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July 2010

Consumer Confidence Report
Fort Meade Drinking Water System
Calendar Year 2009

The Fort George G. Meade, Directorate of Public Works (DPW) presents to you the annual report on the quality of drinking water and services delivered to you. One of the requirements of the Safe Drinking Water Act is to provide this report to you annually. DPW's constant goal is to provide you with a safe and dependable supply of drinking water. Our drinking water is safe and meets or exceeds Federal and State requirements. DPW is committed to both continually improving the water treatment process and protecting Fort Meade's water resources. The Fort Meade drinking water system serves approximately 60,000 people of which 50% is comprised of Department of Defense (DoD) personnel. To meet Fort Meade's drinking water needs ground water is drawn from wells installed in the Patuxent Aquifer and/or surface water is drawn from the Little Patuxent River. For Calendar Year 2009, ground water was the source for drinking water.

A source water assessment was performed by the Maryland Department of the Environment in June 2005. The assessment found the wells at Fort Meade are completed in the Patuxent aquifer, the deepest of the confined aquifers in Anne Arundel County. The clay above the Patuxent aquifer is known as the Arundel Clay and it is a hard, dense clay layer that protects the aquifer from contamination from surface sources. A copy of the source water assessment is available for your review at the DPW's Environmental Division.

America's 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 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 by-products 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 and/or a result of human activities such as oil and gas production and mining activities.

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In order to ensure that the tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (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 and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

DPW monitors the Installation's drinking water according to the requirements of Federal and State laws. Table 1 shows the results of detected contaminants for 2009. Fort Meade's potable water system did comply with the State specified water quality parameters. Most of the contaminants are non-existent or below the instrument detection level at Fort Meade. It is important to remember the presence of these constituents do not necessarily pose a health risk.

If you have any questions about this report or your water quality, please contact the Fort Meade Public Affairs Office (PAO) at (301) 677-1361. DPW wants its valued customers to be informed about their water quality.

Definitions and Information Concerning Water Quality:

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

EPA - Environmental Protection Agency.

DoD – Department of Defense

Haloacetic Acids (HAA5) - Byproducts of drinking water disinfection. Includes monochloroacetic acid, monobromoacetic acid, dichloroacetic acid, trichloroacetic acid, bromochloroacteic acid and dibromoacetic acid.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the maximum contaminant level goals as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - 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.

Maximum Residual Disinfectant Level (MRDL) – 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.

Maximum Residual Disinfectant Level Goal (MRDLG) – 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 contamination.

MDE – Maryland Department of the Environment.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity excess of 5 NTU is just noticeable to the average person.

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

Pico curies per liter (pCi/l) - Pico curies per liter are a measure of the radioactivity in water.

Total Trihalomethanes (TTHMs) - Byproducts of drinking water chlorination. Includes chloroform, bromodichloromethane, dibromochloromethane, and bromoform.

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

Fort Meade Water Test Results:

DPW constantly monitors the water for various constituents in the water supply to meet all Federal and State regulatory requirements and IS SAFE TO DRINK. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters (1/2 gallon) of water everyday at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Total coliform is monitored to ensure that the treatment system is performing properly and that the drinking water we supply is free of microbial contamination. At least 95% of the 60 samples each month must be negative for the presence of total coliform for our system to be in compliance with the regulatory treatment technique requirements. In accordance with the CCR regulations, the highest percentage of positive samples collected in any one month must be reported in the "Level Found" column of the reporting table. For the reporting period January 1, 2009 – December 31, 2009, the total coliform result was zero percent.

Gross Alpha, Gross Beta, Combined Radium contaminants are monitored by MDE, because the concentrations of these contaminants do not change frequently. The MDE results for March 2008 are listed in Table 1.

Lead and copper are regulated under the lead and copper rule, which requires us to report the 90th percentile value of the most recent round of sampling and the number of sampling sites that exceeded the action level. The 90th percentile value is reported in the "Level Found" column of the reporting table. The number of individual locations exceeding the action level is reported in the "Range" column. MDE allows us to monitor lead and copper every three years. Monitoring was last completed in September 2008.

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. Fort Meade 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 water, you may wish to have your water tested. Information on lead in your 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.

Unregulated Contaminants are those contaminants for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. The concentrations listed in Table 1 are known as National Secondary Drinking Water Standards and are not enforceable standards. Unregulated contaminants may cause cosmetic and or aesthetic water quality effects.

If you have any questions, contact Mr. B.R Sharma, Environmental Division at (301) 677-9171/9648.

TABLE 1
Fort Meade Water Quality Test Results
(Jan 1st 2009 - Dec 31st 2009)

Contaminant	Unit	MCL	MCLG	Level Found	Range	Exceed Limit?	Likely Source(s) of Contaminant
Microbiological Contaminants							
Total Coliform Bacteria	%	< 5	0	0.28	n/a	No	Naturally present in the environment
Fecal Coliform and *E.Coli*	n/a	0	0	0	n/a	No	Human and animal fecal waste
Turbidity 95%	NTU	TT	0	0.11	.04 - .37	No	Soil runoff
Radioactive Contaminants Most Recent Monitoring: (March 2008)							
Gross Alpha	pCi/l	15	0	7	n/a	No	Erosion of natural deposits.
Gross Beta	pCi/l	50	0	7	n/a	No	Erosion of natural deposits. EPA considers 50 pCi/l to be the level of concern.
Combined Radium (226&228)	pCi/l	5	0	1.0	n/a	No	Erosion of natural deposits.
Inorganic Contaminants							
Copper (Most recent monitoring: 2008)	ppm	1.3	0	0.07	0.01-3.1	No	Corrosion of household plumbing systems; erosion of natural deposits, leaching from wood preservatives.
Lead (Most recent monitoring: 2008)	ppb	15	0	2	2-203	No	Corrosion of household plumbing systems; erosion of natural deposits.
Barium	ppm	2	0	0.006	n/a	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4	0	0.97	.56-1.20	No	Erosion of natural deposits; water additive, which promotes strong teeth, discharge from fertilizer and aluminum factories.
Phosphate, Total	ppm	1.7	0.1	1.11	0.10-1.60	No	Corrosion Control Additive
Disinfectants and Disinfection By-Products							
Chlorine	ppm	4	4	2.0	1.0 – 2.6	No	Water additive to control microbes.
Total Trihalomethanes (TTHMs)	ppb	80	n/a	2.3	0.6 – 4.9	No	By-product of drinking water chlorination.
Haloacetic Acids (HAA5)	ppb	60	n/a	0.43	0 – 1.4	No	By-product of drinking water disinfection.
Di(2-Ethylhexyl) Phthalate	Ppb	6	0	0.5	0 – 0.5	No	Discharge from Rubbermaid Chemical Factories
Unregulated Contaminants							
Nickel	ppm	100	n/a	0.0064	n/a	No	Erosion of natural deposits.
Sodium	ppm	n/a	n/a	0.012	n/a	No	Erosion of natural deposits; runoff from road de-icing. MDE recommends less than 20 ppm.
Sulfate (Most recent monitoring: June 2007)	ppm	250	n/a	6.9	n/a	No	Water in excess of 250 ppm may have a bitter taste and laxative.
Iron	ppm	0.3	n/a	0.06	.01-.18	No	Pipes Corrosion, Naturally occurring
Manganese	ppm	0.05	n/a	0.004	n/a	No	Naturally occurring
Zinc	ppm	5	n/a	0.24	.11-.40	No	Naturally occurring & Plumbing
Chloroform	ppm	n/a	n/a	0.0006	n/a	No	Disinfectant Byproducts