ANNUAL DRINKING WATER QUALITY REPORT FOR 2016

KENT COUNTY DEPARTMENT OF
WATER & WASTEWATER

EDESVILLE WATER SYSTEM

PUBLIC WATER SYSTEM IDENTIFICATION NUMBER
MD 014-0009 TP 01

May 9, 2017

We are pleased to present to you the ***Annual Water Quality Report*** for 2016. The purpose of this report is to inform you about the water quality and services we deliver to you every day. Our goal is to provide you, the customer, with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources and that we are committed to ensuring the quality of your water.

The water source for the ***Edesville*** water system are three (3) groundwater wells located at the Rock Hall water treatment plant site which draw water from the ***Magothy Aquifer.*** The wells range in depth from 308 to 362 feet.

The Maryland Department of the Environment has performed a source water assessment of the Rock Hall wells, which included a review of water quality data, potential sources of contamination, aquifer characteristics, and well integrity. It was determined from the evaluation that the Rock Hall water supply is not susceptible to microbiological, inorganic, volatile organic or radiological contaminates. The treated water from the Rock Hall water plant undergoes regular analysis for many different compounds and consistently meets all State and Federal requirements.

A copy of the report is available online at www.MDE.State.MD.US, or the Rock Hall Town office.

Some people may be more vulnerable to contaminants in drinking water than the general population. *Immune-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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

Drinking water, including bottled water, may contain at least small amounts of some compounds. The presence of these compounds does not necessarily indicate that water poses a health risk. To obtain more information call the *EPA's Safe Drinking Water Act Hotline (1-800-426-4791).*

The table below lists all the drinking water contaminants detected during the sampling required by the Maryland Department of the Environment. The presence of these compounds in the water does not necessarily indicate that the water poses a health risk.

In this report, you will find many terms and abbreviations that might not be familiar to you. The following definitions explain these terms.

- ***Maximum Contaminant Level Goal (MCLG)*** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- ***Maximum Contaminant Level (MCL)*** – The highest level of a contaminant that allowable in drinking water, MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- ***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.
- ***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.
- ***Action Level (AL)*** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ***Treatment Technique (TT)*** – A required process intended to reduce the level of a contaminant in drinking water.
- ***Turbidity*** – Relates to a condition where suspended particles are present in the water. Turbidity measurements are a way to describe the level of "cloudiness" of the water.
- ***Nephelometric Turbidity Units (NTU)*** – Units of measurement used to report the level of turbidity or "cloudiness" in the water.
- ***pCi/l*** – Picocuries per liter-a measure of radiation.
- ***ppb*** – parts per billion or micrograms per liter
- ***ppm*** – parts per million or milligrams per liter
- ***Avg*** – Regulatory compliance with some MCLs are based on running annual average of monthly samples.

TEST RESULTS								
Copper	12/31/2014	1.3	1.3	0.37		ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Disinfectants and Disinfection By-Products	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	0.8	0.7 - 0.8	MRDLG= 4	MRDL=4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5) (2014)	12.2	12.2 – 12.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (2014)	30.3	30.3 – 30.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Fluoride	0.4	0.4 – 0.4	4	4.0	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

Note: Test results are for year 2016 unless otherwise noted; not all tests are required annually.

Security Statement: Water system security continues to be an enormously important issue. If you notice suspicious activities in or around local water utilities, such as persons cutting or climbing facility fencing, loitering, tampering with equipment or other similar activities, please contact your local law enforcement agency immediately by dialing 911.

Water Conservation: The Department encourages all consumers to practice conservation on a routine basis, and to report any major leaks, or needed repairs to the Department as soon as possible.

Lead Statement (Not Present): 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 Kent County Department of Water and Wastewater Service 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.

If you should have any questions regarding this report or concerning your water utility, please contact Mr. Greg Swartz, Water and Wastewater Division Chief, at (410) -778-3287. In addition, any resident may obtain a copy of this report at the main office Monday thru Friday during normal business hours.

NOTE: As seen by the above listed result, the triennial lead analysis, conducted in accordance with Federal and State regulations, indicate that there is no lead detected in the samples collected from the distribution system in 2016.

Annual Drinking Water Quality Report

TOWN OF ROCK HALL

MD0140006

Annual Water Quality Report for the period of January 1 to December 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by
TOWN OF ROCK HALL is Ground Water

For more information regarding this report contact:

Name Tonnie Tatham

Phone 410-639-7611

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Source of Drinking Water

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 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 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, including 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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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).

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. We 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 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 or at http://www.epa.gov/safewater/lead.

Source Water Information

Source Water Name		Type of Water	Report Status	Location
ROCK HALL WELL 3 KE810289	KE810289	GW	Y	NEAR 0 MI ROCK HALL APPROX. 90 FT W OF LIBERTY RD
ROCK HALL WELL 4 KE730440	KE730440	GW	Y	NEAR 0 MI W OF ROCK HALL APPROX. 140 FT W OF LIBERTY ST
ROCK HALL WELL 5 KE811278	KE811278	GW	Y	NEAR 0 MI ROCK HALL APPROX. 50 FT W OF LIBERTY RD

2016 Regulated Contaminants Detected

Lead and Copper

Definitions:
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	12/31/2014	1.3	1.3	0.37		ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level or 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 or 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 disinfectant level or 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 or 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.
mrem:	millirems per year (a measure of radiation absorbed by the body)
na:	not applicable.
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

Water Quality Test Results

ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine		0.9	0.8 - 0.9	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)		8	4.12 - 8.23	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future								
Haloacetic Acids (HAA5)		8	4.12 - 8.23	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future								
Haloacetic Acids (HAA5)*		8	4.12 - 8.23	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future								
Total Trihalomethanes (TTHM)		35	17.1 - 34.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection
Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future								
Total Trihalomethanes (TTHM)		35	17.1 - 34.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future								

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Fluoride		0.4	0.4 - 0.4	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.