Nebo Water District
2024 Water Quality Report
1/1/24 - 12/31/24

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

Water System ID: KY0540977 **Manager:** Mark Matheny
Phone: 270-249-3709 **Address:** 45 N. Bernard St.
Contact: Kaleb Matheny Nebo Ky 42441
Meeting Location: Water District Office
Meeting Time: 4th Wednesday of the Month 3:00 P.M.

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.

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).

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.

We are required to annually provide information about the health risks from lead in drinking water to schools and child care facilities. All elementary schools, secondary schools, and child care facilities are eligible to be sampled for lead by our water system. Contact our office for scheduling or to learn results of previous sampling.

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 or online at https://qrs.ly/hkgp9x1.

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.

Source Information:

We purchase our water from Madisonville Water Department and Webster County Water District. Both water utilities process surface water at their water treatment plants, Madisonville from the Green River and Lake Pee Wee and Webster Co. from the Green River. During the treatment process particulate matter is settled and oxidation is used to remove contaminants after which the water is filtered and disinfected with chlorine to protect public health. As part of a multi barrier approach to safeguard the public, land use within the watersheds have been assessed to better understand their potential impact to water quality and to assign a susceptibility rating. The susceptibility of our drinking water sources is rated high. This is derived by evaluating the toxicity, proximity to the water intakes and likelihood of potential contaminant sources to be released. There are over 1,000 sources / activities that have the potential to impact our water supplies. These include oil production, pesticide & fertilizer application, wastewater discharges, landfills and fuel & chemical storage and transportation by river and along roadways / rail that transect the watershed. Activities and land use within the watershed can pose potential risks to your drinking water. Under certain circumstances contaminants could be released that would pose challenges to water treatment or even get into your drinking water. These activities and how they are conducted, are of interest to our customers because they potentially affect your health and the cost of treating your water. The complete source water assessments can be reviewed at the Madisonville Water Treatment Plant (270) 824-2145 and Webster County Water District (270) 639-9010.

Service Area Information:

The water purchased from the Madisonville Water Department serves 99.9% of the customers in our system. The water purchased from Webster Co. Water District serves 16 customers on Balls Hill Road from Shade Tree to the Webster county line.

Results Table Information:

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.

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.

(A) MADISONVILLE WATER DEPARTMENT (KY0540936) (B) WEBSTER COUNTY WATER DISTRICT (KY1170995)

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Inorganic Contaminants								
Barium [1010] (ppm)	2	2	A= B=	0.025 0.025	0.025 to 0.025 0.025 to 0.025	Feb-24 May-24	No No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	A= B=	0.66 0.88	0.66 to 0.66 0.88 to 0.88	Feb-24 May-24	No No	Water additive which promotes strong teeth
Nickel (ppb) (US EPA remanded MCL in February 1995.)	N/A	N/A	B=	3	3 to 3	May-24	No	N/A
Nitrate [1040] (ppm)	10	10	B=	1.01	1.01 to 1.01	May-24	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfection Byproducts and Precursors								
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	A= B=	1.18 2.43	0.89 to 1.56 1.8 to 4.04	2024 2024	No 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.

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	A= B=	0.3 0.067	100 100	No No	Soil runoff

Unregulated Contaminants Monitoring (UCMR 5)

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.

NEBO WATER DISTRICT (KY0540977)

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Disinfectants/Disinfection Byproducts							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.59 (highest average)	0.82 to 2.23	2024	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	55 (high site average)	39 to 70 (range of individual sites)	2024	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	83 (high site average)	43 to 135 (range of individual sites)	2024	YES	Byproduct of drinking water disinfection.

TTHM(ppb) Individual Site	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Violation
SM2	0.043	0.087	0.133	0.053	No
SM4	0.056	0.082	0.135	0.059	YES

Household Plumbing Contaminants

Copper (ppm) Round 1 sites exceeding action level 0	AL = 1.3	1.3	0.134 (90th percentile)	0.003 to 0.199	Aug-24	No	Corrosion of household plumbing systems
Lead (ppb) Round 1 sites exceeding action level 1	AL = 15	0	0.00 (90th percentile)	0 to 17	Aug-24	No	Corrosion of household plumbing systems

Unregulated Contaminants Monitoring (UCMR 5)

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.

Unregulated Contaminants (UCMR 5)	Average	Range (ppb)			Date
perfluorobutanoic acid (PFBA)	0.007	0.0054	to	0.0079	Jul-24

Violation: Disinfectant By-Products Rule (2025-6250319 & 2025-6250320)

We received two violations for exceeding the running annual average for Total Trihalomethanes (TTHM) during the 7/1/24 - 9/30/24 and 10/1/24 - 12/31/24 compliance periods. The standard, or maximum contaminant level (MCL) for TTHM is 0.080 mg/L and is determined by averaging all the samples collected at each sampling location for the past 12 months. The level of TTHM averaged at one of our system's locations for 7/1/24 - 9/30/24 and 10/1/24 - 12/31/24 was 0.081 mg/L and 0.083 mg/L, respectively. Nebo Water District is working with the City of Madisonville to correct the problem. We anticipate resolving the problem within Next 4 Quarters. Our customers were notified of these violations by direct mail. For more information, please contact Kaleb Matheny at (270) 249- 3709.

Health Effects:

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.