

2022 Consumer Confidence Report for Public Water System MACEDONIA EYLAU MUD 1

This is your water quality report for January 1 to December 31, 2022

MACEDONIA EYLAU MUD 1 provides surface water from Lake Wright Patman located in Bowie County, TX and Lake Millwood located in Miller County, AR.

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Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (903)832 -1691.

Definitions and Abbreviations

Definitions and Abbreviations

The following tables contain scientific terms and measures, some of which may require explanation.

Action Level:

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Avg:

Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment:

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment:

A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level or 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 or 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 or 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 or 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.

MFL

million fibers per liter (a measure of asbestos)

mrem:

millirems per year (a measure of radiation absorbed by the body)

na:

not applicable.

NTU

nephelometric turbidity units (a measure of turbidity)

pCi/L

picocuries per liter (a measure of radioactivity)

Definitions and Abbreviations

ppb	micrograms per liter or parts per billion
ppm	milligrams per liter or parts per million
ppq	parts per quadrillion, or picograms per liter (pg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Information about your 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.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 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.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 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.
- 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, EPA 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.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

Microbiological Contaminants

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Contaminant	Highest Monthly % Positive Samples	MCL	Unit of Measure	Source of Contaminant
Total Coliform Bacteria	0.00%	Presence of coliform bacteria in 5% of monthly samples	Presence	Naturally present in the environment

Turbidity

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfection process.

Contaminant	Location	Highest Single Measurement	Highest Monthly Average Monthly Limits	Unit of Measure	Violation	Source of Contaminant
Turbidity	Wright Patman	0.29	100%	50.3 in 95% of sample	NTU	Soil runoff
	Millwood	0.30	100%			

Total Organic Carbon (TOC)

The percentage of Total Organic Carbon (TOC) removal was measured monthly in 2021 and TWU met all TOC removal requirements set by USEPA.

Inorganic Contaminants

Contaminant	Location	Average Level Detected	Range of Detected	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
Nitrate (as Nitrogen)	Macedonia-EylauMuniciple Utility District	0.02	0-0.02	10	10	ppm	N	Runoff from fertilizer use; leakage from septic tanks, sewage; erosion of natural deposits
Barium	Wright Patman	0.054	0-0.054	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
	Millwood	0.0098	0 - 0.0098					
Fluoride	Wright Patman	0.0451	0-0.0451	4	4	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
	Millwood	0.0185	0-0.0185					
Nitrate (as Nitrogen)	Macedonia-EylauMuniciple Utility District	0	0-0	10	10	ppm	N	Runoff from fertilizer use; leakage from septic tanks, sewage; erosion of natural deposits

Synthetic Organic Contaminants

Contaminant	Location	Level Detected	Range of Detected	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
Atrazine	Wright Patman	0.0001	0-0.0001	0.003	0.003	ppm	N	Runoff from herbicide used on row crops

Radioactive Contaminants (2020 Results)

Contaminant	Location	Average Level Detected	Range of Detected	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
Gross Alpha	Millwood	4.1 (+/- 0.9)	4.1 (+/- 0.9)	15	0	pCi/L	N	Erosion of natural deposits of certain radioactive minerals that may emit a form of radiation known as alpha radiation
Gross Beta	Millwood	2.7 (+/- 0.7)	2.7 (+/- 0.7)	50	0	pCi/L	N	Decay of natural and man-made deposits of certain radioactive minerals that may emit forms of radiation known as photons and beta radiation.

Lead & Copper Tap Monitoring (2022)

Contaminant	Location	The 90th Percentile	Number of Sites	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
Lead	Macedonia-EylauMuniciple Utility District	1.6	1	15	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits
Copper	Macedonia-EylauMuniciple Utility District	0.029	0	1.3	1.3	ppm	N	

Disinfectants

Contaminant	Location	Annual Average	Range of Detected	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
Chlorine (total)	Macedonia-EylauMuniciple Utility District	2.55	0.8-4.0	4	4	ppm	N	Disinfectant used to control microbes

Disinfection By-Products

Contaminant	Location	Highest Location	Range of Detected	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
Total Trihalomethane (TTHM)	Macedonia-EylauMuniciple Utility District	44	20.4-61.3	80	N/A	ppb	N	By-product of drinking water disinfection
Haloacetic Acid (HAA5)	Macedonia-EylauMuniciple Utility District	28	6.5-37	60	0	ppb	N	By-product of drinking water disinfection

DEFINITIONS

ADH: Arkansas Department of Health

AL: Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which water systems must follow.

ALG: Action Level Goal - the level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Avg: Average - regulatory compliance with some MCLs are based on a running annual average of monthly samples.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E.coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

MCL: Maximum Contaminant Level - the highest level of a contaminant that is allowed in drinking water

MCLG: Maximum Contaminant Level Goal - unenforceable public health goal; 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.

MRDL: Maximum Residual Disinfectant Level - 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.

MRDLG: Maximum Residual Disinfectant Level Goal- 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.

MFL: million fibers per liter (a measure of asbestos)

MREM: millirems per year (a measure of radiation absorbed by the body)

MW: Millwood Water Treatment Plant

NA: not applicable

NTU: Nephelometric Turbidity Unit (a measurement of turbidity)

ppm: parts per million or milligrams per liter - or one ounce in 7.350 gallons of water

ppb: parts per billion or micrograms per liter - or one ounce in 7,350,000 gallons of water

ppq: parts per quadrillion, or picograms per liter (pg/L)

ppt: parts per trillion, or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radioactivity)

TCEQ: Texas Commission on Environmental Quality

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water

TWU: Texarkana Water Utilities

WP: Wright Patman Water Treatment Plant

UCMR: Unregulated Contaminant Monitoring Rule