pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SAFE DRINKING WATER

2022 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 7280014 Greencastle Area, Franklin County, Water Authority (GAFCWA)

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

WATER SYSTEM INFORMATION:

This report details GAFCWA water quality. If you have any questions about this report or your water utility, please contact Emilee Little, Authority Manager, at (717) 597-7143. If you want to learn more, please attend any regularly scheduled meetings. They are held the third Monday of each month at 5:30 PM at the Borough Hall, 60 North Washington St., Greencastle, PA, 17225.

SOURCE(S) OF WATER:

The GAFCWA water sources are located throughout Greencastle at Moss Spring on Grant Street, the Eshelman-Spangler Spring at Long Lane, Ebberts Spring at Molly Pitcher Highway South, Well 1 and 2 at Long Lane, and Well 4 at Leitersburg Street.

A Source Water Assessment was completed by the PA Department of Environmental Protection (PADEP). The Assessment found that GAFCWA sources are potentially susceptible to road deicing materials, accidental spills along roads, manure byproducts, printing inks and dyes, cleaning solutions, and leaks in underground storage tanks. Overall, water sources have moderate risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: www.elibrary.dep.state.pa.us/dsweb/View/Collection-10045. Complete reports were distributed to municipalities, water supplier, local planning agencies, and PADEP offices. Copies of the complete report are available for review at the PADEP South Central Regional Office, Records Management Unit, at (717) 705-4732.

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).

MONITORING YOUR WATER:

The GAFCWA routinely monitors for contaminants in drinking water according to federal and state law. The following tables show the monitoring results for the period of January 1 to December 31, 2022. The State allows the GAFCWA to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

DEFINITIONS:

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

Secondary Maximum Contaminant Level (SMCL) - Non-mandatory water quality standards. These guidelines are set to aid the management of aesthetic considerations which include taste, odor, and color. There are no associated human health risk with these 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.

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.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

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

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter (µg/L)

ppm = parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or picograms per liter

ppt = parts per trillion, or nanograms per liter

DETECTED SAMPLE RESULTS:

Chemical Contaminants								
Contaminant	**MCL in CCR Units**	**MCLG**	**Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Barium	2	2	.07	.06-.07	ppm	2022	N	Discharge of drilling wastes; discharge from metal refineries; and, erosion of natural deposits.
Nitrate	10	10	12	4.48-12	ppm	2022	N	Runoff from fertilizer use; leaching from septic tanks sewage; and, erosion of natural deposits.
TTHM's	80	NA	28.7	12.5-28.7	ppb	2022	N	By-product of drinking water disinfection.
HAA5	60	NA	26.7	5.68-26.7	ppb	2022	N	By-product of drinking water disinfection.
Chlorine	MRDL=4	G=4	1.79	.40-1.79	ppm	2022	N	Water additive used to control microbes.
Combined Radium	5	0	1.58	-	pCi/l	2020	N	Erosion of natural deposits.

*EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chorine	.2	1.17	1.17-1.75	ppm	2022	N	Water additive used to control microbes.

Lead and Copper							
Contaminant	**Action Level (AL)**	**MCLG**	**90th Percentile Value**	**Units**	**# of Sites Above AL of Total Sites**	**Violation Y/N**	**Sources of Contamination**
Lead	15	0	10.2	ppb	0 out of 20	N	Corrosion of household plumbing.
Copper	1.3	1.3	.244	ppm	0 out of 20	N	Corrosion of household plumbing.

Turbidity						
Contaminant	**MCL**	**MCLG**	**Level Detected**	**Sample Date**	**Violation Y/N**	**Source of Contamination**
Turbidity	TT=1 NTU for a single measurement	0	.052	9/17/22	N	Soil runoff.
	TT= at least 95% of monthly samples≤0.3 NTU		100%		N	

Total Organic Carbon (TOC)					
Contaminant	**Range of % Removal Required**	**Range of percent removal achieved**	**Number of quarters out of compliance**	**Violation Y/N**	**Sources of Contamination**
TOC	*ACC	*ACC	0	N	Naturally present in the environment.

***Alternative Compliance Criteria, used to determine compliance**

HEALTH EFFECTS:

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. The treatment process used at the GAFCWA removes nitrates to well below the MCL of 10 ppm.

DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:

About our Nitrates levels: Results of quarterly testing of plant effluent entry point water sample collected on 10-11-2022 revealed a nitrate level of 12ppm which exceeded the MCL of 10ppm for nitrates. A follow-up check sample that was collected 10-18-22 was determined to be 4.92ppm, which is below the MCL. As a

result, the average nitrate results for the 4th quarter and ultimately the entire year 2022 was below the MCL of 10mg/L, therefore there is no SDWA violation.

EDUCATIONAL INFORMATION:

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 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 stormwater 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, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, 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 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, the Environmental Protection Agency (EPA) and PADEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and PADEP 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 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* (800-426-4791).

Information about Lead

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 GAFCWA is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, customers can minimize the potential for lead exposure by flushing the tap for 30 seconds to two 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* (800-426-4791) or at *http://www.epa.gov/safewater/lead.*

OTHER INFORMATION:

The GAFCWA is committed to providing responsible stewardship and safe drinking water for all customers at the most economical cost. Providing, preserving and protecting water resources through consistent testing, management of resources, funding of infrastructure improvements, and exemplary customer service are key objectives for the GAFCWA and its Authority Board.