## Definition Key

- **AL** Action Level: the concentration of a contaminant which, if exceeded, triggers a treatment or other requirement, which a water system must follow.
- **MCL** Maximum Contaminant Level: the highest level of a contaminant that is allowed in drinking water; MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **MCLG** Maximum Contaminant Level Goal: the level of a contaminant in drinking water below which there is no known or expected risk to health; MCLG's allow for a margin of safety.
- **MRDL** Maximum Residual Disinfection Level: 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.
- **MRDLG** Maximum Residual Disinfection Level Goal: the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits to the use of disinfectants to control microbial contaminants.
- **NA** Not applicable
- **NTU** Nephelometric Turbidity Unit: measurements of minute suspended particles, used to judge water clarity.
- **ppb** parts per billion or micrograms per liter (ug/l)
- **ppm** parts per million or milligrams per liter (mg/l)
- **ppt** parts per trillion or nanograms per liter (ng/l)
- **TT** Treatment Technique: a required process, intended to reduce the level of a contaminant in drinking water.

# WATER QUALITY REPORT 2021

**Each day, our staff works to ensure** the water delivered to your home meets all regulatory requirements and your expectations for safety, reliability and quality. For your protection, your drinking water is tested for many parameters. The table below shows only the substances detected in your water during the calendar year. We are proud to report there were no violations during that time.

**REGULATED MONITORING AT THE TREATMENT PLANT**

| SUBSTANCE | UNITS | Range | Average Level Found | MCL | MCLG | Samples Exceeding MCL | POSSIBLE SOURCES |
|---|---|---|---|---|---|---|---|
| Fluoride | ppm | 0.3 - 0.8 | 0.7 | 4 | 4 | 0 | Additive which promotes strong teeth |
| Nitrate | ppm | 0.3 - 0.6 | 0.4 | 10 | 10 | 0 | Runoff from fertilizer use, erosion of natural deposits |

| SUBSTANCE | UNITS | Range | Level Found | MCL | MCLG | Samples Exceeding MCL | POSSIBLE SOURCES |
|---|---|---|---|---|---|---|---|
| Turbidity | NTU | 0.02 - 0.08 | 0.04 | TT = 1 NTU | NA | 0 | Soil runoff and natural sediment |

100% of Turbidity sample levels were found to be < 0.3 NTU.

**REGULATED CHEMICAL MONITORING IN THE DISTRIBUTION SYSTEM**

| SUBSTANCE | UNITS | Range | Highest Running Annual Average | MCL | MCLG | Samples Exceeding MCL | POSSIBLE SOURCES |
|---|---|---|---|---|---|---|---|
| Chlorine Residual | ppm | 0.2 - 1.9 | 0.8 | 4 | MRDLG=4 | 0 | Used to disinfect drinking water |
| Haloacetic Acids | ppb | 11 - 24 | 27 | 60 | NA | 0 | Formed when chlorine is added to water with naturally occurring organic material |
| Trihalomethanes | ppb | 26 - 48 | 46 | 80 | NA | 0 | Formed when chlorine is added to water with naturally occurring organic material |

**REGULATED MONITORING AT CUSTOMER'S TAP**

**Compliance is determined using the 90th percentile, where nine out of ten samples must be below the Action Level. Testing was conducted in 2019.**

| SUBSTANCE | UNITS | Range | 90th Percentile | AL | MCLG | Samples Exceeding MCL | POSSIBLE SOURCES |
|---|---|---|---|---|---|---|---|
| Copper | ppm | 0.0 - 0.2 | 0.1 | 1.3 | 1.3 | 0 | Corrosion of household plumbing systems; Erosion of natural deposits |
| Lead | ppb | 0 - 5 | 3 | 15 | 0 | 0 | Lead service lines, corrosion of household plumbing systems; Erosion of natural deposits |

**REGULATED BACTERIOLOGICAL MONITORING IN THE DISTRIBUTION SYSTEM**

| SUBSTANCE | Highest Level Found | MCL | MCLG | Violation | POSSIBLE SOURCES |
|---|---|---|---|---|---|
| Total Coliform | 0% of all samples collected (0 of 571 samples) | TT | 0 | NO | Naturally present in the environment |
| *E. coli* Bacteria | 0% of all samples collected (0 of 571 samples) | Presence of Total Coliform or E. coli in repeat samples; or repeat samples were not collected | 0 | NO | Human or animal fecal waste |

**ADDITIONAL MONITORING**

| SUBSTANCE | UNITS | Range | Average Found | SOURCE |
|---|---|---|---|---|
| Sodium | ppm | 10 - 12 | 11 | Naturally present in the environment |

**ADDITIONAL MONITORING – PFAS**

| SUBSTANCE | UNITS | Range | Average Found | MCL | SOURCE |
|---|---|---|---|---|---|
| PFNA | ppt | < 2 | < 2 | 6 | Discharge and waste from industrial facilities; Breakdown of precursor compounds |
| PFOA | ppt | < 2 | < 2 | 8 | Discharge and waste from industrial facilities; Stain-resistant treatments |
| PFHxA | ppt | < 2 | < 2 | 400,000 | Firefighting foam; Discharge and waste from industrial facilities |
| PFOS | ppt | < 2 - 2.2 | < 2.1 | 16 | Firefighting foam; Discharge from electroplating facilities; Discharge and waste from industrial facilities |
| PFHxS | ppt | < 2 | < 2 | 51 | Firefighting foam; Discharge and waste from industrial facilities |
| PFBS | ppt | < 2 | < 2 | 420 | Discharge and waste from industrial facilities; Stain-resistant treatments |
| Gen X | ppt | < 2 | < 2 | 370 | Discharge and waste from industrial facilities utilizing the Gen X chemical process |

**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. We are 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 have a lead service line it is recommended that you run your water for at least 5 minutes to flush water from your home plumbing and the lead service line.

Our water supply has 0 lead service lines and 300 services of unknown material out of a total of 12,077 service lines.

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 at 800-426-4791 or at www.epa.gov/safewater/lead.

Testing is also performed to detect the presence of Cryptosporidium and Giardia, which are protozoan parasites that occur in natural surface waters such as lakes, rivers and streams. Wyoming's water treatment process provides multiple barriers, including clarification, filtration, and disinfection to lower the risk of these contaminants in finished tap water. Monitoring of treated water samples yielded a 100% removal rate, highlighting the effectiveness of the treatment system in microscopic particle removal. For information on microbiological testing, contact the Wyoming laboratory at 616-261-3572.

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).

Results were gathered from tests performed by the City of Wyoming's certified lab, as well as the State of Michigan's Department of Environmental Quality laboratory and other certified private laboratories. As authorized by the 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.