

# 2022 WATER QUALITY REPORT

## for the CITY OF MINGO

The City of Mingo strives to provide you with a safe, dependable supply of drinking water that is in compliance with the guidelines established by the Environmental Protection Agency (EPA). This report contains important information regarding the water quality in our water system. The City of Mingo currently purchases its water through a bulk connection with Iowa Regional Utilities Association (IRUA). Newton Waterworks supplies the water to IRUA, which is pumped from 21 wells located in the Alluvial and Cambrian-Ordovician aquifers of the Skunk River. Results of water quality testing from our distribution system and from the Newton Waterworks supply to IRUA are provided below.

| Contaminant                         | MCL<br>(MCLG)        | Compliance       |                        | Year<br>Tested | Violation | Source                                                                                                                     |
|-------------------------------------|----------------------|------------------|------------------------|----------------|-----------|----------------------------------------------------------------------------------------------------------------------------|
|                                     |                      | Type             | Result (Range)         |                |           |                                                                                                                            |
| City of Mingo Distribution System   |                      |                  |                        |                |           |                                                                                                                            |
| Total Trihalomethanes (ppb) [TTHM]  | 80 (N/A)             | LRAA             | 29.00 (29 – 29)        | 2022           | No        | By-products of drinking water chlorination.                                                                                |
| Total Haloacetic Acids (ppb) [HAA5} | 60 (N/A)             | LRAA             | 8.00 (8 – 8)           | 2022           | No        | By-product of drinking water disinfection.                                                                                 |
| Lead (ppb)                          | AL=15 (0)            | 90 <sup>th</sup> | ND                     | 2022           | No        | Corrosion of household plumbing systems; Erosion of natural deposits.                                                      |
| Copper (ppm)                        | AL=1.3 (1.3)         | 90 <sup>th</sup> | 0.0186 (0.0055-0.0279) | 2022           | No        | Corrosion of plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.                              |
| Distribution System                 |                      |                  |                        |                |           |                                                                                                                            |
| Chlorine (ppm)                      | MRDL=4.0 (MRDLG=4.0) | RAA              | 1.2 (ND – 1.36))       | 2021           | No        | Water additive used to control microbes.                                                                                   |
| Water Supplied by Newton Waterworks |                      |                  |                        |                |           |                                                                                                                            |
| Chromium (ppb)                      | 100 (100)            | SGL              | 3.10                   | 2021           | No        | Discharge from steel and pulp mills; Erosion of natural deposits.                                                          |
| Fluoride (ppm)                      | 4 (4)                | SGL              | 0.6                    | 2021           | No        | Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories. |
| Selenium                            | 50 (50)              | SGL              | 3.30                   | 2021           | No        | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.                          |
| Barium (ppm)                        | 2 (2)                | SGL              | 0.0088                 | 2021           | No        | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.                                |
| Sodium (ppm)                        | N/A (N/A)            | SGL              | 48.1                   | 2021           | No        | Erosion of natural deposits; Added to water during the treatment process.                                                  |
| Nitrate [as N] (ppm)                | 10 (10)              | SGL              | 2.600                  | 2022           | No        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                               |

The EPA requires monitoring of over 80 drinking water contaminants. Those listed above are the only contaminants detected in your drinking water. Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

### Violations

In July 2022 we failed to monitor for Coliform Bacteria. Adverse health effects, if any, are not known. Monitoring procedures have been corrected to avoid future violations.

In July 2022 we had a Record Keeping violation for Chlorine,

In 2022 we received a public notice rule violation for failure to provide information to our customers regarding the Chlorine reporting violation.

### DEFINITIONS

- 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.
- ppb – parts per billion

## DEFINITIONS CONTINUED

- ppm – parts per million
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND – Not detected
- RAA – Running Annual Average
- Treatment Technique (TT) – A required process intended to reduce the level of a contamination in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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.
- 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.
- SGL – Single Sample Result
- RTCR – Revised Total Coliform Rule
- NTU – Nephelometric Turbidity Units

## GENERAL INFORMATION

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 posed a health risk. More information about contaminants or potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

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).

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. The City of Mingo 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 drinking 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>.

## SOURCE WATER ASSESSMENT INFORMATION

The Newton Waterworks obtains over 75% of its water from the South Skunk River sand and gravel alluvial aquifer. The alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials provide little protection from contamination at the land surface. The alluvial wells will be highly susceptible to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application.

Less than 25% comes from a high capacity deep well that is completed into the Jordan (Cambrian-Ordovician) aquifer, 2,256 feet beneath the surface of the ground. The Cambrian-Ordovician aquifer was determined to not be susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The Cambrian-Ordovician well will not be susceptible to most contaminant sources except through poorly maintained wells.

## OTHER INFORMATION

The City of Mingo is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near any part of the water system, please contact us at (641) 363-4441 or the local police/sheriff department. We appreciate your assistance in protecting the water system.

For questions regarding this information, please contact Jim Utter, Operator in Charge, at (515) 249-3482. Decisions regarding the water system are made at the Mingo City Council meetings, which are held on the second Tuesday of the month at 6:30 p.m. at the Mingo City Hall; 100 N Station Street, Mingo, Iowa and are open to the public.