2015
Annual Drinking Water Quality Report
Benedict Community – MD0080062
Charles County, Maryland
Prepared by the Department of Public Works
Utilities Division

We are pleased to present the Annual Drinking Water Quality Report for the Benedict Community for the period of January 1, 2015 through December 31, 2015. This report informs you about the quality of the water and services we deliver to you every day. This report is provided in compliance with Federal regulations and is updated annually.

Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to protecting water resources, improving the water treatment process, and ensuring the quality of your water meets or exceeds all local, State, and Federal standards and regulations. We are confident the drinking water from the Benedict system is safe and meets all Federal and State requirements.

Usted puede obterner esta información en espańol, llamando al Departamento de Obras Públicas División de Utilidades en 301-609-7400.

The source of the drinking water for the Benedict system is the Aquia Aquifer. An aquifer is an underground reservoir or deposit of water that is tapped by drilling wells and pumping the water to the surface for distribution. The earth between the surface and the underground aquifer helps to purify the water, making it easier to treat the water supply before it is pumped into the water distribution system. The Benedict system is served by 2 wells.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade, such as microbes, inorganic or organic chemicals, and radioactive substances. 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminates in drinking water than the general population. The elderly, infants, and immunocompromised persons, such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) or other immune system disorders, can be at a higher risk of infection from contaminates. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency/Center for Disease Control (EPA/CDC) guidelines to reduce the risk of infection are available from the Safe Drinking Water Hotline at 1-800-426-4791.

The Department of Public Works, Utilities Division, routinely monitors the Benedict system for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring efforts and identifies the year a contaminant was tested. The results of testing for contaminates which are not regulated are listed in the Unregulated Contaminants section. Definitions of key terms are presented below the table.

Benedict System

Test Results						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Major Sources in drinking water
Radioactive Contaminants						
Beta emitters Benedict Well (2011) St.Francis Well (2011)	N	12.7 11.5	pCi/L	0	50	Decay of natural and man-made deposits
Inorganic Contaminants						
Fluoride (2015)	N	0.21 to 0.22	Ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Distribution (2011)	N	0	Ppb	0	AL= 15	Corrosion of household plumbing systems, erosion of natural deposits
Copper Distribution (2014)	N	0.163	Ppm	1.3	AL= 1.3	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives
Arsenic (2015) Range (both wells)	N	7.0 to 8.7	Ppb	0	10	Erosion of natural deposits; runoff from glass and electronics production wastes
Arsenic (2015) **Annual Average** St. Francis Well Benedict Well **Highest RAA** St. Francis Well Benedict Well	N	7.6 8.5 7.6 8.5	Ppb	0	10	Erosion of natural deposits; runoff from glass and electronics production wastes
Barium	N	0.0067 to 0.0074	Ppm	2	2	Discharge of drilling waste, discharge form metal refineries, erosion of natural deposits
Volatile Organic Contaminants						
TTHMs [Total Trihalomethanes] Distribution (2014)	N	2.18	Ppb	0	80	By-product of drinking water chlorination
HAA5s Haloacetic Acids Distribution (2014)	N	0	Ppb	0	60	By-product of drinking water chlorination
Disinfectants						
Chlorine (2015)	N	0 to 2	Ppm	MRDLG 4	MRDL 4	Water additives to control microbes

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Major Sources in drinking water
Unregulated Contaminants						
Chloroform Benedict Well (2012) St. Francis Well (2012)	N	0.6 to 0.8 1.0	Ppb	N/A	N/A	By-product of drinking water chlorination
Sodium Benedict Well (2012) St. Francis Well (2012)	N	9.3 9.4	Ppm	N/A	N/A	Erosion of natural deposits
Chloroethane Benedict (2014)	N	0.5 to 0.6	Ppb	N/A	N/A	Chloroethane is used in production of gasoline.

Definitions of Key Terms

- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.
- 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.
- Maximum Residual Disinfection 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 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 of microbial contaminants.
- 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.
- Results with a less than "<" symbol preceding the result indicates the contaminant is below the detectable level.
- Non-Detects (ND) – The laboratory analysis indicates the contaminant is non-detectable.
- Parts per billion (ppb) or Micrograms per liter (µg/L) – The equivalent of 1 minute in 2,000 years or a single penny in $10,000,000.00.
- Parts per million (ppm) or Milligrams per liter (mg/L) – The equivalent of 1 minute in 2 years or a single penny in $10,000.00.
- Picocuries per liter (pCi/L) – A measure of the radioactivity in water.
- RAA – Running Annual Average.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of experiencing adverse health effects from the contaminant. The presence of some contaminants in drinking water is unavoidable, but we make every effort to keep your drinking water at or below the levels specified by law as being safe for consumption.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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 Department of Public Works, Utilities Division, 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's Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

Conserving water saves you money!

Approximately sixty percent of total household water supply is used inside the home and forty percent is used outside the home. A few simple changes can reduce water usage. Run the dishwasher only when full. Use a dishpan or plug the sink when hand-washing dishes. Run full loads of laundry instead of many small loads. Pull weeds to decrease competition for water. Repair or replace leaking hoses and sprinklers.

The staff of the Department of Public Works, Utilities Division, works diligently to provide top quality water and excellent customer service. All customers are urged to protect our valuable water resources and practice conservation to ensure a sustainable water supply for our community. If you have any questions concerning this report or any aspect of your water utility, please contact Sam Simanovsky, Chief of Operations and Maintenance, at 301-609-7400.