**2025 for 2024**
**Consumer Confidence Report**

A detailed report on your drinking water in the City of Knox.

**Knox Water Works**
**PWSID – IN 5275002**

Utility Office – 574-772-3032
Mayor's Office – 574-772-4553

# 2024 Annual Drinking Water Quality Report

We are pleased to provide you with the 2024 Annual Water Quality Report for the year, for the period of January 1 to December 31, 2024. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. Our drinking water source is Ground water and originates from three deep groundwater wells located at various parts of the city. Each well produces between 500 and 700 gallons per minute and pumps an average of 400,000 gallons of water from the wells each day. The well water is pumped to a treatment plant where iron is removed and chlorine disinfectants, fluoride, and polyphosphate are added before distribution to residents of the City.

Knox's source water protection plan has determined the boundaries and source of the underground aquifer and the direction the water flows to our wells. New well area protection signs have been purchased and will be installed in 2023 to alert residents of the areas critical to the well fields. A Wellhead Protection Committee has been formed and has identified any potential sources of pollution. This information is available at the Water Plant or by contacting Mayor Dennis Estok at 574-772-4553.

**We are pleased to report that our drinking water is safe and meets Federal and State requirements**.
This table shows the results of our monitoring for the period of 2024 and the most recent testing done in accordance with the regulations.

City of Knox Water Works tested a minimum of 4 samples per month in accordance with the Total Coliform Rule for microbiological contaminates. With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.

## Regulated Contaminants – below are the regulated contaminants that were detected. Chemical sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

| Unregulated Contaminant Monitoring Rule (UCMR) | Collection date of HV | Highest Value (HV) | Range of Sampled Results | Unit |
|---|---|---|---|---|

| Regulated Contaminants | Collection Date | Highest Value | Range | Unit | MCL | MCLG | **Typical Source** |
|---|---|---|---|---|---|---|---|
| ARSENIC | 9/25/2023 | 1 | 1 | ppb | 10 | 0 | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| BARIUM | 9/25/2023 | 0.067 | 0.067 | ppm | 2 | 2 | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| FLUORIDE | 9/25/2023 | 0.09 | 0.09 | ppm | 4 | 4 | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |

| Disinfection Byproducts | Sample Point | Period | Highest LRAA | Range | Unit | MCL | MCLG | Typical Source |
|---|---|---|---|---|---|---|---|---|
| Total Haloacetic Acids (HAA5) | 101 W. Washington | 2022-2023 | 25 | 25 - 25 | ppb | 60 | 0 | By-product of drinking water disinfection |
| Total Haloacetic Acids (HAA5) | 406 S McGill | 2022-2023 | 52 | 52 - 52 | ppb | 60 | 0 | By-product of drinking water disinfection |
| TTHM | 101 W. Washington | 2022-2023 | 26 | 25.9 – 25.9 | ppb | 80 | 0 | By-product of drinking water disinfection |
| TTHM | 406 S McGill | 2022-2023 | 53 | 53.1 – 53.1 | ppb | 80 | 0 | By-product of drinking water disinfection |

| Lead and Copper | Period | 90th Percentile: 90% of your water utility levels were less than | Range of Sampled Results (low-high) | Unit | AL | Sites Over AL | Typical Source |
|---|---|---|---|---|---|---|---|
| LEAD | 2020-2023 | AL=15 | 0.62 – 2.8 | ppb | 15 | 0 | Corrosion of household plumbing systems; Erosion of natural deposits |
| COPPER, FREE | 2020-2023 | AL=1.3 | 0.0025 – 0.4 | ppm | 1.3 | 0 | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |

| Radiological contaminants | Collection date | Highest Value | Range | Unit | MCL | MCLG | Typical Source |
|---|---|---|---|---|---|---|---|
| Gross Alpha, EXCL Radon & U | 5/7/2019 | 0.48 | 0.48 | pCi/L | 15 | 0 | Erosion of natural deposits |

## Violations

During the period covered by this report we had the violations noted below.

| Violation Period | Analyte | Violation Type | Violation Explanation |
|---|---|---|---|
| 12/31/23-12/30/24 | TTHM | Monitoring, Routine (DSP) Major | Performed both tests in one day instead of 6 mos apart |
| 12/31/23-12/30/24 | Total Haloacetic Acids (HAA5) | Monitoring, Routine (DSP) Major | Performed both tests in one day instead of 6 mos apart |

There are no additional required health effect notices.
There are no additional required health effects violation notices.

## Deficiencies

During the period covered by this report there were zero unresolved deficiencies identified.

**Our system was required to collect samples for 29 PFAS compounds** and Lithium as part of the U.S. EPA Unregulated Contaminant Monitoring Rule. We did not detect any compounds in any of our samples. If you would like to see copies of the sampling results, contact us at 574-772-4661.

**Lead:** Ther is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include a decrease in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of people who are exposed to lead before or during pregnancy may be at increased risk of these harmful effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we 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.

**Our system was required to complete a lead service line inventory in 2024. That inventory is available at: https://pwstd.02wateaudit.com/KnoxWW-IN**

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
**Action Level Goal (ALG)** - the level of a contaminant which in drinking water below which there is no known or expected risk to health, ALG's allow for a margin of safety.
**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 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 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.
**Maximum residual disinfectant level or MRDL –** The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
**Treatment Technique or TT** – A required process intended to reduce the level of a contaminant in drinking water.
**Variances and Exemptions** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
**AVG – Average** – Regulatory compliance with some MCLs are based on running annual average of monthly samples.
**LRAA –** Locational running Annual Average
**mrem** – millirems per year (a measure of radiation absorbed by the body)
**ppb -** micrograms per liter (ug/L) or parts per billion – or one ounce in 7,350,000 gallons of water.
**Ppm** – milligrams per liter (mg/L) or parts per million – or one ounce in 7,350 gallons of water.
**picocuries per liter (pCI/L) –** picocuries per liter is a measure for the radioactivity in water.
**na** – Non-applicable

### WHY ARE CONTAMINANTS IN THE 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 animal or human activity.

Drinking water, including bottled water, may reasonable be expected to contain at least small amounts of some contaminates. 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 EPAs Safe Drinking Water Hotline at (800) 426-4791. Contaminants that may be present in source waters 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 runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.
*Pesticides and Herbicides*, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
*Organic chemical Contaminates,* including synthetic and volatile organics 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.

Some people may be more vulnerable to contaminants in drinking water than the general population.
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 mor information on taste, odor, or color of drinking water, please contact the system's business office.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

**FOR YOUR INFORMATION**:
If you have any questions about this report concerning your water utility, please contact Tim Lindewald, Water Superintendent, phone (574) 772-4461 or Mayor Dennis Estok at 574-772-4553**.** If you have questions about your bill or service, please contact the Utility office at 574-772-3032. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. Board of Works meets the 4th Wednesday of each month at 9:30 am and the Common Council meetings are held on the 2nd and 4th Tuesdays at 6:00 p.m. and both meet in Knox City Hall, 101 W. Washington St, Knox, Indiana.