

GAITHER MANOR APARTMENTS WATER QUALITY REPORT - 2016

PWSID 006-0202

During 2015, your drinking water was monitored for a variety of contaminants through samples taken by Gaither Manor, Maryland Department of the Environment (MDE), and Carroll County Health Department. All of the test results were within the current regulation levels set by the Environmental Protection Agency (EPA) and MDE. This report is required by amendments to the Safe Drinking Water Act of 1996 to inform you about the quality of your water, as well as the efforts your system takes to ensure that quality. Also, information is to be provided to you concerning source water derivation and protection. More information is available about this report by calling 410-795-1925 and asking for Mel Schneider.

The water at Gaither Manor currently comes from two wells, each approximately 100 feet deep, located on the property near Bethway Drive. Another well located near Gaither Manor Drive has had all of its testing completed and only needs a final inspection by MDE to become operational. Every effort is made to protect the recharge areas of the wells. Minimal amount of fertilizer, herbicides and pesticides are used to prevent affecting these sources. Several years ago, three lots of land which are located close to the wells of Bethway Drive, were purchased by Gaither Manor Apartments. The lots have remained wooded to ensure water quantity and three septic systems that would have discharged in to the ground, were not built so that the water quality could be maintained. Also, we connected the building which contains the Gaither Market Store and several apartments to our wastewater treatment system. This was done to prevent the possible contamination of our wells from the discharge of the existing septic system which was located less than 200 feet from one of our wells. In 2001 we have connected two more nearby septic systems to our wastewater system to further protect our wells. The water from the wells has soda ash added to it to prevent corrosion of the pipes that could cause elevated levels of lead and copper. Chlorine is also added to protect against microbial contaminants.

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 EPA'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 infection. These people should seek advise 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 at 800-426-4791.

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 sources water include:

- * **Microbial Contaminants** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operation and wildlife.
- * **Inorganic Contaminants** such as salts and metals which, can be naturally occurring or result from urban storm-water 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 storm-water runoff, and residential uses.
- * **Organic Chemical Contaminants** such as synthetic and volatile organic chemicals, which are by-

products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Source Water Assessment and Its Availability

A source water assessment was completed for Gaither Manor Apartments in 2003 by Maryland Department of the Environment. Copies are available at Carroll County Public Library and Carroll County Health Department or the Rental Office.

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for Gaither Manor Apartments. The required components of this report as described in Maryland's Source Water assessment Plan (SWAP) are: 1) delineation of an area that contributes water to the source, 2) identification of potential sources of contamination, and 3) determination of the susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

The source of Gaither Manor Apartment's water supply is an unconfined fractured rock aquifer, known as the Wissahickon Formation. The Source Water Assessment Area was specifically designed for each source.

Potential sources of contamination within the assessment area were identified based on site visits, database reviews and land use maps. Well information and water quality data were also reviewed. Figures showing land uses and potential contaminant sources within the Source Water Assessment Area and an aerial photograph of the well locations are enclosed at the end of the report.

The susceptibility analysis for Gaither Manor Apartment's water supply is based on a review of the water quality data. Potential sources of contamination, aquifer characteristics, and well integrity. It was determined that all of Gaither Manor Apartments water supply is susceptible to contamination by nitrate, volatile organic compounds and radon, but not to synthetic organic compounds, other inorganic compounds or radionuclides. Well No. 1 is not susceptible to microbiological contaminants. Raw water quality data was not available for Wells 1A and 3 to make a susceptibility determination for microbiological contaminants.

WATER QUALITY DATA

In 2015, the water at Gaither Manor Apartments was tested monthly for presence or absence of coliform bacteria, which is a bacteria that is usually present if there is microbial contamination. All of the required tests performed show absence of coliform bacteria. The water was also tested quarterly for nitrates. Five samples were taken on Triennial basis for lead and copper, with the last samples taken in 2013. Tests were taken by MDE for over 100 contaminants. Out of those tested, detectable amounts were only found for a few chemicals and all were within regulated limits. Some of these contaminants are currently unregulated, which means that no limit has been set yet.

Terms and Abbreviations used below:

- * **MCLG** - Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- * **MCL** - Maximum Contaminant Level: the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- * **AL** - Action Level: The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- * **N/A** - Not applicable
- * **ND** - Not detectable at testing limit
- * **ppm** - Parts per million or milligrams per liter
- * **ppb** - Parts per billion or micrograms per liter
- * **pCi/l** - Picocuries per liter (a measure of radiation)

REGULATED CONTAMINANTS

Inorganic Contaminants	MCL	MCLG	Sample Result	Sample Date
Nitrate (ppm)	10	10	9.1	1-20-15
Nitrate (ppm)	10	10	9.0	4-14-15
Nitrate (ppm)	10	10	9.0	8-11-15
Nitrate (ppm)	10	10	8.7	10-13-15
Radionuclides				
Gross Beta(pCi/L)	15	None	1.6	12-14-09
	AL	MCLG	Sample Result	Sample Date
Lead (ppb)	15	0	ND	9-14-13
Lead (ppb)	15	0	ND	9-16-13
Lead (ppb)	15	0	ND	9-16-13
Lead (ppb)	15	0	ND	9-16-13
Lead (ppb)	15	0	ND	9-16-13
Copper (ppb)	1300	1300	148	9-14-13
Copper (ppb)	1300	1300	129	9-16-13
Copper (ppb)	1300	1300	116	9-16-13
Copper (ppb)	1300	1300	111	9-16-13
Copper (ppb)	1300	1300	107	9-16-13
Disinfection Byproducts	MCL	MCLG	Sample Result	Sample Date
TTHMs (ppb)	80	NA	2.4	7-29-14
Bromoform (ppb)		0	<.5	7-29-14
Chloroform (ppb)		70	2.4	7-29-14

UNREGULATED CONTAMINANTS

	MCL	MCGL	Sample Result	Sample Date
Radionuclides				
Radon (pCi/L)	None	None	3930	3-18-96
Inorganic Chemicals				
Barium (ppm)	2	2	.1	3-13-14
Fluoride (ppm)	4.0	4.0	<.1	4-28-14

About Nitrate: Nitrate in drinking water at level above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

About Barium: Barium can come from discharge of drilling wastes; discharge from metal refineries and erosion of natural deposits. Drinking in excess of MCL over many years can cause an increase in blood pressure.

About Fluoride: Fluoride can come from erosion of natural deposits and discharge from fertilizer and aluminum factories. Some people who drink fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of bones.

About Lead and Copper: While the levels of lead and copper tested very low, to not detectable, however 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. Gaither Manor Apartments 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 drinking 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

About Radon: Radon is a radioactive gas that you cannot see, taste, or smell, it is naturally occurring all over the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation as well as become dissolved in ground water. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. For additional information, call your state radon program or call EPA's Radon Hotline at 800-SOS-RADON. EPA is currently determining a limit for this substance. If the limit set by EPA is lower than the current test results for our water, it can be easily removed by aerating our atmospheric storage tanks to remove it before it enters the water system.

About Disinfection Byproducts: TTHMs are byproducts of using chlorine to disinfect drinking water. It is produced when chlorine reacts with organic carbon in drinking water. Since our source water is of high quality, we use only minimal amounts of chlorine, thus minimizing the occurrence of these chemicals. The level detected is 20 times less than the action level for this contaminant.

It is hoped that the technical parts of this report has not bored or confused you. Any questions you may have can be directed to Mel Schneider at 410-795-1925. Perhaps this report will help you appreciate all that is involved in providing the safe tap water that we all tend to take for granted. Each of us has a responsibility to help protect our water for future generations and us. Little things, like proper use and disposal of chemicals, paint, oil, and pesticides, all add up to ensure that there will always be adequate clean water.