

Metropolitan Lynchburg / Moore County Utility Department TN0000416 WATER QUALITY REPORT 2023

Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 30 contaminants that may be in drinking water. As you'll see in the chart, we only detected 27 of these contaminants. We found all of these contaminants at safe levels.

What is the source of my water?

Your water, which is surface water, comes from the Tims Ford Laker. Our goal is to protect our water from contaminants, and we are working with the State to determine the vulnerability of our water source to **potential** contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP Report assesses the susceptibility of untreated water sources to **potential** contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible, or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Metropolitan Lynchburg / Moore County Utility Department sources rated as slightly susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or you may contact the Water System to obtain copies of specific assessments.

Why are there contaminants in my water?

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Este informe contiene informacion muy importante. Traduscalo o hable con alguien que lo entienda bien.

For more information about your drinking water, please call Chief Operator Mike Mitchell at 931-993-9483.

How can I get involved?

Our Water Board meets every second Tuesday at 6:00 PM at the utility office, 705 Fayetteville Highway. Please feel free to participate in these meetings.

Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

Other Information

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.

Contaminants that may be present in source water:

- 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 stormwater 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 stormwater 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 stormwater 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 and the Tennessee Department of Environment and Conservation prescribe regulations which limit the number of certain contaminants in water provided by public water systems. Metropolitan Lynchburg / Moore County Utility Department's water treatment processes are designed to reduce any such substances to levels well below any health concern. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Do I Need to Take Special Precautions?

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 under-gone 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 not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Lead in Drinking Water

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. Metropolitan Lynchburg / Moore County Utility Department 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 800-426-4791 or at <http://www.epa.gov/safewater/lead>

Water System Security

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to 931-759-4297

Think before you flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of Tennessee's waterways by disposing in one of our permanent pharmaceutical take back bins. There are nearly 100 take back bins located across the state, to find a convenient location please visit: <https://tdeconline.tn.gov/rxtakeback/>



Metropolitan Lynchburg/ Moore County Utility Department

TN0000416

2022 Water Quality Data

What does this chart mean?

- **MCLG** - Maximum Contaminant Level Goal, or 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.
- **MCL** - Maximum Contaminant Level, or 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. To understand the possible health effects described for many regulated constituents, 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.
- **MRDL** - 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 the 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.
- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **Below Detection Level (BDL)** - laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- **Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** – explained as a relation to time and money as 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** - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.
- **Million Fibers per Liter (MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **RTCR** – Revised Total Coliform Rule. This rule went into effect on April 1, 2016 and replaces the MCL for total coliform with a Treatment Technique Trigger for a system assessment.
- **TT** - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (RTCR)	NO	0.0%	<5% positive	2022		0	TT Trigger	Naturally present in the environment
E. coli Bacteria	NO	0.0%	N/A	2022		0	See Footnote 7	Human or animal wastes
Turbidity ¹	NO	.029 NTU	NTU 0.01- .27	2022	NTU	n/a	TT	Soil runoff
Antimony	NO	.004		2022	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic ²	NO	.004		2022	ppb	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	NO	.017		2022	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium ³	NO	.001		2022	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium	NO	.007		2022	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium	NO	.004		2022	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	NO	90%= 0.03 PPM		2021	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide	NO	.002		2022	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	NO	0.61 Aver.		2022	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead ⁴	NO	90%=<1.0 ppb		2021	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

Mercury (inorganic)	NO	.013		2022	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel	NO	.002		2022	Ppb	100	100	
Nitrate (as Nitrogen) ⁵	NO	0.449		2022	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen)					ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	NO	.006		2022	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	NO	5.23		2022	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
Thallium	NO	.002		2022	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
2,4-D	NO	BDL		2022	ppb	70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex)	NO	.002		2022	ppb	50	50	Residue of banned herbicide
Atrazine	NO	.007		2022	ppb	3	3	Runoff from herbicide used on row crops
Nickel	NO	.002		2022	ppb	100	100	
Simazine	NO	.005		2022	ppb	4	4	Herbicide runoff
TTHM ⁶ [Total trihalomethanes]	NO	SITE 1 .038		2022	ppb	n/a	80	By-product of drinking water chlorination
TTHM ⁶ [Total trihalomethanes]	NO	SITE 2 .039		2022	ppb	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	NO	SITE 1 .040		2022	ppb	N/A	60	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	NO	SITE 2 .038		2022	ppb	n/a	60	By-product of drinking water disinfection.
Total Organic Carbon	NO	1.00		2022	ppm	TT	TT	Naturally present in the environment.

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MRDLG	MRDL	Likely Source of Contamination
Chlorine	NO	1.83	.40-2.5	2022	ppm	4	4	Water additive used to control microbes.

During the most recent round of Lead and Copper testing, only 0 out of 20 households sampled contained concentrations exceeding the action level.

¹100% of our samples were below the turbidity limit. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

²While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

³The laboratory did not meet the required detection limit therefore the data does not necessarily reflect that the water is contaminated to a level approaching the MCL.

⁴Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

2022 WATER QUALITY REPORT

⁵Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

⁶ While your drinking water meets EPA's standard for trihalomethanes, it does contain low levels. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

⁷E. coli: A system is in compliance with the MCL for E. coli for samples unless any of the conditions identified in parts 1 through 4 occur.

1. The system has an E. coli-positive repeat sample following a total coliform positive routine sample.
2. The system has a total coliform positive repeat sample following an E. coli-positive routine sample.
3. The system fails to take all required repeat samples following an E. coli-positive routine sample.
4. The system fails to test for E. coli when any repeat sample tests positive for total coliform.

⁸We have met all treatment technique requirements for Total Organic Carbon removal.

Health Effects

Microbiological Contaminants:

Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Fecal coliform/E.coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Turbidity. 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.

Inorganic Contaminants:

Antimony. Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

Arsenic. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer.

Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Beryllium. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

Cadmium. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

Chromium. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage.

People with Wilson's Disease should consult their personal doctor.

Cyanide. Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Mercury (inorganic). Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

Thallium. Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

Synthetic organic contaminants including pesticides and herbicides:

2,4-D. Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

2,4,5-TP (Silvex). Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.

Acrylamide. Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood and may have an increased risk of getting cancer.

Alachlor. Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

Atrazine. Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

HAA [Haloacetic Acids]. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Reporting Requirements Not Met for
Metropolitan Lynchburg / Moore County Utility Department #1
PWSID TN 0000416

Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we 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 the first quarter of 2022 we failed to monitor for Total Trihalomethanes and Total Haloacetic Acids per our Stage 2 LRAA Monitoring Plan and therefore cannot be sure of the quality of your drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below list the contaminant(s) we did not test according to our monitoring plan during a recent compliance period, how often we are supposed to sample, how many samples we are supposed to take, how many samples we took, when the samples should have been taken, and the date on which samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples required	When samples should have been taken during week of	When samples were taken (or will be taken)
Total Trihalomethanes	Quarterly	2	2/9/2022	1/14/2022
Total Haloacetic Acids	Quarterly	2	2/9/2022	1/14/2022

What is being done?

Metropolitan Lynchburg / Moore County Utility Department Water Plant Operators collected the required sampling before the actual sampling period it was to be collected in. The following steps have been taken to prevent this monitoring violation from repeating and are as follows: The required testing dates are to be posted on the calendar at the Water Treatment Plant, all required sampling test kits inventoried and checked off for accountability, and a monthly briefing of all required testing to be accomplished in each month will be given to the General Manager of the Utility

For more information, please contact Chief Operator Michael Mitchell at (931) 759-7858 or P.O. Box 503, Lynchburg Tn 37352

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.

This notice is being sent to you by Metropolitan Lynchburg / Moore County Utility Department #1

State Water System ID#: TN0000416

Date distributed: April 15th, 2023.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Reporting Requirements Not Met for
Metropolitan Lynchburg / Moore County Utility Department #1
PWSID TN 0000416

Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we 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 the April 1 – June 30, 2022, we failed to monitor or test for Nitrate, Atrazine, 2,4-D, Alachlor/Lasso, and Simazine and therefore cannot be sure of the quality of your drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below list the contaminant(s) we did not test according to our monitoring plan during a recent compliance period, how often we are supposed to sample, how many samples we are supposed to take, how many samples we took, when the samples should have been taken, and the date on which samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples required	When samples should have been taken during week of	When samples were taken (or will be taken)
Nitrate	Annually	1	April 1 – June 30, 2022	July 2022
Atrazine	Annually	1	April 1 – June 30, 2022	July 2022
2,4-D	Annually	1	April 1 – June 30, 2022	July 2022
Alachlor/Lasso	Annually	1	April 1 – June 30, 2022	July 2022
Simazine	Annually	1	April 1 – June 30, 2022	July 2022

What is being done?

Metropolitan Lynchburg / Moore County Utility Department Water Plant Operators failed to collect the required sample. This was due to a failure of the water plant operator noticing the required sampling kit was not sent by the lab. The following steps have been taken to prevent this monitoring violation from repeating are as follows: The required testing dates are to be posted on the calendar at the Water Treatment Plant, all required sampling test kits inventoried and checked off for accountability, and a monthly briefing of all required testing to be accomplished in each month will be given to the General Manager of the Utility

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METRO UTILITY DEPARTMENT #2

(Cobb Hollow, Ledford Mill, Ridgeville, and Tankersley Ridge Area Residents Only)

2023 WATER QUALITY REPORT

UTILITY INFORMATION

The Metro Utility Department #2 distributes drinking water supplied by the Duck River Utility Commission through the Tullahoma Utilities Authority. The DRUC is a regional water authority that provides ultra-pure and plentiful water to nearly 70,000 people in Manchester, Tullahoma and portions of the surrounding counties. The DRUC is a government agency formed in 1976 and operates a state-of-the-art water filtration plant and other water supply facilities. The DRUC system is operated twenty-four hours a day by State certified personnel producing up to twelve million gallons of pure water each day. Certified employees of the MUD#2 operate and maintain the distribution system.

WATER SOURCE

The DRUC water treatment plant withdraws surface water from Normandy Reservoir, constructed by TVA in 1976, which is filled by flow from the Duck River. The DRUC, TVA and the Tennessee Department of Environment and Conservation (TDEC) are actively working to protect the reservoir from sources of pollution and assess vulnerability to potential contamination. The DRUC has prepared a Source Water Assessment Program (SWAP) report that assesses the susceptibility of Normandy Reservoir to *potential* contamination and it has been rated as reasonably susceptible (moderate) based on geological factors and human activities in the vicinity of the reservoir. An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scoring and the overall TDEC report to the USEPA can be viewed online or you may contact TDEC at 1-888-891-TDEC to obtain copies of specific assessments. In addition, the DRUC has implemented a number of security measures, including 24-hour surveillance and alarms at our facilities to protect against vandalism and other forms of attack.

THE TREATMENT PROCESS

The DRUC water treatment plant utilizes advanced water treatment technology to remove both particulate matter and dissolved compounds from the water before it is disinfected and pumped to the MUD#2 distribution system. The reservoir water entering the facility is first oxidized and disinfected by the injection of chlorine dioxide. Traditional pretreatment with gaseous chlorine was discontinued in 1988 in favor of chlorine dioxide that does NOT create certain regulated byproducts. After oxidation and disinfection, particulate matter is coagulated using polyaluminum chloride. The coagulant causes the particles in the water to stick to each other, increasing the overall size and weight of the particles. The water then moves into settling basins where these new larger particles sink to the bottom and are removed. The clarified water then travels into the filtration building where the water is vacuumed through hollow fiber ultrafiltration membranes and then flows through eight huge granular activated carbon contactors. These new filters are designed to remove any remaining particulate matter, even particles smaller than bacteria or viruses. The GAC contactors adsorb any remaining organic compounds that could cause objectionable tastes and odors. After charcoal filtration, the water is pH neutralized and a disinfectant residual is added before the water is pumped to the community. Fluoride is also added to prevent tooth decay at the CDC/ADA recommended level of 0.7 parts per million. A corrosion inhibitor is also applied to the water to prevent any corrosion of distribution lines and customer piping.

CUSTOMER COMMITMENT

The MUD#2, TUA and DRUC are committed to producing safe and reliable water for all of our customers' water needs. The MUD#2, TUA and DRUC are proud to report that the water produced by the DRUC filtration plant met all federal and state standards for drinking water during 2022. In fact, the MUD#2, TUA and DRUC have never exceeded any USEPA or State standard or regulation since it was formed in 1976.

The Commission is also very proud of the 99.6% average score achieved on inspections by the Tennessee Division of Water Resources over the last 25 years. The MUD#2 and DRUC both employ a full-time staff to manage, operate and monitor both source and product water quality including environmental engineers, biologists/chemists and certified water treatment plant and distribution system operators. Thousands of tests are conducted each month on water samples at the treatment plant and throughout the distribution systems to ensure that the water remains safe and pure at all times. Over the past thirty years, the DRUC has invested over \$17,000,000 in state-of-the-art technology and upgrades to the treatment facilities, improving both water quality and reliability. The DRUC also operates a USEPA and State certified laboratory at the water treatment plant, analyzing water samples for the utilities as well as the general public.

REQUIRED INFORMATION FROM THE US EPA

All 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both bottled water and tap water) include rivers, lakes, streams, reservoirs, ponds, 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.

Contaminants that may be present in source water: 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 stormwater 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 stormwater runoff and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also come from gas stations, urban stormwater 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 and the Tennessee Department of Environment and Conservation prescribe regulations that 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.

VULNERABLE POPULATIONS

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 food preparation, sanitation and handling of infants or pets as well as drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline toll free at (800-426-4791) or on the Internet at www.epa.gov

ATENCIÓN

Este informe contiene información muy importante. Tradúzcalo o hable con alguien que lo entienda bien.

INFORMATION AND INVOLVEMENT

For more information about this report or other water quality questions, contact the MUD#2 at (931)695-5362 or DRUC at (931) 455-6458 or on the Internet at www.druc.org or by email at manager@druc.org. The Moore Utility Department #2 meets on the second Tuesday of every month at 6:00 pm at the MUD#2 offices at 705 Fayetteville Highway, Lynchburg, Tennessee. The Public is always welcome to participate.

METRO UTILITY DEPARTMENT #2

(Cobb Hollow, Ledford Mill, Ridgeville, and Tankersley Ridge Area Residents Only)

2022 WATER QUALITY DATA

QUALITY ASSURANCE

In order to ensure that tap water is safe, the U.S. Environmental Protection Agency prescribes regulations that require utilities to monitor regularly for numerous substances in the water it produces. An independent laboratory certified by the EPA and the State of Tennessee performs this testing. All testing is conducted in compliance with current regulations. **The water supplied to MUD#2 by the TUB from DRUC has never exceeded the limits for any regulated compound or substance as established by the State of Tennessee or U. S. EPA.**

TEST RESULTS – NONE DETECTED: Analysis is routinely performed for the following list of substances. NONE were detected in the water.

PRIMARY ORGANICS	VOLATILE ORGANICS	VOLATILE ORGANICS	INORGANICS	SYNTHETIC ORGANICS	SYNTHETIC ORGANICS
Alachlor	Bromobenzene	Dichloropropane	Arsenic	Carbofuran	Metolachlor
Aldicarb	Bromochloromethane	Dichloropropene	Antimony	Chlordane	Metribuzin
Benzene	Bromodichloromethane	Ethylbenzene	Beryllium	Dalapon	Oxamyl
Carbon Tetrachloride	Bromomethane	Fluorotrichloromethane	Cadmium	Dicamba	PCB 1016
Dichloroethane	Butylbenzene	Hexachloro-1,3-butadiene	Chromium	Dieldrin	PCB 1221
Dichloroethylene	Chlorobenzene	Isopropylbenzene	Cyanide	Dinoseb	PCB 1232
Endrin	Chlorodibromomethane	p-Isopropyltoluene	Mercury	Di(2-ethylhexyl)adipate	PCB 1242
Lindane	Chloroethane	Naphthalene	Nickel	Di(2-ethylhexyl)phthalate	PCB 1248
Methoxychlor	Chloromethane	n-Propylbenzene	Selenium	2,3,7,8-TCDD (Dioxin)	PCB 1254
Paradichlorobenzene	o-Chlorotoluene	Styrene	Thallium	Endothal	PCB 1260
Toxaphene	p-Chlorotoluene	Tetrachloroethane			
Trichloroethane	Dibromomethane	Tetrachloroethylene	SYNTHETIC ORGANICS	Ethylene dibromide	Pentachlorophenol
Trichloroethylene	m-Dichlorobenzene	Toluene	Aldicarb	Glyphosate	Picloram
Vinyl Chloride	o-Dichlorobenzene	Trichlorobenzene	Aldicarb Sulfone	Heptachlor	Propachlor
2,4-D	Dichlorodifluoromethane	Trichloroethane	Aldicarb Sulfoxide	Heptachlorepoxyde	Simazine
2,4,5-TP (Silvex)	Dichloroethane	Trichloropropane	Butachlor	Hexachlorobenzene	RADIONUCLIDES
ASBESTOS	Dichloroethylene	Trimethylbenzene	Benzo(a)pyrene	Hexachlorocyclopentadiene	Gross Alpha
Asbestos Fibers	Dichloromethane	Xylene	Carbaryl	3-Hydroxycarbofuran	Radium 226
				Methomyl	

TEST RESULTS – REQUIRED REPORTING OR DETECTED COMPOUNDS

The following water quality analysis and testing information is required reporting or are substances that were detected in the drinking water. All of the substances that were detected are present at levels well below the U. S. EPA limits and do not pose a health risk to the general public.

Substance (units)	EPA Limit (MCL)	MUD#2 Maximum	MUD#2 Range	EPA Goal (MCLG)	Possible Source of the Contaminant
Microbial -Total Coliform	TT*	None	None	N/A	Naturally present in the environment
* During the past year the Metro Utility Department met all treatment technique and monitoring and reporting requirements. No assessments or corrective action were required.					
Fecal Coliform & E. Coli (p-Positive)	0	0	0	0	Human and animal fecal waste
Total Organic Carbon (ppm)*	TT*	1.9	1.2 - 1.9	N/A	Naturally present in the environment
Turbidity (NTU)*	TT*	0.06	0.02 - 0.06	N/A	Turbidity does not present any risk to your health and is measured to assess the effectiveness of the filtration system.
* The Treatment Technique requirements for both Turbidity and Total Organic Carbon were met throughout the year.					
Inorganic Compounds					Substances of mineral origin
Chlorine (ppm)	MRDL = 4	0.83	0.25 - 0.93	MRDLG = 4	Water additive used to control microbes
Chlorine Dioxide (ppb)	800	23	1 - 23	800	Water additive used to control microbes
Chlorite (ppm)	1	0.31	0.00 - 0.31	0.80	Byproduct of drinking water chlorination
Fluoride (ppm)	4	0.61	0.56 - 0.68	4	Added to prevent tooth decay, natural erosion
Nitrate (ppm)	10	0.6	0.6	10	Agricultural runoff, natural erosion, sewage discharge
Sodium (ppm)	N/A	6.5	6.5	N/A	Natural erosion, component of water additives
Copper (ppm)	AL (Action Limit) = 1.3	0.16	None of 5 samples exceeded the action limit	1.3	Corrosion of household plumbing, - 2020 Data
Lead (ppb)	AL (Action Limit) = 15	1	None of 5 samples exceeded the action limit	0	Corrosion of household plumbing, - 2020 Data
Organic Compounds					Natural or synthetic carbon-based compounds
Haloacetic Acids Total (ppb)	60	32	32	0	Byproduct of drinking water disinfection
Trihalomethanes Total (ppb)	80	42	42	0	Byproduct of drinking water disinfection

DEFINITIONS: MCL: Maximum Contaminant Level, or 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. MCLG: Maximum Contaminant Level Goal, or 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, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants. MRDLG: Maximum Residual Disinfectant Level Goal, or 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 the disinfectants to control microbial contaminants. AL: Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water. BDL: Below the Detection Limit. ppb: Parts per billion or micrograms per liter (explained in terms of money as one penny in \$10,000,000.00). ppm: parts per million or milligrams per liter (explained in terms of money as one penny in \$10,000.00). pCi/L: picocuries per liter. NTU: Nephelometric Turbidity Unit; Turbidity is a measure of the clarity of the water. Turbidity in excess of 5 NTU becomes just noticeable to the average person. * The Treatment Technique requirements for both Turbidity and Total Organic Carbon were met throughout the year.

USEPA NOTICE ON 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. MUD 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 www.epa.gov/safewater/lead. No lead has ever been detected in samples of the water from the Reservoir or leaving the DRUC Water Filtration Plant.

SOURCE WATER MONITORING TEST RESULTS: The DRUC water source, Normandy Reservoir, is very clean and the DRUC encounters no difficulty in treating the water to EPA and State of Tennessee standards. The DRUC routinely monitors the reservoir water for various contaminants and any indication of potential pollution. Prevention of pollution of our water source is one of our highest priorities. Below is a summary of recent source water testing in cooperation with other agencies including the USEPA, State of Tennessee and Tennessee Valley Authority. **NONE of these contaminants have ever been found in the water distributed to customers.**

CRYPTOSPORIDIUM OOCYSTS: From 2014 thru 2016, the DRUC completed testing on reservoir water for this common organism found in nature, mostly as a result of the presence of wildlife and livestock animals. These monthly sampling events did not detect any oocysts. These test results are excellent and indicate that there is no significant contamination of the reservoir from livestock or wildlife.

NOTE: Federal regulations now require all surface water systems serving more than 10,000 people to sample for Cryptosporidium. The DRUC previously completed this required testing in 2004 thru 2006 and 2014 thru 2016. Cryptosporidium is a microbial parasite which is found in surface waters throughout the United States. No cryptosporidium oocysts have ever been detected in any drinking water samples. Cryptosporidium is effectively removed by filtration and the DRUC system currently provides treatment which is designed to remove cryptosporidium. The USEPA has determined that the presence of cryptosporidium at the concentration level reported in our source water is insignificant, based on the level of treatment we currently provide. Symptoms of cryptosporidium infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immune-compromised people have more difficulty and are at greater risk of developing severe, life-threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. For more information on Cryptosporidium, contact the Safe Drinking Water Hotline (800-426-4791).