

BOONSBORO/KEEDYSVILLE REGIONAL WATER SYSTEM
2008 ANNUAL DRINKING WATER QUALITY REPORT
PWSID #0210002

We are very pleased to present to you the Boonsboro/Keedysville Regional Water System's Annual Drinking Water Quality Report for the 2008 calendar year. Our goal is to consistently provide you with a safe and dependable supply of drinking water by continuing to improve the water treatment process and taking the extra steps to protect our valuable water resources. We are committed to ensuring the safe quality of the water that reaches your tap which is reflected in the monitoring results included in this report.

Your drinking water comes from the Tomstown Dolomite, a ground water source made of carbonate rock, which forms an aquifer feeding a combination of wells and springs which is filtered, chlorinated and processed *with fluoride* through the Boonsboro and Keedysville Water Treatment Plants. The Boonsboro/Keedysville Water System staff diligently monitor for constituents in your drinking water insuring safety according to Federal and State laws.

Your water is tested because all sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. 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. The presence of contaminants does not necessarily indicate that the water poses a health risk.

While the Town of Boonsboro Publics Works staff is responsible for providing high quality drinking water, they cannot control the variety of materials that naturally affect our public water system. Therefore, the Environmental Protection Agency (EPA) sets regulations that limit the amount of the certain contaminants (listed below) in water provided by public water systems to ensure that your tap water is safe to drink.

- **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.
- **Total organic carbon (TOC)** has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer. *Your drinking water contains levels of THMs and HAAs well below the Maximum Contaminant Level set by the EPA.*

Food and Drug Administration (FDA) regulations set limits for contaminants in bottled water that 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 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 EPA *Safe Drinking Water Hotline* 1-800-426-4791.

If present, elevated levels of lead can also 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. 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>."

Monitoring results in this report are for the period of January 1 to December 31, 2008 and will show that our system had no violations. Although monitoring and test results detected some constituents, the EPA has determined that your water IS SAFE at these levels.

Contaminant	Source	Sample Date	Unit of Measure	MCLG	MCL/TT	Your Water	Violation	Source of Contamination
Volatile Organic Chemicals								
Haloacetic Acids	D	2008	ppb	N/A	60	.50	N	Product of Chlorine Disinfection
Trihalomethanes	D	2008	ppb	N/A	80	1.90	N	Product of Chlorine Disinfection
Inorganic Contaminants								
Fluoride	1	2006	ppm	4	4	1.1	N	Erosion of natural deposits; water additives promoting strong teeth; discharge from fertilizer and aluminum factories
Fluoride	2	2007	ppm	4	4	1.06	N	
Fluoride	3	2006	ppm	4	4	1	N	
Nitrate	1	2008	ppm	10	10	3.6	N	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate	2	2008	ppm	10	10	4.7	N	
Nitrate	3	2008	ppm	10	10	3.2	N	
Chromium	1	2006	ppm	0.1	0.1	.01	N	Discharge of drilling wastes; metal refineries; erosion of natural deposits
Beryllium	1	2006	ppm	0.004	0.004	.001	N	
Copper	D	2008	ppm	1.3	1.3	.18	N	Corrosion of household plumbing systems, Erosion of natural deposits
Lead	D	2008	ppm	0	0.015	0	N	
Mercury	2	2007	ppm	2	2	.0005	N	Erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides								
Di-(2-ethylhexyl) phthalate	1	2008	ppb	0	6	.53	N	Discharge from rubber and chemical factories
Di-(2-ethylhexyl) phthalate	2	2007	ppb	0	6	.6	N	Discharge from rubber and chemical factories
Di-(2-ethylhexyl) phthalate	3	2006	ppb	0	6	1	N	Discharge from rubber and chemical factories
Unregulated Contaminants								
Sodium	1	2006	ppm	MNR	MNR	21.3	N	Erosion of natural deposits
Sodium	2	2007	ppm	MNR	MNR	24.2	N	Erosion of natural deposits
Sodium	3	2006	ppm	MNR	MNR	11.9	N	Erosion of natural deposits

Drinking Water Definitions and (Unit) Descriptions

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

MCL: Maximum Contaminant Level; the highest level of a contaminant that is allowed in drinking water.

MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

TT: Treatment Technique; a required process to reduce the level of a contaminant in drinking water.

(NTU): nephelometric turbidity unit is a measure of the clarity of water.

(pCi/L): picocuries per liter is a measure of the radioactivity in water.

(ppm): parts per million **(ppb)**: parts per billion **(NA)**: not applicable **(MNR)**: monitoring not required

Source: Monitoring results are for three water sources and the distribution system as a whole noted as 1, 2, 3 and D accordingly.

Some of the data, though representative, are more than one year old because the state allows us to monitor for some contaminants less than once a year because concentrations of these contaminants do not change frequently.

For more information or questions regarding this report, please contact Debra A. Smith, Boonsboro Town Manager at 301-432-5141 or town.manager@myactv.net or visit the EPA website at www.epa.gov/safewater

To learn more about your town's water and/or sewer system, please attend one of these monthly meetings; the Boonsboro Municipal Utilities Commission on the 2nd Thursday of the month at 7 PM at 21 N. Main Street in Boonsboro, MD or the Keedysville Water Board on the 1st Monday of the month at 7 PM at 19 S. Main Street in Keedysville, MD or visit the following websites for meeting information, www.town.boonsboro.md.us and www.keedysvillemd.com