2021

Annual Water Quality Report

Greensburg Municipal Water Works

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water comes from two sources: Surface water from Flatrock River which is located 6 miles Northwest of Greensburg on Highway 421 and; Ground water from six (6) wells which are located in an aquifer that runs along Freeland Road and North Ireland Street. Well information is available through our Wellhead Protection Program.

I'm pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact

Rick Denney (voice 812.663.2641 – fax 812.662.0620 Email Rdenney@greensburg.in.gov).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. They are held on the first (1st) Tuesday of every month at 6:00 p.m. in City Hall, located at 314 W. Washington Street.

The Greensburg Municipal Water Worksroutinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st,2021.All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

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:

*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* - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

*Nephelometric Turbidity Unit (NTU)* - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Treatment Technique (TT)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level* - The “Maximum Allowed” (MCL) is 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* - The “Goal”(MCLG) is 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.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **TEST RESULTS** | | | | | | | | | | | | |
| Contaminant | Range | | | Level  Detected | | Unit  Measurement | | MCLG | MCL | Likely Source of Contamination | | |
| **Microbiological Contaminants** | | | | | | | | | | | | |
| Turbidity | .02  to  .29 | | | .12  Yearly  Avg | | NTU | | n/a | TT  =.05 | Soil runoff | | |
| Highest single measurement = .29 All of our samples were below the turbidity limits specified for our filtration technology. Turbidity is measured to determine the clarity of the water after filtration. It is used to determine whether small particles that could cause disease are able to get through our treatment process and into the water system. | | | | | | | | | | | | |
| **Inorganic Contaminants** | | | | | | | | | | | | |
| Copper | <0.005  to  0.518 | | | \* 90%  value  0.104 | | ppm | | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives | | |
| Fluoride | 0.2  to  1.5 | | | 0.6  Yearly  Avg. | | ppm | | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories | | |
| Nitrate (as Nitrogen) | 2021 | | | 0.14 | | ppm | | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits | | |
| Arsenic | 2021 | | | 1 | | ppb | | 0 | 10 |  | | |
| Lead | <0.5 to  5.3 | | | 2 | | ppb | | 1.5 | AL=15 |  | | |
| Barium | 2021 | | | 0.0958 | | ppm | | 2 | 2.0 | Discharge of drilling waste, metal refineries, Erosion of natural deposits | | |
| Beta/photon emitters | 2020 | | | 2.8 | | Mrem/yr | | 0 | 4 | Decay of natural and man made deposits | | |
| Combined Radium 226/228 | 2020 | | | 2.21 | | pCi/l | | 0 | 15 | Erosion of natural deposits | | |
| 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. GWW 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”.  Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.  \*Copper: 90% of samples at or below this level. (30 samples taken in 2021) | | | | | | | | | | | | |
| **Disinfectants and Disinfection By-products** | | | | | | | | | | | | |
| Cholorine | 2021 | | | 1 | | 1-1 | | 4 | ppm | Water additive used to control microbes | | |
| TTHM  [Total Trihalomethanes] | 24.3 to  188 | | | AVG.  72.3 | | ppb | | N/A | 80 | By-product of drinking water chlorination | | |
| HAA5’s  Total | 12.6 to  131 | | | AVG.  45.9 | | ppb | | N/A | 60 | By-product of drinking water chlorination | | |
| Total Organic Carbon | 0 to  1.8 | | | AVG.  1.1 | | ppm | | N/A | >1.0  Annual Ave. | By-product of drinking water chlorination | | |
| **Synthetic organic contaminants including pesticides and herbicides** | | | | | | | | | | | | |
|  | Collection date | | | Level detected | | Range of levels | | MCLG | MCL | Units | | |
| Atrazine | 2021 | | | 0.3 | | 0-0.3 | | 3 | 3 | ppb | | |
| 2,4-D | 2021 | | | 2.2 | | 0-2.2 | | 70 | 70 | ppb | | |
| **Volatile Organic Contaminants** | | | | | | | | | | | | |
| Xylenes | 2021 | | | 0.0006 | | 0-0.0006 | | 10 | 10 | ppm | | |
| **Unregulated Contaminants** | | | | | | | | | | | |
| Sodium | 2021 | | 18.7 | | ppm | | |  |  | Consumer Information | |
| Water Hardness | 2021 | | 19gpg | | gpg | | |  |  | Consumer Information | |
|  | | | | | | | | | | | |
| **Violations** | | | | | | | | | | | |
| Alachlor | | | | | | | | | | | |
| Some people who drink water containing Alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys or spleen. | | | | | | | | | | | |
| Violation Type | | Violation Begin | | | | | Violation End | | | | Violation Explanation |
| Monitoring, Routine Minor | | 04/01/2021 | | | | | 06/30/2021 | | | | Failed to complete all the required tests of our drinking water for the contaminant and period. |
| Atrazine | | | | | | | | | | | |
| Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties. | | | | | | | | | | | |
| Monitoring, Routine Minor | | 04/01/2021 | | | | | 06/30/2021 | | | | Failed to complete all the required tests of our drinking water for the contaminant and period. |
| Di (2-ethylhexyl) adipate | | | | | | | | | | | |
| Some people who drink water containing di(2-ethylehexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties. | | | | | | | | | | | |
| Monitoring, Routine Minor | | 04/01/2021 | | | | | 06/30/2021 | | | | Failed to complete all the required tests of our drinking water for the contaminant and period. |
| Di (2-ethylhexyl) phthalate | | | | | | | | | | | |
| Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver or experience reproductive difficulties and may have an increased risk of getting cancer. | | | | | | | | | | | |
| Monitoring, Routine Minor | | 04/01/2021 | | | | | 06/30/2021 | | | | Failed to complete all the required tests of our drinking water for the contaminant and period. |

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

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 animals or from human activity. Contaminants that may be present in source water 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 or farming.
* Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
* Organic chemicals, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
* Radioactive materials, 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 that limit the amount of certain contaminants in water provided by public water systems. Food & Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline at (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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We at the Greensburg Municipal Water Works work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children’s future.

Logo

Description automatically generated

Rick Denney, Superintendent

1105 N. Ireland St.

Greensburg, IN 47240

Rdenney@greensburg.in.gov

812.663.2641

CITY OF GREENSBURG

MUNICIPAL WATER WORKS

|  |  |  |  |
| --- | --- | --- | --- |
| Simazine | | | |
| Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood. | | | |
| Violation Type | Violation Begins | Violation End | Violation Explanation |
| Monitoring, Routine Minor | 04/01/2021 | 06/30/2021 | Failed to complete all the required tests of our drinking water for the contaminant and period. |
| Total Trihalomethane (TTHM) | | | |
| Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems and may have an increased risk of getting cancer. | | | |
| MCL, LRAA | 07/01/2021 | 09/30/2021 | Water samples showed that the amount of this contaminant in our drinking water was above its standard. |
| MCL, LRAA | 07/01/2021 | 09/30/2021 | Water samples showed that the amount of this contaminant in our drinking water was above its standard. |