**2021 WATER QUALITY RESULTS**

|  |
| --- |
| **REGULATED SUBSTANCES** |
| SUBSTANCES (UNIT) | YEAR SAMPLED | MCL | MCLG | RESULTS | RANGE | VIOLATIONS | TYPICAL SOURCE |
| Arsenic (ppb) | 2021 | 10 | 0 | 1.2 | 0 - 1.2 |   | Natural Deposits |
| Barium (ppm) | 2021 | 2 | 2 | 0.256 | 0.21 - 0.256 |   | Natural Deposits |
| Fluoride (ppm) | 2021 | 4 | 4 | 0.8 | 0.2 - 0.8 |   | Natural Deposits |
| Gross Alpha, Excl Radon & Uranium (pCi/L) | 2017 | 15 | 0 | 2.8 | 0.44 - 2.8 |   | Erosion of natural deposit |
| Nickel (ppb) | 2021 | N/A | N/A | 3.1 | 1.6 -4.6 |   | Natural Mineral Deposit |
| Nitrate (ppm) | 2021 | 10 | 10 | 0.14 | 0 – 0.14 |   | Fertilizers, septic tank leaching |
| Haloacetic Acid (ppb) | 2021 | 60 | N/A | 11.45 | 5 – 20.6 |   | Disinfection by-product |
| Total Trihalomethanes (ppb) | 2021 | 80 | N/A | 40.6 | 12.4 – 40.6 |   | Disinfection by-product |
| Chlorine (ppm) | 2021 | 4 | 4 | 1.01 | 0.2 - 1.4 |   | Water additive used to control microbes |
| **Tap water sample were collected for lead and copper analyses from sample sites though out the community** | AL | MCLG | 90th percentile |   |   |   |
| Copper (ppm) | 2020 | 1.3 | 1.3 | 0.785 | 0 of 30>AL |   | Corrosion of household plumbing |
| Lead (ppb) | 2020 | 15 | 0 | 1.5 | 0 of 30>AL |   | Corrosion of household plumbing |
| **SECONARY SUBSTANCES** |  |  |  |  |  |  |  |
| **SUBSTANCES (UNIT)** | **YEAR SAMPLED** | **MCL** | **MCLG** | **RESULTS** | **RANGE** | **VIOLATIONS** | **TYPICAL SOURCE** |
| Sodium (ppm) | 2021 | N/A | N/A | 17.6 | 15 - 20.2 |   | Erosion of natural deposit |
| Molybdenum (ppb) | 2016 | N/A | N/A | 580 | 528 - 690 |   |   |
| Strontium (ppb) | 2016 | N/A | N/A | 0.23 | ND - 0.45 |   |   |
| 1,4 Dioxane (ppb) | 2016 | N/A | N/A | 0.2 | ND - 0.80 |   |   |
| Bromide (ppb) | 2016 | N/A | N/A | 37.45 | 32.1 - 42.9 |   |   |
| Manganese (ppb) | 2018 | N/A | N/A | 29.13 | 13.1 - 38.8 |   |   |
| Haloacetic Acid (HAA6Br) (ppb) | 2018 | N/A | N/A | 5.37 | 1.82 - 6.92 |   |   |
| Haloacetic Acid (HAA9) (ppb) | 2018 | N/A | N/A | 11.24 | 2.49 - 13.59 |   |   |
| Total Organic Carbon (ppb) | 2018 | N/A | N/A | 1250 | 1150 - 1360 |   |   |

***DEFINITIONS***

**ACTIONAL 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 in drinking water below which is no expected risk to health. ALGs allow for a margin of safety.

**AVG** - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**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.

**VARIANCES AND** **EXEMPTIONS** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**Nd** - No Detection

**ppm** - Parts per million, or milligrams per liter (mg/l)

**ppb** - Parts per billion, or micrograms per liter (ug/l)

**pCi/l** - Picocuries per liter (a measure of radioactivity)

**MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL)** - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**DETECTED CONTAMINANTS**

A detected contaminant is any contaminant detected at or above its minimum detection limit (MDL). The State allows us to monitor for some contaminants less than once per year because concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

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 Greenfield Water Utility 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**.

**MAXIMUM RESIDUAL 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.

 **UNREGUALTED CONTAMINANTS**

The purpose of monitoring for unregulated contaminants in drinking water is to provide data to support the EPA Administrator’s decisions concerning whether or not to regulate these contaminants in the future for the protection of public health. The Greenfield Water Utility has tested for unregulated contaminants as required. A copy is available upon request.

NOTE: The EPA requires monitoring for over 80 drinking water contaminants. The contaminants listed above are the only contaminants detected in Greenfield Municipal Water. Please understand that none of the compounds listed are at or above the limits established by the USEPA. For a complete list of contaminants that are tested, contact the Greenfield Water Utility.

|  |  |
| --- | --- |
| TREATMENT TECHNIQUES | NO VIOLATION |
| LEAD AND COPPER CONTROL | NO VIOLATION |
| MONITORING AND REPORTING DATA | NO VIOLATION |
| RECORD KEEPING REQUIRMENTS | NO VIOLATION |
| VIOLATION OF A VARIANCE OR EXEMPTION | NO VIOLATION |
| VIOLATION OF AN ADMINISTRATIVE OR JUDICIAL ORDER | NO VIOLATION |
| SPECIAL MONITORING REQUIREMENTS | NO VIOLATION |

**SOURCE OF WATER FOR GREENFIELD**

The City of Greenfield Water Utility draws water from aquifers in Greenfield. The water is pumped from the City wells to the Filtration Plants and then put through the filtration and disinfection process. It is then sent into the water distribution system. The total capacity of all plants is seven million gallons per day, with the capability to expand to eleven million gallons per day. The City currently averages approximately 2.5 million gallons per day. A Wellhead Protection Program is in place. Wellhead Protection is available for viewing upon request.

****