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.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

Edmonson Co. Water District Water Quality Report 2024

For previous reports include year.
Example: tapwaterinfo.com/2023/edmonsoncounty

Water System ID: KY0310114
Manager: Kevin Shaw
CCR Contact: Steffan Meredith
Phone: 270-246-0357

Mailing address:
P.O. Box 208
Brownsville, KY 42210

Meeting location and time:
Water District Office – 1128 Hwy 295 N
2nd and 4th Tuesday each month at 8:30 AM

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). 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.

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

Source Information:

Edmonson Co. Water District treats surface water from the Green River at the Brownsville treatment plant "A" and from Nolin Reservoir at the Wax treatment plant "B". Source Water Assessment Plans have been developed for both sources of water. An analysis of the overall susceptibility to contamination for these sources indicates that this susceptibility is generally moderate. Areas of high concern consist of underground storage tanks, agricultural activities, bridges, culverts, and transportation corridors, oil and gas production facilities, and landfills The complete Source Water Assessment Plan is available for review at the Edmonson County Water District office during normal business hours.

We purchased supplemental water for the Peonia area from Grayson County Water District, which purchases a portion of its water from Leitchfield Utilities. Both systems treat surface water from Rough River Lake. A Source Water Assessment indicates a moderate overall susceptibility ranking. However, areas of high susceptibility consist of row crops which provide the potential for run-off of herbicides, pesticides, and other chemicals accidentally spilling into the water source. The complete report is available at the Grayson County Water Treatment Plant, 517 Waterside Dr, Falls of Rough, KY.

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:

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 water system is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact your local water system. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

Service Line Inventory Information:

To address lead in drinking water, EPA requires that all community water systems develop and maintain an inventory of service line materials. We have completed a service line inventory (SLI) and it is available for review at our office.

Lead Sample Results Availability Information:

We are required to periodically sample water from customer taps to determine lead and copper levels. EPA sets the lead action level at 0.015 mg/L (15 ppb). For a water system to be in compliance, at least 90% of tap water samples must have lead levels below this limit. This report contains the 90th percentile and range of our most recent sampling. The individual results for each location sampled can be reviewed at our office.

We are only required to test for some contaminants periodically, so the results listed in this report may not be from the previous year. Only detected contaminants are included in this report. For a list of all contaminants we test for please contact us. Copies of this report are available upon request by contacting our office.

Regulated Contaminant Test Results - Brownsville Plant (B); Wax Plant (W); Grayson Co. (G); Leitchfield (L)							
Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2	2	B W L G	0.025 0.029 0.03 0.032	0.025 to 0.025 0.029 to 0.029 0.03 to 0.03 0.032 to 0.032	2024	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	B W L G	0.5 1.16 0.71 0.65	0.5 to 0.5 1.16 to 1.16 0.71 to 0.71 0.65 to 0.65	2024	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	B W G	1.16 2.96 0.363	1.16 to 1.16 2.96 to 2.96 0.363 to 0.363	2024	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
2,4-D [2105] (ppb)	70	70	G	BDL	BDL to 0.71	2024	No	Runoff from herbicide used on row crops
Atrazine [2050] (ppb)	3	3	W	0.4	0.4 to 0.4	2024	No	Runoff from herbicide used on row crops
Disinfectants/Disinfection Byproducts and Precursors								
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	B W L G	1.80 1.53 1.82 1.86	1.38 to 2.46 0.61 to 3.00 0.88 to 3.01 1.52 to 2.49	2024	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		1.40 (highest average)	0.34 to 2.20	2024	No	Water additive used to control microbes.
Chlorite (ppm)	1	0.8	G	0.570 (average)	0.02 to 0.75	2024	No	Byproduct of drinking water disinfection.
Chlorine dioxide (ppb)	MRDL = 800	MRDLG = 800	G	410	0 to 410	2024	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A		43 (average)	16 to 43 (range of individual sites)	2024	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A		63 (average)	21 to 68 (range of individual sites)	2024	No	Byproduct of drinking water disinfection.
Other Constituents								
Turbidity (NTU) TT * Representative samples	Allowable Levels		Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity	
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU Less than 0.3 NTU in 95% monthly samples		B W L G	1 9.7 0.1 0.26	80 92 100 100	YES YES No No	Soil runoff	

Household Plumbing Contaminants							
Copper (ppm) Round 1 sites exceeding action level 0	AL = 1.3	1.3	0.116 (90^{th} percentile)	0.003 to 0.206	2023	No	Corrosion of household plumbing systems
Lead (ppb) Round 1 sites exceeding action level 1	AL = 15	0	5 (90^{th} percentile)	0 to 47	2023	No	Corrosion of household plumbing systems

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.

Violations – 2024-9953663; 2024-9953664; 2024-9953666 Heavy rains and raw water temperatures during January 2024 caused treatment problems at both plants and turbidity levels were exceeded. A change in coagulants and treatment modifications were made. The problem was resolved. Public notices were distributed for these violations. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Violation 2024-9953667 Each month we are required to complete a Monthly Operation Report (MOR) and submit it to the Kentucky Division of Water by the tenth of the following month. This report includes daily testing results. We failed to collect and report all required minimum daily chlorine residual samples throughout the distribution system. This has been resolved and we have established procedures to avoid similar violations. There is nothing you need to do.

Violations 2024-9953662; 2024-9953668; 2024-9953670; 2024-9953671 Cryptosporidium is a disease-causing microorganism that was found in our raw water source during a series of sampling a few years ago. It was found in our source water. It was not detected in the finished water. Based on this study, our water system was required to maintain a specified level of additional treatment to address Cryptosporidium. Nephelometric Turbidity Unit (NTU) is a measure of the clarity of water. Due to Cryptosporidium being found in our source water we were required to maintain 0.15 NTU instead of the previously required 0.3 NTU. During 2024 our system fell below this level at our treatment plants. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Treatment modifications have been made and plans are being discussed for new treatment plant construction. Public notices were distributed for these violations.

Violation 2024–9953665 Our water system violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During January 2024, we did not complete all monitoring by failing to report or correctly report testing for turbidity. Therefore, we could not verify the quality of your drinking water to the primacy agency during that time.

Each month we are required to complete a Monthly Operation Report (MOR) and submit it to the Kentucky Division of Water by the tenth of the following month. This report includes daily testing results. We failed to collect and report the number of required turbidity samples at the Wax treatment plant, 165 samples reported of 175 required for the January 2024 monitoring period. We have established procedures to avoid similar violations. There is nothing you need to do. For more information, please contact Kevin Shaw at 270-597-2165 or P.O. Box 208, Brownsville, KY 42210.

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.