



2019 ANNUAL DRINKING WATER QUALITY REPORT

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

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 identifies water quality results for the Greencastle Area, Franklin County, Water Authority (GAF CWA). Questions regarding the information contained in the following pages should be directed to Lorraine Hohl, Authority Manager at (717) 597-7143. The Authority aims to provide current and accurate information about the water supply. For more information, residents are welcome to attend any regularly scheduled Authority meetings held the third Monday of each month at 6:45 PM, at Borough Hall, 60 North Washington Street, Greencastle, PA 17225 ____.

SOURCE(S) OF WATER:

GAF CWA water sources are located throughout Greencastle at Moss Spring on E. Grant Street; the Eshelman-Spangler Spring at Long Lane; the Ebberts Spring at Molly Pitcher Highway South; wells 1 and 2 at Long Lane and Well 4 at Leitersburg Street.

A Source Water Assessment (SWA) of our well sites was completed by the PA Department of Environmental Protection (PADEP). The SWA found that the water sources are most susceptible to road deicing materials, accidental roadway spills, manure byproducts, printing inks and dyes, cleaning solutions, and leaks in underground storage tanks placing them at moderate risk of significant contamination. A summary report of the SWA 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 suppliers, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP South Central Regional Office, Records Management Unit at (717) 771-4481.

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 GAF CWA routinely monitors for contaminants in the drinking water according to federal and state law. The following tables show the monitoring results for the period of January 1 to December 31, 2019. Pennsylvania regulations allow GAF CWA to monitor for some contaminants less than once per year because the concentrations of these contaminants have minimal changes. Some data enclosed is from prior years in accordance with the Safe Drinking Water Act, as 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)

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

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

ppq = parts per quadrillion, or picograms per liter

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

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	.06	.06	ppm	2019	N	Discharge of drilling wastes; discharge from metal refineries; and erosion of natural deposits.
Nitrate	10	10	5.7	3.9-5.7	ppm	2019	N	Runoff from fertilizer use; leaching from septic tanks sewage; and erosion of natural deposits.
TTHM's	80	NA	40	28-40	ppb	2019	N	By-product of drinking water disinfection.
HAA5	60	NA	14	8.6-14	ppb	2019	N	By-product of drinking water disinfection.
Chlorine	MRDL= 4	G=4	1.63	.39-1.63	ppm	2019	N	Water additive used to control microbes.
Combined Radium	5	0	1	-	pCi/l	2014	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
Chlorine	.20	1.23	1.23-1.65	ppm	2019	N	Water additive used to control microbes.

Lead and Copper							
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	6	ppb	0 out of 20	N	Corrosion of household plumbing.
Copper	1.3	1.3	.391	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	.06	8/17/19	N	Soil runoff.
	TT= at least 95% of monthly samples \leq 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 syndrome. The treatment process used at the GAFCWA removes nitrates to well below the MCL of 10 ppm.

OTHER VIOLATIONS:

In 2019 the GAFSCWA did not complete the first weekly sampling under the new Disinfection Requirements Rule (DRR). The DRR requires the GAFSCWA to maintain at least a .20 free chlorine residual throughout the distribution system and the plant's lowest free chlorine residual was .39, which is above the required amount.

EDUCATIONAL INFORMATION:

The sources of drinking water (both tap water and bottled) 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 by-products 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 EPA and PADEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 PADEP *Safe Drinking Water Hotline* at (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 the result of materials and components associated with service lines and home plumbing. The GAFSCWA is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting in household lines for several hours, lead exposure can be minimized if consumers first flush their tap for 30 seconds to two minutes prior to use or consumption. Customers with concerns regarding lead levels can request water testing. 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>.

OTHER INFORMATION:

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