2014 Drinking Water Quality Annual Report

Camp McTureous Military Family Housing, Okinawa, Japan

Camp McTureous MFH, your water is safe to drink. Our goal is to provide you with a safe and dependable supply of drinking water, and we do just that. This annual report summarizes the quality of water delivered to Camp McTureous Military Family Housing (MFH). Under the "Consumer Confidence Reporting Rule" of the federal Safe Drinking Water Act (SDWA), community water systems are required to report water quality information to the consuming public. Presented in this report is information on the source of our water, its constituents and the health risks associated with any contaminants.

The 18th Aerospace Medicine Squadron, Bioenvironmental Engineering Flight (BEF), is responsible for drinking water monitoring of AF-owned or managed installations, including MFH on Okinawa. The BEF provides drinking water test results through the Consumer Confidence Report (CCR) to report the findings to the affected occupants and MFH residents.

All sections of the CCR are written in English. Please contact the BEF at 634-4752 for Japanese translation.

弟１８航空医療中隊、生物環境工学部（BEF）は、沖縄にある空軍所有の施設及びその他の関連施設、更には基地内住宅の水道飲料水のモニタリングを空軍規則により行なっています。BEF はモニタリングの水道水分析結果を CCR で利用者及び関係者に報告しています。

CCR の全てが英文訳の文書です。日本語訳希望者は BEF までご連絡下さい。基地内： 634-4752　基地外から：098-938-1111 ext. 634-4725

Where does our water come from?

The Camp McTureous MFH drinking water system is operated and maintained by the 18th Civil Engineer Squadron (CES). The water is pumped from the Ishikawa water treatment plant. The water supply is a combination of surface water from reservoirs and rivers.

How pure is our water?

The sources of drinking water (both tap 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, trace-amounts of radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in ***any*** 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- ***Pesticides and Herbicides***, which may come from agriculture, urban storm water runoff, and residential uses.
- ***Organic Chemical Contaminants***, including synthetic and volatile organics, 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/gas production and mining activities.
- ***Volatile Organic Chemicals*****,** are ground-water contaminants of concern because of very large environmental releases, human toxicity, and a tendency for some compounds to persist in and migrate with ground-water to drinking-water supply.
- ***Disinfection By-Products,*** are formed when disinfectants used in water treatment plants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water.
- In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. 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 the the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).
- The CES manages the maintenance and operations of the drinking water distribution at Camp McTureous MFH. CES Utility personnel operate on 24 hour work shifts to ensure the system is pressurized and maintains sufficient chlorine residual.
- The BEF monitors the quality of the drinking water provided to consumers at Camp McTureous MFH and addresses any health related concerns.
- The USMC is the owner/operator of the water system at Camp McTureous. The G-F Environmental Affairs Branch is responsible for monitoring other contaminants required by Japan Environmental Governing Standards (JEGS) not listed in the table below. A copy of the installation CCR is posted on http://www.mcbbutler.marines.mil/News/2014ConsumerConfidenceReports.aspx. Please contact the G-F Environmental Affairs Branch at DSN 645-5197 for installation-wide monitoring results and CCR.

How our water is monitored?

The BEF and G-F Environmental Affairs Branch routinely monitor for over 80 contaminants using certified laboratories and approved methods in accordance with JEGS.

- ***Microbial contaminants*** sampling is conducted every week at distribution points in MFH, to include analysis for the levels of chlorine and pH in the water.
- ***Other contaminants*** (Lead and Copper, and *Disinfectant/Disinfection By-Products*) are monitored on different frequencies. The contaminants, listed in Table 1, were the primary contaminants monitored in our drinking water.

Potential Health Effects & Risk

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 individuals should seek advice about drinking water from their health care providers if they have concerns.

About Lead in 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. CES Utility 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. The BEF monitors lead and copper in housing annually. All test results have met JEGS drinking water requirements. If you are concerned about lead levels in your home's water, please contact the BEF at 634-4752. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791), or online at http://www.epa.gov/safewater/lead.

The Camp McTureous MFH drinking water system violated drinking water requirements over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we are doing to correct these situations.

The BEF takes pride in our record of service of providing quality drinking water to the Camp McTureous MFH area. To ensure that quality, BEF samples for substances listed in Table 1. However, during the 2014 Drinking Water Sanitary Survey, conducted by the PACAF Drinking Water Regulatory Authority (Primacy), it was discovered that additional sampling for Disinfectant/Disinfection By-Products is required in the military family housing areas. This sampling is now incorporated into the environmental sampling and analysis management plan.

Table 1: 2014, Camp McTureous MFH Water Monitoring Data for the period of January 1 to December 31, 2014

Substances	Violation? Yes/No	Units	Highest Level Detected	MCL	Frequency	Likely Source of Contamination
				Japan Environmental Governing Standards		
Microbial Contaminants						
Total Coliform	No	N/A	0	>1 positive per month	Monthly	Naturally present in the environment
Residual Disinfectants						
Free Chlorine	N/A	ppm	0.70	N/A	Monthly	Water additive use to control microbes
Lead and Copper						
Lead	No	mg/L	**0.003** 0% of total samples above 0.015	>10% of total samples above 0.015	Annually	Corrosion from household plumbing systems
Copper	No	mg/L	**0.0211** 0% of total samples above 1.3	>10% of total samples above 1.3	Annually	Erosion of natural deposits
Disinfectant/Disinfection By-Products						
Total Trihalomethanes	Yes*	mg/L	--	0.08	Annually	By-products of drinking water chlorination
Halo-Acetic Acids	Yes*	mg/L	--	0.06	Annually	By-products of drinking water chlorination

* Frequency Violation

Terms Defined

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water.
N/A - Not applicable.
ND - Means not detected and indicates that the substance was not found by laboratory analysis.
Parts per Million (ppm) - One ppm corresponds to 1 minute in 2 years, or a single penny in $10,000.
Parts per Billion (ppb) - One ppb corresponds to 1 minute in 2,000 years, or a single penny in $10,000,000.
Milligrams per Liter (mg/L) - A unit of concentration of constituents in water.

Customer Views Welcome!!

This CCR will be posted on the Kadena AB homepage at https://www.kadena.af.mil.. Select Library Tab, choose Consumer Confidence Report.

Camp McTureous CCR location: http://www.mcbbutler.marines.mil/News/2014ConsumerConfidenceReports.aspx.

Customers can address any drinking water concerns during the monthly Water Quality Working Group meeting. Please contact the number below for more information or to make an appointment to attend the meeting.

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Bioenvironmental Engineering Flight
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