



2016
Annual Drinking Water Quality Report
Waldorf Community – MD0080049
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 Waldorf Community for the period of January 1, 2016, through December 31, 2016. 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 Waldorf system is safe and meets all Federal and State requirements.

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

The sources of the drinking water for the Waldorf system are the Patapsco and Magothy Aquifers, and the Washington Suburban Sanitary Commission's surface water plant. 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. Charles County also purchases water from the Washington Suburban Sanitary Commission (WSSC) which is blended with the existing Waldorf ground water wells. The sources of water used by WSSC for its water treatment plants are the Patuxent and Potomac Rivers. The Waldorf system is served by 15 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 contaminants 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 contaminants. 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 Waldorf 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 contaminants which are not regulated are listed in the Unregulated Contaminants section. Definitions of key terms are presented below the table.

Charles County purchases some water from WSSC (approximately 2 % on yearly basis), therefore we are required to provide a link to WSSC's CCR:

https://www.wsscwater.com/files/live/sites/wssc/files/water%20quality/wqr_latest_en.pdf

Waldorf System

Test Results						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Major Source in Drinking Water
Radioactive Contaminants						
Alpha emitter Range – all sources	N	8.7 to 8.7	pCi/L	0	15	Erosion of natural deposits
Beta/proton emitters Range – all sources	N	ND to 12.9	pCi/L	0	50	Decay of natural and man-made deposits
Radium 226 Range - all sources	N	ND to 1.2	pCi/L	0	5	Erosion of natural deposits
Combined Radium (226 & 228) Range – all sources	N	0.2 to 2.8	pCi/L	0	5	Erosion of natural deposits
Radium 228 Range - all sources	N	ND to 2.4	pCi/L	0	5	Erosion of natural deposits
Volatile Organic Contaminants						
TTHMs (Total Trihalomethanes) Highest LRAA (2016)	N	37	Ppb	0	80	By-product of drinking water chlorination
TTHMs Range – all sources	N	ND to 60.9	Ppb	0	80	By-product of drinking water chlorination
HAA5s (Total Haloacetic Acids) Highest LRAA (2016)	N	16.83	Ppb	0	60	By-product of drinking water chlorination
HAA5s Range – all sources	N	ND to 16.7	Ppb	0	60	By-product of drinking water chlorination
Inorganic Contaminants						
Barium Range – all sources	N	0.29	Ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Selenium Range – all sources	N	ND to 6.1	Ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Fluoride Range – all sources	N	0.87	Ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Distribution (2014)	N	0	Ppb	0	AL= 15	Corrosion of household plumbing systems, erosion of natural deposits
Copper Distribution (2014)	N	0.1	Ppm	1.3	AL= 1.3	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives

Test Results (continued)						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Major Source in drinking water
Unregulated Contaminants						
Bromodichloromethane Range – all sources	N	ND to 1.8	Ppb	N/A	N/A	By-product of drinking water chlorination
Dibromochloromethane Range – all sources	N	ND to 0.9	Ppb	N/A	N/A	By-product of drinking water chlorination
Chloroform Range – all sources	N	ND to 2.2	Ppb	N/A	N/A	By-product of drinking water chlorination
Chloroethane Range – all sources	N	ND to 0.7	Ppb	N/A	N/A	Used as a gasoline additive.
Chloromethane Range – all sources	N	ND to 2.1	Ppb	N/A	N/A	By-product of drinking water chlorination
Sodium Range – all sources	N	9.6 to 61.9	Ppm	N/A	N/A	Erosion of natural deposits

Unregulated Contaminant Monitoring Rule results (UCMR3)						
Contaminant	Violation Y/N	Range of Level Detected	Unit Measurement	MCLG	MCL	Use or Environmental Source
Chromium (2013)	N	ND to 1.8	Ppb	N/A	N/A	Naturally occurring element: used in making steel and other alloys.
Chromium-6 (2013)	N	ND to 0.27	Ppb	N/A	N/A	Naturally occurring element: used in making steel and other alloys. Chromium-6 is used in for chrome plating, dyes and pigments, leather tanning, and wood preservation.
Chlorate (2013)	N	ND to 90	Ppb	N/A	N/A	Agricultural defoliant or desiccant: used in production of chlorine dioxide.
Strontium (2013)	N	ND to 400	Ppb	N/A	N/A	Naturally occurring element: historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.
Vanadium (2013)	N	ND to 0.63	Ppb	N/A	N/A	Naturally occurring elemental metal: used as vanadium pentoxide which is a chemical intermediate and a catalyst.
Disinfectants						
Chlorine (2016)	N	0.2 – 4.0	Ppm	MRDLG 4	MRDL 4	Water additives to control microbes

Total Coliform Rule information						
	MCL	MCLG	Your water result	Sample Date	Violation Y/N	Typical Source
Total Coliform	5% of monthly samples are positive	0	2.2 %	July, 2016	N	Naturally present in the environment
Fecal Coliform Or E.coli Bacteria		0	0		N	Human or animal fecal waste

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 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.
- 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 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.
- 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.
- Locational Running Annual Average (LRAA) – average for the results of TTHMs and HAA5s

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.

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.