byproduct of drinking water disinfection.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	2 (high site average)	1 to 2 (individual site range)	August 2023	No	Byproduct of drinking water disinfection

#### 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. Your local public water 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 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>.



Electric Plant Board's water supply comes from a ground water source and draws from four wells within the Ohio River Alluvium, located 3 miles east of Vanceburg in the community of Black Oak. The following is a summary of the system's source of water assessment and its availability and susceptibility to contamination, which is part of the completed Source Water Plan (SWAP). The completed plan is available for inspection at the Electric Plant Board Office. An analysis of the overall susceptibility to contamination of the Vanceburg Utilities' water supply indicated that this susceptibility is moderate. There are a total of 127 potential sources of contamination within the wellhead protection area following susceptibility rankings: 7 high, 120 medium, and 0 low. Sources of high potential impact include: Highway 8, agricultural land use, underground storage tanks, above ground storage tanks, and a railroad. Sources of moderate potential impact include: septic systems, wastewater package plants, and above ground storage tanks. This is a summary of the susceptibility analysis. The complete Susceptibility Analysis Report is available at the Buffalo Trace Area Development District and at the Division of Water.

Some or all of these definitions may be found in this report:

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

**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 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 a 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.

**Below Detection Levels (BDL)** - laboratory analysis indicates that the contaminant is not present.

**Not Applicable (N/A)** - does not apply.

**Parts per million (ppm)** - or milligrams per liter, (mg/l) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb)** - or micrograms per liter, (µg/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per trillion (ppt)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Parts per quadrillion (ppq)** - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

**Picocuries per liter (pCi/L)** - a measure of the radioactivity in water.

**Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL)** - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

**Nephelometric Turbidity Unit (NTU)** - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

**Variances & Exemptions (V&E)** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

**Treatment Technique (TT)** - a required process intended to reduce the level of a contaminant in drinking water.