

***Annual Drinking Water Quality Report for 2016***  
***The Town of Oakland***  
***PWSID # 0110008***  
***April, 2017***

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.

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>, 2016. 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. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. 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.

<b>TEST RESULTS</b>						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Turbidity (2016)	N	0.29	ntu	n/a	TT	Soil runoff
<b>Inorganic Contaminants</b>						
Mercury (inorganic) (2014)	N	1.9	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Copper – Distribution (2014)	N	0.379	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (2016) Range  Average	N	0.267 - 0.35 0.3	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Chlorine (2016)	N	0.9	ppm	4	4	Water Additive used to control microbes
Barium (2016)	N	0.04	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Lead – Distribution (2014)	N	5.0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)(2014)	N	0.81	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

<b>Volatile Organic Contaminants</b>						
<b>Stage 2 Disinfection Byproducts: January 1, 2015 – December 30, 2015</b>						
TTHM (Distribution) (2016) Range and Locational Running Annual Average	N	10.4-39.5 32	ppb	0	80	By-product of drinking water chlorination
HAA5 (Distribution) (2016) Range and Locational Running Annual Average	N	14.8-29.86 32	ppb	0	60	By-product of drinking water chlorination

**Additional test results for unregulated contaminants were as follows.**

<b>Unregulated Contaminants</b>						
pH, range (2014) Broadford Bradley Lane	N	6.4 6.9				
Sodium (2014) Broadford Plant (avg.) Bradley Lane Plant (avg)	N N	23.2 11.1	ppm	N/A	N/A	Erosion of Natural Deposits
Chloroform (2014) Broadford Plant Bradley Lane Plant	N N	4.7 25.8	ppb	N/A	N/A	By-product of drinking water chlorination
Bromodichloromethane (2014) Broadford Plant Bradley Lane Plant	N N	1.7 4.1	ppb	N/A	N/A	By-product of drinking water chlorination

Note: Test results are for year 2016 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.

Our system received a monitoring violation for the period of October 1, 2016 - December 31, 2016. We failed to monitor for Total Organic Carbon (TOC) at the Broadford and Bradley Lane drinking water treatment plants. Our system was returned to compliance after TOC samples were taken on January 11, 2017."

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 <http://www.epa.gov/safewater/lead>.

**NOTE: As can be seen by results listed in the above tables, lead, which is tested for triennial (every 3 years) in accordance with Federal and State regulations in Oakland's distribution system, was detected in samples collected in 2014 but did not exceed the MCL.**

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.