## Annual Drinking Water Quality Report for 2021 The Town of Oakland PWSID # 0110008

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you 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. We are committed to ensuring the quality of your water. The Oakland Water System obtains all of its raw water from two separate sources. Source #1 is the Youghiogheny River and it supplies water for the Bradley Lane Water Treatment Plant which is located off of Bradley Lane in Oakland. Source #2 is called Broadford Lake, which is located just off of Broadford Road and it supplies water for the Broadford Water Treatment Plant. Once the water is treated, it is pumped directly to the customer with excess capacity held in reserve at our 800,000 gallon water storage tank to meet daily needs. Water from both sources is blended together in this storage tank.

The Maryland Department of the Environment Water Management Administration Water Supply Program completed a Source Water Assessment in February 2004.

https://mde.maryland.gov/programs/Water/water\_supply/Source\_Water\_Assessment\_Program/Documents/www.mde.state.md.us/assets/document/watersupply/SWAPS/Garrett/The%20Town%20of%20Oakland.pdf

This report shows our water quality and what it means.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions concerning this report or your water utility, please contact Dean Keefer at the Oakland Water Department at 301-334-3836 or Mayor M. Jamirson at 301-334-2691. The Mayor and Town Council of Oakland holds regularly scheduled meetings on the first Monday of the month at 7:00 PM in the Council Chambers, 15 South Third Street, Oakland, Maryland. Please call 301-334-2691 to schedule your topic on the agenda for discussion at any regularly scheduled meeting.

The Town of Oakland routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2021. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in

excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 - The "Goal" (MCLG) is 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.

TEST RESULTS									
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination			
Microbiological Contaminants									
Turbidity (2021)	N	0.28	ntu	n/a	TT	Soil runoff			
Inorganic Contamir	nants			1		L			
Copper – Distribution (2020)	N	0.18	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			
Fluoride (2021) Range Highest level	N	0.27-0.48	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories			
Chlorine (2021)	N	1.0	ppm	4	4	Water Additive used to control microbes			
Barium (2021)	N	0.037	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits			
Nitrate (measured as nitrogen) (2021)	N	0.22-0.54 0.54	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, Erosion of natural deposits			
Radioactive Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely source of Contamination			
Combined Radium 226/228 (2021)	N	0.6	pCi/L	0	5	Erosion of natural deposits			
Beta/photon emitters (2021)	N	0.1	pCi/L	0	50	Decay of natural and man-made deposits			
Gross alpha excluding radon and uranium (2021)	N	0.1	pCi/L	0	15	Erosion of natural deposits			

Volatile Organic Contaminants								
Stage 2 Disinfection Byproducts:								
TTHM (Distribution) (2021) Range and Locational Running	N	22.2-54.2	ppb	0	80	By-product of drinking water chlorination		
Annual Average		30						

HAA5 (Distribution)	N	18.2-35.1	ppb	0	60	By-product of drinking water
(2021) Range and						chlorination
Locational Running		48				
Annual Average						

Note: Test results are for year 2021 unless otherwise noted. Not all contaminants are required to be tested for annually.

**Total Organic Carbon** – The percentage of Total Organic Carbon (TOC) removed was measured each Month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violation

Section.

## **Total Organic Carbon**

Total organic carbon has no health effects. However, organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health.

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 Town of Oakland 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

PFAS – short for per- and polyfluoroalkyl substances- refers to a large group of more than 4000 human made chemicals that have been used since the 1940's in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging, and fire fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in the soil, surface water, groundwater and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

Currently, there are no federal regulations (i.e. Maximum Contaminant Levels (MCLs) for PFAS in drinking water. However, the US Environmental Protection Agency (EPA) has issued a health advisory level (HAL) of 70 parts per trillion (PPT) for the sum of PFOA and PFOS concentrations in drinking water. While not enforceable regulatory standard, when followed, the EPA HAL does provide drinking water customers, even the most sensitive populations, with a margin of protection from lifetime exposure to PFOA and PFOS in drinking water. Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. In 2021, results from samples taken at the Town of Oakland's drinking water treatment system showed a ND (non/detect) for PFOA and PFOS concentration. No additional actions are planned at this time. MDE anticipates that EPA will establish an MCL for PFOA and PFOS in the near future. This would entail additional monitoring. Additional information about PFAS can be found on the MDE website: mde.maryland.gov

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's 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 having the described health effect.

Please call our office at 301-334-3836 if you have questions.