DRINKING WATER QUALITY REPORT – Calendar Year 2015
U.S. Army Garrison Aberdeen Proving Ground South

MD0120010

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Acronyms Used Throughout This Report

AL	action level
APG	Aberdeen Proving Ground
CCR	Consumer Confidence Report
EPA	Environmental Protection Agency
HAA5	haloacetic acids (five)
MCL	maximum contaminant level
MCLG	maximum contaminant level goal
MDE	Maryland Department of the Environment
MRDL	maximum residual disinfection level
MRDLG	maximum residual disinfection level goal
N/A	not applicable
ND	not detected
NTU	Nephelometric Turbidity Unit
ppb	parts per billion
ppm	parts per million
TOC	total organic carbon
TT	treatment technique
TTHM	total trihalomethanes

Contact Information

Questions regarding the information contained in this report may be directed to the following:

Mr. Richard Wiggins, Directorate of Public Works, (410) 436-3808

Mr. Kelly Luster, Public Affairs Office (410) 278-1147

ABOUT THIS REPORT

Once again, we are proud to present to you our annual drinking water quality report. This is the annual report concerning the quality of water delivered to U.S. Army Garrison Aberdeen Proving Ground (APG) South for the period of January 1, 2015 through December 31, 2015. Under the Consumer Confidence Report (CCR) Rule of the Federal Safe Drinking Water Act, community water systems are required to report this water quality information to the consuming public. Presented in this report is information regarding the source of our water, its constituents and the health risks associated with any contaminants detected in quantities exceeding a drinking water regulatory maximum contaminant level (MCL), action level (AL) or treatment technique (TT).

HOW CAN IMPURITIES GET IN THE WATER SUPPLY?

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 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 occur naturally or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may occur 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 come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

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 U.S. Environmental Protection Agency (EPA) **Safe Drinking Water Hotline at (800) 426-4791**.

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

YOUR DRINKING WATER SOURCES

The water provided to APG South customers comes from the Van Bibber water treatment plant (WTP) in Edgewood, Maryland. Water is pumped from Winters Run (a surface water source), treated at the Van Bibber plant and delivered to APG South customers. Maryland Department of Environment (MDE)

completed a source water assessment in 2005 for our source water. The study found that Winters Run, like many surface water sources in Maryland, is potentially most susceptible to non-point pollution from agricultural activities and urban stormwater runoff. The source water assessment report is available from MDE's Water Supply Program webpage under Source Water Protection (www.mde.state.md.us/programs/Water/Water_Supply).

MONITORING OF YOUR DRINKING WATER

The APG South water system uses only EPA-approved laboratory methods to analyze your drinking water. Our personnel collect water samples from the distribution system and from the Van Bibber WTP. Samples are then brought to the accredited laboratory where a full spectrum of water quality analyses is performed. The results are reported to MDE. At APG South, we monitor for the contaminant groups listed in Table 1 using EPA-approved methods. Table 1 also lists the monitoring frequencies for these contaminant groups.

Table 1. Monitored Contaminants and Frequencies

Contaminant Group	Monitoring Frequency
Disinfection By-Products (DBP)	Quarterly
DBP Precursors and Microorganisms	Monthly
Inorganic Compounds	Once Per Year
Lead and Copper	Once Every 3 Years
Turbidity	Daily
Radionuclides	Once Every 3 Years
Synthetic Organic Compounds	Twice Per Year
Volatile Organic Compounds	Once Per Year

DEFINITIONS

Action Level (AL) - the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG 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 contaminants.

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

APG SOUTH WATER QUALITY DATA

Table 2 lists only the contaminants detected in the APG South drinking water distribution system during calendar year 2015. We routinely monitor for a number of contaminants in the water supply to meet regulatory drinking water compliance requirements. Your drinking water has been analyzed for many other contaminants as well, but they were not detected in the APG South drinking water distribution system during 2015 or the most recent sampling period.

Table 2. Contaminants Detected in APG South Drinking Water During 2015

Disinfectants and Disinfection By-Products

Substances We Detected	Your Water	What's Allowed? (MCL)	Violation ?	Range Detected	What's the Goal? (MCLG)	Typical Source of Contaminant
TTHM (ppb)[1]	46	80	NO	15.2 – 57.1	N/A	By-product of drinking water chlorination
HAA5 (ppb)[1]	16	60	NO	11.7 – 24	N/A	By-product of drinking water chlorination
Chlorine (ppm)[2]	1	4	NO	0 – 1	4	Water additive to control microbes

Inorganics

Substances We Detected	Your Water	What's Allowed? (MCL)	Violation ?	Range Detected	What's the Goal? (MCLG)	Typical Source of Contaminant
Barium (ppm)[3]	0.034	2	NO	N/A	2	Erosion of natural deposits
Fluoride (ppm)[3]	0.1	4	NO	N/A	4	Water additive to promote strong teeth
Nitrate (ppm)[3]	3	10	NO	N/A	10	Runoff from fertilizer use; natural deposits
Lead (ppb)[4]	4	15 (AL)	NO	< 1 – 370 (1 sample >AL)	0	Corrosion of household plumbing systems
Copper (ppm)[4]	0.16	1.3 (AL)	NO	0.0067 – 1.6 (1 sample >AL)	1.3	Corrosion of household plumbing systems

Substances We Detected	Your Water	TT Minimum Ratio	Violation ?	Range Detected	What's the Goal? (MCLG)	Typical Source of Contaminant
Total Organic Carbon[5]	1.05	1.0	NO	0.82 - 1.52	N/A	Naturally present in the environment

Turbidity

Substances We Detected	Your Water	What's Allowed? (TT)	Violation ?	Typical Source of Contamination
Highest Single Measurement	0.29 NTU	1 NTU	NO	Soil runoff
Lowest Monthly % Meeting Limit	100%	0.3 NTU	NO	Soil runoff

1 The highest running annual average detected during 2015 is reported in the "Your Water" column and the range of individual results is presented in the "Range Detected" column.

2 Chlorine is added to our drinking water to control the presence of microorganisms. The standard by which compliance with chlorine levels is determined is called the Maximum Residual Disinfectant Level (MRDL). The MRDL is the highest level of a disinfectant allowed in drinking water. The highest running annual average is presented in the "Your Water" column with the range of detected concentrations presented in the "Range Detected" column. The Maximum Residual Disinfectant Level Goal (MRDLG) is the level of a drinking water disinfectant below which there is no known or expected risk to health.

3 The detected level of inorganic contaminants is presented in the "Your Water" column. The range of detected levels is not applicable (N/A) for the APG South System because inorganics are monitored once per year.

4 Compliance for these parameters is demonstrated by comparing the 90th percentile of results to the regulatory Action Level (AL) for each parameter. This 90th percentile value is reported to you in the "Your Water" column. This value represents the concentration that ninety percent of the sites (not values) were below during the most recent round of monitoring. The range of values detected is presented in the "Range Detected" column. Bldg E4670 had an elevated lead level of 370 ppb and an elevated copper level of 1.6 ppm (samples collected 11 August 2015). Following renovation of E4670 and replacement of the water lines, sample recollection on 18 November 2015 showed a lead level of non-detect and a copper level of 0.098 ppm.

5 The lowest running annual average detected during 2015 is reported in the "Your Water" column and the range of individual results is presented in the "Range Detected" column.

ADDITIONAL NOTES REGARDING YOUR DRINKING WATER

- 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. We 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 at (800) 426-4791 or at http://www.epa.gov/safewater/lead.

- **Special Precautions**: 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/Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

- Discolored water can be a common complaint in water distribution systems with aging water lines, such as APG South, and is usually due to iron and/or manganese particles being released from the pipes. Although it is aesthetically unpleasant, it is not harmful to drink. Disturbances in water lines can cause discolored water. For example, if water crews have rerouted water to repair a water main or shutoff water lines in a nearby area, are conducting water main flushing, or there is increased usage from firefighting, this may cause a reddish/brown/yellow tinge to the water. If discolored water is evident, flush taps until the water is clear. Depending on the size of the building, this may be a lengthy flush (20 – 30 minutes).

YOUR WATER IS SAFE TO DRINK

As you can see by the tables in this report, some contaminants were detected in the water provided to you by APG. However, your tap water met all U.S. Environmental Protection Agency and state drinking water health standards during 2015.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Directorate of Public Works, Environmental Division
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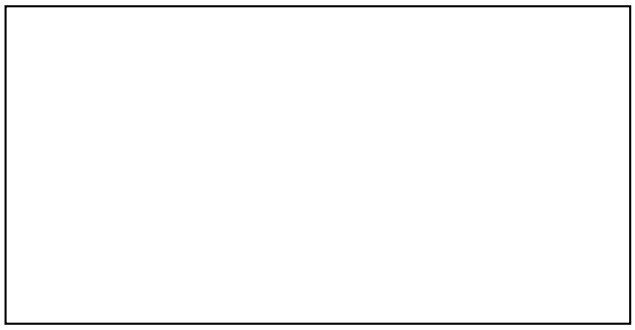

FOR MORE INFORMATION
We want our customers to be informed about their drinking water system. If you have additional questions or concerns, the following APG contacts can be reached by telephone or email.

- **Richard Wiggins** – Directorate of Public Works,
  Environmental Division
  410-436-3808
  Richard.j.wiggins6.civ@mail.mil
- **Rodney Fletcher** – Directorate of Public Works, Operation and Maintenance Division
  (410) 436-2066
  rodney.w.fletcher.civ@mail.mil
- **Kelly Luster** – Public Affairs Office
  410-278-1147
  Kelly.c.luster.civ@mail.mil

Other means of communication and community outreach at APG regarding drinking water are as follows:

- Public Works Service Desk – 410-306-1400
- Military Housing, Corvias – 410-305-1076
- Installation Website – www.apg.army.mil with various links under 'Connect with us' to APG on Facebook, Twitter, DoD's Interactive Customer Evaluation (ICE), etc.
- Installation Town Hall Briefings – Held at APG Post Theater and regularly scheduled as announced on APG's website under 'Community'