Town of Middletown

Annual Drinking Water Quality Report 2008

Report Date: May 1, 2009

PWSID: 0100018 Town of Middletown

The Burgess and Commissioners of Middletown are pleased to present to you this annual Water Quality Report. This report is designed to inform you about the quality of our water and services we deliver to you. Our constant goal is to provide you with a safe and dependable supply of drinking water, to continually improve our water treatment process, and to protect our water resources.

The Middletown water system is supplied by eighteen (18) wells and four (4) major groups of springs located on the west side of the Catoctin Mountain, north of town. The Middletown water system draws from the Catoctin Mountain Aquifer. Water from the springs flow by gravity to two (2) in-ground reservoirs with a combined capacity of two million gallons. Raw water from the reservoir flows directly to our water treatment plant. The reservoirs and the treatment plant are located just west of Hollow Road about one mile north of the intersection with US Alternate 40. Water treatment consists of adding caustic soda, for pH adjustment, chlorine, as a disinfectant to protect against microbial contaminants and fluoride to promote dental health. From the plant, the water is pumped to our 400,000 gallon elevated storage tank.

We are pleased to report that Middletown's drinking water is safe and continues to meet all Federal and State requirements. If you have any questions about this report or concerning water quality, please contact Andrew J. Bowen, Town Administrator, at 31 West Main Street, Middletown, MD 21769 or call 301 371-6171. To learn more about the Town's water and sewer system activities, you are encouraged to attend our monthly Town Meeting at 7:00 PM on the second and fourth Monday's of each month at the Middletown Municipal Center, located at 31 West Main Street, Middletown, MD.

The Middletown water system routinely monitors your drinking water for possible contaminants in accordance with Federal and State laws. Of the some 122 regulated and unregulated contaminants for which the Environmental Protection Agency (EPA) has identified a Maximum Contaminant Level (MCL), none were at violation levels. 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. All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these does not necessarily pose a health risk. More information about contaminants and potential health risks can be obtained by calling the EPA Safe Drinking Water Hotline at 800-426-4791.

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).

The table on the opposite side of this page lists all contaminants found in Middletown's drinking water during the 2008 calendar year. Unless otherwise noted, testing was done January 1 – December 31, 2008. The State requires us to monitor some contaminants less than once per year because their concentrations are not likely to vary significantly from year to year. Therefore, some of the data, though representative of the water quality, is more than one year old. 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:

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.
Action Level - the concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.
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
Radioactive Contaminants						
Alpha emitter(2003) ID#1 (2005) ID#2	NO NO	ND 4	pCi/1	0	15	Erosion of natural deposits
Beta/photon emitters ID#1 (2005) ID#2	NO NO	ND 5	pCi/1	0	50	Decay of natural and man-made deposits
Combined radium ID#1 (2005) ID#2	NO NO	ND 0.3	pCi/1	0	5	Erosion of natural deposits
Inorganic Contaminants						
Copper (90th percentile) (2008)	NO	0.18	ppm	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits
Lead (90th percentile) (2008)	NO	2	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) ID#1 ID#2	NO NO	3.0 0.9	ppm	10	10	Runoff from fertilizer use; leaching form septic tanks, sewage; erosion of natural deposits
Fluoride –Range ND-1.14	NO	0.28 Avg.	ppm	4	4	Erosion of natural deposits
Barium (2006) ID#1 (2008) ID#2	NO NO	.0239 .057	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Synthetic Organic Contaminants						
Di(2-ethylhexyl) ID#1 Phthalate (2005) ID#2	NO NO	0.6 0.9	ppb	0	6	Discharge from rubber and chemical factories
Pentachlorophenol ID#1 ID#2	NO NO	ND 0.02	ppb	0	1	Discharge from wood preserving factories
Volatile Organic Contaminants						
HAA5 Haloacetic Acids (Distribution) (2007)	NO	0.6	ppb	0	60	By-product of drinking water chlorination
TTHM Total (distribution) Trihalomethanes (2007)	NO	9.76	ppb	0	80	By-product of drinking water chlorination
Unregulated						
Bromodichloromethane ID#1 (2006) ID#2	NO NO	1.8 1.2	ppb	N/A	N/A	Byproducts of chlorine disinfection
Chloroform ID#1 (2006) ID#2	NO NO	1.3 0.8	ppb	N/A	N/A	Byproducts of chlorine disinfection
Dibromochloromethane ID#1 (2007) ID#2	NO NO	1.2 1.0	ppb	N/A	N/A	Byproducts of chlorine disinfection
Sodium (2006) ID#1 (2008) ID#2	NO NO	17.4 24	ppm	N/A	N/A	Erosion of natural deposits
Chloromethane ID#1 (2007) ID#2	NO NO	ND 9	ppb	N/A	N/A	

ID #1 – 10 Wells and 6 spring/ID #2 – Well #15-18

Note: Test results are for 2008 unless otherwise stated. All tests do not require annual testing.

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 Middletown is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When you 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.

The employees of the Middletown water system work constantly to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have questions.