# Auburn Municipal Water Works
## 2022 Water Quality Report

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The City of Auburn purchases water from the Logan-Todd Water Commission. The intake is located in the Cumberland River which is classified as surface water. The protection area taken into consideration is from the LTRWC intake point to the Clarksville Water System intake upstream. Urban nonpoint source runoffmay contribute contamination to the water supply by delivering sediment, oil and grease, road salt, fertilizers, pesticides, nutrients and other contaminants. Transportation accidents can threaten water quality. Tractor-trailers, barges, rail cars and pipelines all have the potential for adverse impact of our water supply. A state primary road - Tn 13 - crosses the Cumberland River, as do the Cunningham Bridge and the L&N Railroad bridge. For source water protection information, contact LTRWC (270) 483-6990 located at 248 Tower Street in Guthrie, Ky. or contact the central office of the Tn. Division of Water Supply. We would like to encouage our customers to call in any water leaks or activities ofi ntrest to the water office at 270-542-4149.

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 ofi ndustrial 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 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 ofi nfection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels ofl ead 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.

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 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 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. Copies of this report are available upon request by contacting our office during business hours.

**Regulated Contaminant Test Results — LOGAN-TODD REGIONAL WATER COMMISSION (KY1101005)**

| Contaminant [code] (units) | MCL | MCLG | Report Level | Range of Detection | Date of Sample | Violation | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| **Inorganic Contaminants** | | | | | | | |
| Barium [1010] (ppm) | 2 | 2 | 0.0212 | 0.0212 to 0.0212 | 2022 | No | Drilling wastes; metal refineries; erosion of natural deposits |
| Fluoride [1025] (ppm) | 4 | 4 | 0.641 | 0.641 to 0.641 | 2022 | No | Water additive which promotes strong teeth |
| Nitrate [1040] (ppm) | 10 | 10 | 0.572 | 0.572 to 0.572 | 2022 | No | Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits |
| **Disinfection Byproduct Precursor** | | | | | | | |
| Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio) | TT* | N/A | 1.87 (lowest average) | 1.7 to 2.02 (monthly ratios) | 2022 | 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 | 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% of monthly samples | 0.11 | 100 | No | Soil runoff |

**Regulated Contaminant Test Results — AUBURN MUNICIPAL WATER WORKS (KY0710012)**

| 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 | 1.41 (highest average) | 0.62 to 2.04 | 2022 | No | Water additive used to control microbes. |
| HAA (ppb) (Stage 2) [Haloacetic acids] | 60 | N/A | 36 (high site average) | 23.7 to 47.6 (range of individual sites) | 2022 | No | Byproduct of drinking water disinfection |
| TTHM (ppb) (Stage 2) [total trihalomethanes] | 80 | N/A | 88 (high site average) | 22.4 to 137 (range of individual sites) | 2022 | YES | Byproduct of drinking water disinfection. |
| **Household Plumbing Contaminants** | | | | | | | |
| Copper [1022] (ppm) sites exceeding action level 0 | AL = 1.3 | 1.3 | .0438 ($90^{th}$ percentile) | 0.00174 to 0.106 | Sep-20 | No | Corrosion of household plumbing systems |

Violation #: 2022-9937317 - LRAA MCL Testing resuts from 04/01/2022 - 06/30/2022 indicated our system exceeded the Maximum Contaminant Level (MCL) for TTHM. The MCL is a locational running annual average (LRAA) of 0.080 mg/L. Our LRAA was 0.084 mg/L.

If you have any questions regarding this report or would like to request a copy, please contact Brandon Gates at (270) 847-8415 .