2016 CAMP RUDDER & 7TH SPECIAL FORCES GROUP (AIRBORNE) ANNUAL WATER QUALITY REPORT

TESTING PERIOD: 1 JANUARY-31 DECEMBER 2016

WE ARE PLEASED TO REPORT THAT OUR DRINKING WATER MEETS ALL FEDERAL AND STATE REQUIREMENTS

The Bioenvironmental Engineering Flight at Eglin Air Force Base (AFB) is pleased to provide you with the 2016 Annual Drinking Water Quality Report. Our goal is to provide you a safe and dependable supply of drinking water. We want to keep you informed about the excellent water provided over the past year. The Bioenvironmental Engineering Flight routinely monitors for contaminants in your drinking water in accordance with federal and state laws, rules, and regulations. This report is based on the results of our monitoring for the period of January 1 to December 31, 2016, except where indicated otherwise. Data in this report obtained prior to January 1, 2016 reflect the most recent testing as required by Safe Drinking Water Act laws, rules, and regulations.

WHERE DOES OUR DRINKING WATER COME FROM?

The Floridan Aquifer is one of the most productive aquifers in the world with an underlying area of about 100,000 square miles. In the figure to the right, the areas in gray indicate the buried portion of the aquifer containing drinking water. Eglin AFB draws water from the Floridan Aquifer to supply two Public Water Systems: Camp Rudder and 7th Special Forces Group (Airborne). Camp Rudder draws water from two wells and 7th Special Forces Group (Airborne) draws from an additional two wells. Because of the excellent quality of our water, the only treatment required is chlorine for disinfection purposes.

Source: www.water.usgs.gov

In 2016 the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on our systems. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are two potential sources of contamination identified for Camp Rudder and two for 7th Special Forces Group (Airborne), all with low susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

This report is published electronically to conserve paper but may be mailed to consumers upon request. To attain a paper copy of this report, contact Mr. Craig Bennett at (850) 883-8607.

CAMP RUDDER
2016 CONTAMINANTS

Continuous processes are in place to ensure quality water treatment and to protect our water resources. "Eglin AFB works diligently to provide top quality water to every tap," said Mr. Craig Bennett, Environmental Health Director. All our customers are asked to help protect our water; please do not flush your unused or unwanted medications down toilets or sink drains. For more information please visit http://www.dep.state.fl.us/waste/categories/medications/pages/disposal.htm.

Thank you for taking an interest in our water sources which are critical to the health of our community, and our way of life. If you have any questions or concerns about the information provided in this report, please contact Bioenvironmental Engineering Flight at (850) 883-8607.

INORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Date (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	Sep 15	N	0.0065	ND – 0.0065	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	Sep 15	N	0.50	0.47 – 0.50	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Sodium (ppm)	Sep 15	N	77	73 – 77	N/A	160	Salt water intrusion, leaching from soil

NOTE: DEFINITIONS FOR UNFAMILIAR TERMS AND ABBREVIATIONS FOR TABLES CAN BE FOUND ON PAGE 6 OF THIS REPORT.

CAMP RUDDER
2016 CONTAMINANTS CONT.

STAGE 1 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Disinfectant and Unit of Measurement	Sampling Dates (mo/yr)	MRDL Violation (Y/N)	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	Jan - Dec 16	N	0.94	0.41 – 1.25	4	4.0	Water additive used to control microbes

STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Disinfectant and Unit of Measure	Sampling Dates (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	Sep 15	N	3.1	N/A	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	Sep 15	N	8.49	N/A	N/A	80	By-product of drinking water disinfection

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Sampling Dates (mo/yr)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm)	Jun - Sep 15	N	0.18	0 of 10	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	Jun - Sep 15	N	6.8	1 of 10	0	15	Corrosion of household plumbing systems, erosion of natural deposits

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7TH SPECIAL FORCES GROUP (AIRBORNE)
2016 CONTAMINANTS

RADOIOACTIVE CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Dates (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	Apr 11 Mar 12	N	1	ND – 1	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	Apr 11 Mar 12	N	0.78	0.53 – 0.78	0	5	Erosion of natural deposits

INORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Sampling Dates (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	Apr 15	N	0.015	0.014 - 0.015	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	Apr 15	N	0.172	0.162 - 0.172	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Lead (point of entry) (ppb)	Apr 15	N	2.2	ND - 2.2	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Sodium (ppm)	Apr 15	N	8	7.2 - 8	NA	160	Salt water intrusion, leaching from soil

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7TH SPECIAL FORCES GROUP (AIRBORNE)
2016 CONTAMINANTS CONT.

STAGE 1 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Disinfectant and Unit of Measurement	Sampling Dates (mo/yr)	MRDL Violation (Y/N)	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	Jan - Dec 16	N	0.88	0.51 – 1.13	4	4.0	Water additive used to control microbes

STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Disinfectant and Unit of Measure	Sampling Dates (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	Jul 16	N	9.9	N/A	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	Jul 16	N	23.8	N/A	N/A	80	By-product of drinking water disinfection

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Sampling Dates (mo/yr)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm)	Jun - Sep 14	N	0.25	0 of 10	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	Jun - Sep 14	N	4.2	0 of 10	0	15	Corrosion of household plumbing systems, erosion of natural deposits

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EPA DEFINITIONS

Action Level (AL): The concentration of a contaminant which, 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 MCLGs 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.

Not Detected (ND): Indicates the substance was not found by laboratory analysis.

Parts per billion (ppb) or Micrograms per liter (µg/ l): one part by weight of analyte to 1 billion parts by weight of the water sample.

Parts per million (ppm) or Milligrams per liter (mg/l): one part by weight of analyte to 1 million parts by weight of the water sample.

Picocurie per liter (pCi/L): measure of the radioactivity in water.

ADDITIONAL INFORMATION

LEAD SPECIFIC INFORMATION

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. Eglin AFB 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 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.

GENERAL CONTAMINANT 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:

A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
B. 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.
C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
D. 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.
E. 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, the 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 regulations establish limits for contaminants in bottled water, which must provide the same protection for public consumption.

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 the 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 at 1-800-426-4791.

VULNERABLE POPULATIONS

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 1-800-426-4791.