2012 Quality on Tap Report

BROOKVILLE MUNICIPAL AUTHORITY WATER SYSTEM
Public Water System ID #6330004

INTRODUCTION

We are pleased to present our Annual Drinking Water Quality Report for the year 2012. *(Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.)* This report is designed to inform you about the quality of water we deliver every day. Our goal is to provide you with a continuous, safe and dependable supply of drinking water. Through this report, we hope to explain the efforts we make to continually improve the quality of your water.

Our water source is a storage impoundment located on the North Fork of Redbank Creek. The water is treated, filtered, disinfected and pumped to the distribution system. A source water assessment was completed in 2003 by the PA Department of Environmental Protection (PADEP). The assessment found that the North Fork of Redbank Creek is potentially most susceptible to an accidental release of contaminants along major transportation corridors and bridges, runoff carrying nitrates and pathogens from fertilizers, manure spreading and other agricultural activities without Best Management Practices, storm water runoff from the roads and residential areas, malfunctioning on-lot septic systems and the cumulative effect of acid rain to waters which lack buffering capacity. Overall, the North Fork watershed has little risk of significant contamination. Summary reports of the assessment are available by writing to: PADEP Water Supply Management Program, Northwest Regional Office, 230 Chestnut St, Meadville, PA 16335 or available on-line at www.dep.state.ps.us (keyword: source water protection).

MONITORING REQUIREMENTS

The Brookville Water Authority (BMA) routinely monitors for constituents in your drinking water according to Federal and State laws. The attached table shows the results of our monitoring for the period of January 1st to December 31st, 2012. This table may contain the most recent results from previous years. **We are pleased to report that our drinking water meets all Federal and State requirements.**

The Federal and State regulatory agencies require that our water does not exceed their Maximum Contaminant Levels (MCL's). These MCL's are set at very stringent levels for health effects. To understand the possible effects described for many regulated constituents, a person would have to drink two 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. The attached table compares those contaminants found to be present in the system's water with the regulatory limit of that substance. If the contaminant exceeds the limit at any time, a violation is said to occur. We are proud that our drinking water meets all Federal and State requirements. We have learned through our ongoing monitoring and testing that some constituents have been detected, but all are below acceptable levels.

FUTURE IMPROVEMENTS

In order to maintain a safe and dependable water supply, the Authority recently replaced their 100-year water treatment plant with a state-of-the-art water treatment facility using membrane-microfiltration technology. Wells have also been drilled and developed to provide a supplemental water supply. Also, the Authority is conducting geologic studies of the North Fork Creek Watershed to evaluate the potential impacts of coal mining and gas drilling on our water supply.

CONTACT INFORMATION

If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the second Tuesday of every month at 4:00 p.m. at the Brookville Borough Municipal Building, 18 Western Avenue. **If you have any questions about this report or your water utility, please feel free to contact Authority Secretary, Charles Gable at 814-849-5320.**

2012 Water Quality Report
Brookville Municipal Authority (PWS ID #6330004)

Contaminant Name	Highest Level Allowed (MCL/MRDL/TT/AL)	Treatment Goal (MCLG/ MRDLG)	Highest Level Detected by BMA	Range of Detection by BMA	Sources of Contaminants in Drinking Water	Violations By BMA
Microbiological Contaminants						
Turbidity*	TT = 0.3 NTU 95% of monthly samples < = 0.3 NTU	N/A	0.057 NTU (measured on 5/8/12) Lowest monthly % = 100%	0.017 - 0.057	Naturally present in the environment. Soil runoff.	None
Chlorine	MinRDL = 0.2 ppm MRDL = 4 ppm	N/A 4 ppm	Lowest entry point residual = 0.61 ppm (9/20/12) Distribution sys. highest mo. avg. = 0.91 ppm (Jan.)	0.61 - 1.68 ppm 0.24 - 0.91 ppm	Drinking water additive to control microbes.	None
Inorganic Contaminants						
Barium	2 ppm	2 ppm	0.18 ppm	N/A	Erosion of Natural Deposits, Discharge of Drilling Wastes.	None
Lead (2010)	AL = 15 ppb	0 ppb	90th percentile = 0 ppb (no. of sites > AL= 0)	0 - 11.5 ppb	Corrosion of household plumbing, erosion of natural deposits.	None
Copper (2010)	AL = 1.3 ppm	1.3 ppm	90th percentile = 0.218 ppm (no. of sites > AL = 0)	0 - 0.366 ppm	Corrosion of household plumbing, erosion of natural deposits.	None
Fluoride	2 ppm	2 ppm	0.64 ppm	N/A	Erosion of natural deposits.	None
Organic Contaminants						
Total Trihalomethanes (TTHMs)	80 ppb	N/A	Highest Running Annual Avg. = 47.9 ppb	22.4 - 45.9 ppb	By-product of drinking water chlorination.	None
Halogenated Acetic Acids (HAAs)	60 ppb	N/A	Highest Running Annual Avg. = 32.6 ppb	10.7 - 21.0	By-product of drinking water chlorination.	None
Total Organic Carbon (TOC)	TT	N/A	Alternative Compliance Criteria TOC < 2.0 ppm	1.02 - 1.43 ppm	Naturally present in the environment.	None

*** Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.**

Definitions:

MCL - Maximum Contaminant Level - 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.

MCLG - Maximum Contaminant Level Goal - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCGL's allow for a margin of safety.

MRDL - Maximum Residual Disinfectant Level - 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.

MRDLG - Maximum Residual Disinfectant Level Goal - 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.

MinRDL - Minimum Residual Disinfectant Level - The minimum level of residual disinfectant required at the entry point to the distribution system.

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

TT - Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

ppm - One part per million. Comparable to one milligram per liter (1 mg/L). Corresponds to one minute in two years or a single penny in $10,000.

ppb - One part per billion. Comparable to one microgram per liter (1ug/L). Corresponds to one minute in 2000 years or a single penny in $10,000,000.

NTU - Nephelometric turbidity unit is a measurement of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

N/A - Not applicable.

HEALTH INFORMATION

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 stormwater 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 stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these 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 or by referring to the website at *http://www.epa.gov/safewater*.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 at 1-800-426-4791.

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. Brookville Municipal Authority is responsible for providing a 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 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*.