

2012 Annual Drinking Water Quality Report
Greencastle Area, Franklin County, Water Authority
PWS ID# 7280014

The Greencastle Area, Franklin County, Water Authority (GAFcWA) is very pleased to provide the 2012 Annual Drinking Water Quality Report to keep its customers informed about the excellent water and services delivered over the past year. The GAFcWA's longstanding objective has been, and continues to be, providing quality potable water to the Greencastle area. The GAFcWA water sources are Moss Spring, Eshelman-Spangler Springs and Ebberts Spring. Two wells located on the Authority's farm along Long Lane provide an additional water supply during dry periods. Well #4 is an additional well located along Leitersburg Street and is the Authority's newest water source.

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo o hable con alguien que lo entienda bien. (Note: This report contains very important information about your drinking water. Please translate the information or speak to someone who understands it.)

A source water assessment report which provides more detailed information, such as potential sources of contamination, is available by contacting our office. A summary of the water system's susceptibility to potential sources of contamination follows:

A Source Water Assessment of sources which supply water to the Moss Spring Filtration Plant was completed in 2003 by the PA Department of Environmental Protection (PA DEP). The assessment found that water sources are potentially most susceptible to road deicing materials, accidental spills along roads, various chemicals and processes, metal working and cleaning, microorganisms, nitrogen and phosphorus from manure, inks and dyes used in the printing process, cleaning solutions, and leaks in underground storage tanks. Overall, the watershed providing water to GAFcWA customers has a moderate risk of significant contamination. Summary reports of the Assessment are available by writing to Susan Armstrong, Authority Manager, 60 North Washington Street, Greencastle PA 17225 and will be available on the PA DEP website at www.dep.state.pa.us (direct LINK source water). Complete reports were distributed to municipalities, water suppliers, local planning agencies and PA DEP offices. Copies of the complete report are available for review at the PA DEP South Central Regional Office, Records Management Unit at (717) 705-4700.

The GAFcWA is pleased to report that its *drinking water meets federal and state requirements*. On March 13 and March 14, 2012, DEP performed a Filter Performance Evaluation of the Moss Spring Water Treatment Plant. The plant received a *satisfactory rating* from DEP.

As a result of E.P.A. monitoring requirements for Cryptosporidium and Giardia, GAFcWA collected 24 samples from January to December 2009; all 24 laboratory samples' testing results came back with non detected analysis.

If you have questions about this report or your water utility, please contact Susan Armstrong, Authority Manager at (717) 597-7143 or write to Greencastle Area, Franklin County, Water Authority, 60 North Washington Street, Greencastle PA. 17225-1230. To learn more about the GAFcWA and its operations, feel free to attend any of the GAFcWA regularly scheduled meetings held on the third Monday of each month at 6:45 p.m. at Council Hall, 60 North Washington Street, Greencastle PA 17225.

The Greencastle Area, Franklin County, Water Authority routinely monitors for

contaminants in drinking water according to Federal and State laws. The table contained herein shows the results of our monitoring for the period of January 1 to December 31, 2012. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

In the table on the next page you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

- *Non-Detects (ND)* - laboratory analysis indicates that the contaminant is not present at a detectable level.
- *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(ug/l)* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- *Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.
- *Millirems per year (mrem/yr)* - measure of radiation absorbed by the body.
- *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.
- *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 contamination.

| | | | | | | |
|---|---|------|-----------|----------|------------|---|
| 17. Fluoride (ppm) 2012 | N | 0.11 | A | 2 | 2 | Erosion of natural deposits; water additive, which promotes strong teeth; and, discharge from fertilizer and aluminum factories |
| 19. Nitrate (ppm) | N | 7.40 | 4.39-7.40 | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks and sewage; and, erosion of natural deposits |
| Nitrite | | 0.99 | 0.0-0.99 | 1 | | A salt or ester of nitrous acid |
| 76. Lead (ppb) | N | 7.3 | (d) | AL=15 | 0 | Corrosion of household plumbing systems and erosion of natural deposits |
| 77. Copper (ppm) | N | .27 | (d) | AL=1.3 | 1.3 | Corrosion of household plumbing systems and erosion of natural deposits |
| Disinfection Byproducts (DBPs), Byproduct Precursors, and Disinfectant Residuals | | | | | | |
| 78. Haloacetic Acids (HAA) (ppb) | N | 11.4 | A | 60 | n/a | By-product of drinking water disinfection |
| 79. TTHMs [Total trihalomethane] (ppb) | N | 43.2 | A | 80 | n/a | By-product of drinking water disinfection |
| 80. Total organic carbon (ppm) | N | 0.52 | <0.5–0.52 | TT | n/a | Naturally present in the environment |
| 83. Chlorine (ppm) | N | 1.48 | 1.15-1.48 | MRDL = 4 | MRDL G = 4 | Water additive used to control microbes |

Footnotes:

- (a) *Only one sample required.*
 (b) *The lowest monthly percentage of samples meeting the turbidity limits specified in 141.73. For example: “In November, 97% of turbidity samples met the turbidity limits.”*
 (c) *The MCL for Beta particles is 4 mrem/yr. EPA considers 50 pCi/l to be the level of concern for Beta particles.*
 (d) *This reported value is a 90th level. For example: Greencastle Area, Franklin County, Water Authority took 20 samples, 90% of 20 is 18, and 18 subtracted from 20 is 2. Therefore, the value reported here is the second highest result. None of 20 tests for lead or copper exceeded the 90th percentile action level values.*

83. Chlorine (ppm) - Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

| TEST RESULTS | | | | | | |
|-----------------------------------|---------------|----------------|---------------------|------------------|------|--|
| Microbiological Contaminants | | | | | | |
| Contaminant (Unit of measurement) | Violation Y/N | Level Detected | Range of Detections | MCL in CCR Units | MCLG | Major Sources in Drinking Water |
| 4. Turbidity (NTU) | N | 0.05 | 100% (b) | TT | n/a | Soil runoff |
| Inorganic Contaminants | | | | | | |
| 12. Barium (ppm) 2012 | N | 0.065 | A | 2 | 2 | Discharge of drilling waste; discharge from metal refineries; and, erosion of natural deposits |

2012 ANNUAL DRINKING WATER QUALITY REPORT

What does this mean? As you can see by the table, our *system had no violations of contaminant levels*. We are proud that our drinking water meets or exceeds all Federal and State requirements.

All sources of drinking water are subject to potential contaminants that are naturally occurring or man-made. Those contaminants can be microbes, organic or inorganic chemicals, or radioactive materials. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Through thorough monitoring and testing, our water too has been found to have some contaminants. However, please note: ***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 1-800-426-4791.

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.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

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 healthcare 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 (1-800-426-4791).

GAFCWA received 2 reporting violations on April 1 and July 1, 2012 for Total Organic Carbon samples that were sent to Certified Laboratory, which failed to submit analytical results to DEP by the designated due date.

In order to maintain a dependable water supply, we sometimes need to make improvements that will benefit all of our customers, which subsequently are reflected in rate structure adjustments. One such rate structure adjustment occurred in January 2011. Specifically, in order to keep pace with inflation and to fund necessary replacements and capital improvements at the Grant Street water treatment plant and within the water distribution system, the Authority Board found it necessary to increase rates effective January 2011.

Thank you for allowing the Greencastle Area, Franklin County, Water Authority to continue to meet its objective of providing quality potable to its customers. As always, should you have any questions, please feel free to contact the GAFCWA via telephone at (717) 597-7143 or U.S. mail at 60 North Washington Street, Greencastle PA 17225.

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