

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, ($\mu\text{g}/\text{l}$). 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.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber.

Tradúzcalo o hable con alguien que lo entienda bien.



Eddyville Water Department Water Quality Report 2018

To request a paper copy call (270) 388-2226.

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Meeting location and time:

Eddyville City Hall – 153 West Main Street

First Monday each month at 6:00 PM

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 that we will continue to monitor, improve, and protect the water system and deliver a high quality product.

The Eddyville Water Department treats a mixture of groundwater from wells and surface water from Lake Barkley. A Source Water Assessment Plan has been developed by the Pennyriple Area Development District and a summary of the report follows. An analysis of the overall susceptibility to contamination of the water source for Eddyville indicates that potential impacts range from low to high. The analysis indicates that there are thirty-one potential contaminant sites with the possibility of contaminating the water supply within the watershed. Sources of high potential impact include underground storage tank facilities, hazardous materials transfer and storage, three marinas and docks, landfills, and roads, bridges and highways which pose a risk due to the possibility of hazardous materials entering the water supply from traffic accidents, spills, and illegal dumping. Sources of medium to low threats include failing septic systems, small scale wastewater treatment facilities, and farm operations. The complete Source Water Assessment Plan is available for review during normal business hours at the Eddyville City Hall at 153 West Main Street.

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 stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater 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, stormwater runoff, or septic systems). 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. 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 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).

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>.



The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often 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. Copies of this report are available upon request by contacting our office during business hours.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.29	100	No	Soil runoff

Regulated Contaminant Test Results Eddyville Water Department

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2	2	0.017	0.017 to 0.017	Feb-18	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.0572 (90 th percentile)	0.0043 to 0.138	Jul-16	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	0.50	0.5 to 0.5	Feb-18	No	Water additive which promotes strong teeth
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	0 (90 th percentile)	0 to 4	Jul-16	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	0.618	0.618 to 0.618	Oct-18	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Tetrachloroethylene [2987] (ppb)	5	0	0.225	0 to 0.9	May-18	No	Leaching from PVC pipes; discharge from factories and dry cleaners
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	2.13 (lowest average)	1.00 to 5.07 (monthly ratios)	2018	No	Naturally present in environment.

*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.

Chlorine (ppm)	MRDL = 4	MRDLG = 4	2.12 (highest average)	1.36 to 2.85	2018	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	55 (high site average)	8 to 58 (range of individual sites)	2018	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	72 (high site average)	14 to 75 (range of individual sites)	2018	No	Byproduct of drinking water disinfection.

Unregulated Contaminants (UCMR 4)	average	range (ppb)	date
Manganese	2.200	1 to 3.6	Jul-18
HAA5	20.743	8.2 to 39.474	Oct-18
HAA6Br	16.818	8.8 to 24.6	Oct-18
HAA9	34.750	15.9 to 55.617	Oct-18

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those that EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact our office during normal business hours.

	Average	Range of Detection
Fluoride (added for dental health)	0.8	0.2 to 1.17
Sodium (EPA guidance level = 20 mg/L)	7.5	7.51 to 7.51

Secondary contaminants do not have a direct impact on the health of consumers. They are being included to provide additional information about the quality of the water.

Secondary Contaminant	Maximum Allowable Level	Report Level	Range of Detection	Date of Sample
Aluminum	0.05 to 0.2 mg/l	0.07	0.07 to 0.07	Feb-18
Chloride	250 mg/l	19.6	19.6 to 19.6	Feb-18
Corrosivity	Noncorrosive	0.166	0.166 to 0.166	Feb-18
Fluoride	2.0 mg/l	0.6	0.6 to 0.6	Feb-18
pH	6.5 to 8.5	8.31	8.31 to 8.31	Feb-18
Sulfate	250 mg/l	20.8	20.8 to 20.8	Feb-18
Total Dissolved Solids	500 mg/l	90	90 to 90	Feb-18

2017 CCR Violation

We received a violation because the on-line version of our 2017 CCR was incorrect and did not match what was submitted to Division of Water.

Last year the hard copy Water Quality Report (CCR) provided to individuals and posted in the community was correct, as well as the hard copy submitted to Division of Water. However, when the report was being posted to a website an incorrect detection table was inadvertently included in the report. The on-line version of the 2017 Water Quality Report has been revised and reposted to the original site of:

www.krwa.org/2017ccr/eddyville.pdf

There were no violations required within the 2017 CCR and all detections were below the MCL. The error occurred when an incorrect detection table was inserted into the on-line version. Corrected documents and certifications have been submitted to Division of Water. We have taken steps to assure that this error will not occur in the future.