Annual Drinking Water Quality Report for 2018
Oak Hill Water Association, Charles County, Maryland

Dear Neighbors,

This note is an introduction for the required annual report for the community. Since the information provided by the Maryland Department of the Environment (WDE) has a somewhat different format from previous years, I thought it helpful to give our neighbors, especially our newer neighbors, a heads-up.

The first couple of pages of this document are important for explaining some basic, but required, information by MDE.

The next couple of pages provide detailed information of Test Results from required monitoring during the 2018 report period.

By way of a reminder, and information for our newer residents of Oak Hill, the following is information on our water system itself:

Water samples are collected monthly, annually, or at a greater intervals as required by Maryland State or Federal regulations. All of our test results are consistently well below the Maximum Contaminant Levels set by the Maryland State and Federal authorities.

Our drinking water comes from a single 6 inch diameter artesian well drilled into the Magothy Aquifer, which, in our part of the County, lies about 400-500 feet below the earth's surface. An aquifer is a strata of saturated sands which is tapped by drilling wells into it and pumping the water to the surface by way of a submersible pump or pumps. The water is purified as it moves through the saturated sands from the surface point of entry to the point of discharge; this distance can be many miles and can take many years to travel from Point A to Point B. After the water is pumped out of the aquifer, we add chlorine disinfection to protect against microbial contaminants that may enter through the distribution system, plus we add a sequestering agent, which holds any Iron that may be naturally occurring in suspension to eliminate staining of laundry, etc. Please note, the Iron is not actually physically removed from the water, it is "Sequestered". F.Y.I.: Our well is drilled to a depth of 453 feet; the pump is set at a depth of 319 feet. Our pump delivers water to the surface at a rate of 50 gallons/minute.

Each of the fifty-five properties served by the Oak Hill Water Association owns an equal share of the water system. In order to maintain a safe and dependable water supply, the costs of operation, maintenance, and necessary improvements are reflected in the rate structure and remain the responsibility of each property owner. Rate adjustments may be necessary in order to address needed improvements, repairs, or to comply with future regulations. We set our water rates so that the system pays for itself, thereby (hopefully) avoiding the necessity of charging each household for revenue short-falls. It is essential that each and every property owner, or designated responsible person, faithfully pay their share. You may be aware that there is a stand-by artesian well currently being drilled not far from the existing well house. This update to our water system will cost many thousands of dollars. If you are not up-to-date with your water bill please pay up immediately.

The Oak Hill Water Association consists of a single operator licensed by the State of Maryland, up to three elected officers, and the community itself with each homeowner holding an equal share of the water supply system . The operator has more than 40 years of experience in the field and is required to attend Continuing Education Training in an effort to keep up-to-date with the latest in water treatment techniques as well as State and Federal regulations regarding water quality. We encourage residents to learn about our water system. It is our desire to continually provide the best quality drinking water possible for our Oak Hill community. Interested parties can also obtain a temporary certification to assist with operation and maintenance of our water system. This certification could possibly lead to obtaining a permanent Water System Operator's license.

If you have any questions about this report or concerning your water service, please contact Jim Story (system operator) at 4431 Bellewood Drive or by email at jmstory@earthlink.net. In case of emergency, contact Jim at 301-932-0718 or (cell) 301-885-8563. *Officer of the Water Association is Brian Berringer (President.) The community Annual Crab Feast also serves as a platform for the Water Association's annual meeting. Additional meetings can be called as needed.*

Annual Drinking Water Quality Report

MD0080034 OAK HILL ESTATES

Annual Water Quality Report for the period of January 1 to December 31, 2018

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.

For more information regarding this report contact:

Name James M. Story, Operator

Phone 301-932-0718 (Home) 301-885-8563 (Cell)

OAK HILL ESTATES is Ground Water

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

Sources 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.

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.

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.

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 are responsible for providing high quality drinking water, but 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

SWA = Source Water Assessment

Source Water Name		Type of Water	Report Status	Location
OAK HLLS 1 CH690056	CH690056	GW	Y	LA PLATA APPROX. 3000FT S OF RT 227

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	Lead and Copper	Likely Source of Contamination
Copper	09/19/2017	1.3	1.3	0.13	0	ppm	Copper	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.
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.
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.
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.
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 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.
na:	not applicable.
mrem:	millirems per year (a measure of radiation absorbed by the body)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
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	2018	0.6	0.5 - 0.6	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Total Trihalomethanes (TTHM)	10/20/2017	5.5	5.5 - 5.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Fluoride	09/09/2015	0.15	0.15 - 0.15	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2018	8.2	8.2 - 8.2	0	50	pCi/L	N	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	2018	2.7	2.7 - 2.7	0	15	pCi/L	N	Erosion of natural deposits.
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Heptachlor epoxide	09/09/2015	100	100 - 100	0	200	ppt	N	Breakdown of heptachlor.