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.

To request a paper copy call (270) 597-2165.

Edmonson Co. Water District 2018 Water Quality Report

(Monitoring and testing performed during 2017)

Water System ID: KY0310114
Manager: Tony Sanders
270-597-2165
CCR Contact: Tim Brewster
270-597-3591

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

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

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.

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.

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.

Quality On Tap!
Our Commitment Our Profession

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.

	Allowable Levels	Source	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% monthly samples	A= B=	0.26 0.29	100	No	Soil runoff

Regulated Contaminant Test Results - A = Brownsville Treatment Plant; B = Wax Treatment Plant; D= Distribution

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2	2	A= B=	0.02 0.02	0.02 to 0.02 0.02 to 0.02	2017	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	D=	0.050 (90^{th} percentile)	0 to 0.2	2017	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	A= B=	0.8 0.8	0.8 to 0.8 0.8 to 0.8	2017	No	Water additive which promotes strong teeth
Lead [1030] (ppb) sites exceeding action level 1	AL = 15	0	D=	2 (90^{th} percentile)	0 to 73	2017	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	A= B=	1.8 3.1	1.8 to 1.8 3.1 to 3.1	2017	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	A= B=	1.36 1.45	0.63 to 3 0.55 to 2.87	2017	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	D=	1.24 (highest average)	0.22 to 2.14	2017	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	D=	52 (average)	11 to 68 (range of individual sites)	2017	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	D=	50 (average)	19 to 66 (range of individual sites)	2017	No	Byproduct of drinking water disinfection.

Violations

Our water system violated drinking water requirements . Even though these were not emergencies, as our customers, you have a right to know what happened and what we are doing (did) to correct these situations.

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 1/1/2015 – 12/31/2016 we did not complete all monitoring or testing for Atrazine, Dalapon, and E.coli and therefore cannot be sure of the quality of your drinking water during that time.

Listed below are the violations and actions taken:

2017-9953642 Atrazine – Test results for Atrazine for treatment plant B were not submitted properly to Division of Water during the period 1/1/2016 – 12/31/2016. All results have been submitted and we are currently scheduled to monitor for Atrazine at plant B once per year during the third quarter.

2017-9953643 & 2017-9953644 & 2017-9953645 Dalapon – We failed to monitor and submit results for Dalapon for treatment plant A during the time periods 10/1/2015-12/31/2015 and 1/1/2016–3/31/2016 and 10/1/2016-12/31/2016. We should have been monitoring quarterly during those time periods. We are currently scheduled to monitor for Dalapon at treatment plant A once per year during the third quarter.

2017-9953646 & 2017-9953647 LT2 E.coli – We failed to submit E.coli data for plants A & B 1/1/2015 – 1/31/2015
2017-9953650 LT2 E.coli – We failed to conduct E.coli monitoring at plants A and B 7/1/2017 – 7/31/2017
We contracted with a lab to provide analytical and reporting requirements for LT2 which includes Crypotosporidium, E.coli, and turbidity. Even though the lab tested for Cryptosporidium and turbidity they failed to test for E.coli. The Division of Water has rejected the test results and has required us to begin monitoring again and test for all of the components of the LT2 monitoring. We have initiated another round of LT2 monitoring.

There is nothing you need to do at this time. For more information, please contact Tony Sanders 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.

2017-9953648 CCR – The 2015 & 2016 CCRs had numerous problems. We reported the twice monthly fluoride results collected for the Dental Health Program but the Division of Water requires the fluoride result from the inorganics sample collected only once per year. If we choose to report the dental health fluoride it must be not be in the main CCR table. We reported chlorine values based upon daily tests at the treatment plant rather than from the bacteriological samples we collected in the distribution system. The ranges for our disinfection byproducts were incorrect and we did not list all of the violations we had received. To help prevent similar issues and violations we have asked for assistance from Kentucky Rural Water Association to track our monitoring and prepare CCRs and other documents for us.