



2012 Consumer Confidence Report

White Beach

Drinking Water System

Commander, Fleet Activities, Okinawa



This report meets Commander, Naval Facilities Engineering Command Policy Letter 5090, Ser EV/10011, 06 July 10.

Introduction

Commander, Fleet Activities, Okinawa (CFAO) is pleased to provide our customers with this annual Consumer Confidence Report (CCR) for the CFAO Drinking Water System that supports White Beach. CFAO occupied facilities on Kadena Air Base and Military Housing are covered under the Air Force CCR. The web site for accessing the Air Force CCR is listed in the “Additional Sources of Information” on page 2.

The drinking water at CFAO facilities meets all standards for safe drinking water. This report explains where our water comes from and summarizes the quality of water we received at White Beach in 2012. Our goal is to continue providing safe, dependable and clean drinking water.

Source of Water

The drinking water for White Beach comes from the following surface water sources: Fukuji Dam, Arakawa Dam, Aha Dam, Fungawa Dam, Benoki Dam, Taiho Dam, Kanna Dam, Haneji Dam, Kurashiki Dam, Kin Dam, Yamashiro Dam, and rivers that are located in the northern and central areas of the Main Island of Okinawa (Figure 1).

Water from these sources is filtered and disinfected at the Ishikawa Water Treatment Plant (WTP). The Ishikawa WTP, then, supplies the treated water to various municipalities. We purchase our drinking water from Uruma City for White Beach.

Water Distribution Systems

The Naval Facilities Engineering Command Far East Public Works Department Okinawa (PWD) operates the water distribution system servicing White Beach. The purchased water is temporarily stored in a bulk water tank before being distributed to the facilities.

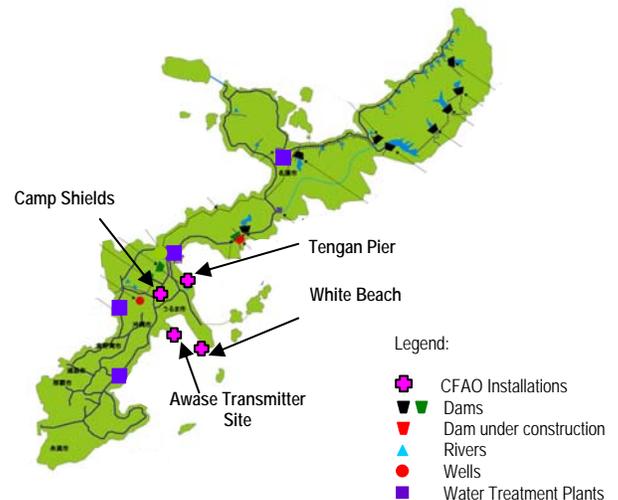


Figure 1 Water Sources and Water Facilities on Main Island of Okinawa

Water Quality

Our drinking water in 2012 met all criteria established in the Japan Environmental Governing Standards (JEGS). The JEGS are the Department of Defense (DoD) governing standards intended to ensure DoD activities and installations in Japan protect human health and the environment, and to ensure safe drinking water is provided to all DoD personnel. Drinking water standards in the JEGS are derived from the same standards used in the U.S. To continually ensure that our water is safe to drink, the JEGS require us to regularly monitor and test our water for contaminants.

Possible Source of Contaminants

As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals. It can also pick up other contaminants resulting from the presence of animals or human activities. Drinking water, including bottled water, may reasonably be expected to contain trace 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 Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791 or visiting the EPA website at <http://water.epa.gov/drink/index.cfm>

Potential Contaminants

Lead

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 building plumbing. For low use taps or when water has been sitting in service lines for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using the water for drinking or cooking. Information on lead in drinking water is available at <http://water.epa.gov/drink/info/lead/index.cfm>

Nitrate/Nitrite

Nitrates are naturally present in soil, water, and food. They are used primarily to make fertilizer. Nitrates themselves are relatively nontoxic. However, when swallowed, they are converted to nitrites that can react with hemoglobin in the blood, creating methemoglobin. This methemoglobin cannot transport oxygen, causing shortness of breath and blue baby syndrome. Information on Nitrate in drinking water is available at <http://water.epa.gov/drink/contaminants/basicinformation/nitrate.cfm>

Arsenic

Arsenic is odorless and tasteless. It enters drinking water supplies from natural deposits in the earth or from agricultural and industrial practices. People who over a period of many years drink water contaminated with arsenic in excess of the drinking water standards could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Information on Arsenic in drinking water is available at <http://water.epa.gov/drink/contaminants/basicinformation/arsenic.cfm>

Drinking Water Monitoring

We use Japanese and EPA approved laboratory methods to analyze our drinking water. We monitor our drinking water for the following contaminants at frequencies prescribed by the JEGS.

Contaminants	Frequency
pH and Chlorine Residual	Daily
Disinfection byproducts (Total Trihalomethanes (TTHM) & Haloacetic Acids (HAA5))	Quarterly
Total Coliform	Monthly
Lead, Copper, Inorganic Chemicals (e.g. Nitrate/Nitrite & Arsenic), Organic Chemicals and Disinfection Byproducts (TTHM and HAA5)	Annually
PCBs, Herbicides and Pesticides	Once every 3 years
Radionuclides	Once every 4 years
Asbestos	Once every 9 years

The table on page 3 lists the results of the analysis performed in 2012. Only those contaminants detected are listed in the table. None of the samples exceeded the JEGS drinking water standards.

Additional Sources of Information

USEPA:

<http://water.epa.gov/drink/index.cfm> or the Safe Drinking Water Hotline (1-800-426-4791).

Centers for Disease Control:

<http://www.cdc.gov/healthywater/drinking/>

Kadena Air Force 2012 CCR:

<http://www.kadena.af.mil/library/communitynotes.asp>

The Okinawa Prefectural Enterprise Bureau provides water monitoring results for the Water Treatment Plants (Only in Japanese):

http://www.eb.pref.okinawa.jp/water_info/water_quality_info/result/search.html

Frequently Asked Questions

My water doesn't taste, smell or look good. What's wrong with it?

Even when water meets standards, it still may have an objectionable taste, smell or appearance. These are aesthetic characteristics that do not pose health risks. Cloudiness is typically caused by air bubbles. A chlorine taste can be improved by letting the water stand exposed to air. Rusty colored water and metallic tastes are due to iron in the water. They are not a health risk and can be improved by running the tap until the water color clears. If you wish to improve the taste, smell or appearance of your water, you can also install a home water filter. Please keep

in mind that the filters require regular maintenance and replacement.

Will using a home water filter make the water safer or healthier?

Most filters improve the taste, smell and appearance of water, but they do not necessarily make the water safer or healthier. Please keep in mind that filters require regular maintenance and replacement. If maintenance of water filters is ignored, then water quality problems may occur.

What is a precautionary Boil Water Advisory?

If a problem is detected in the distribution system such as a drop in water pressure or a break in main water line, PWD puts out a precautionary Boil Water Advisory. It advises consumers that the water must be boiled to kill bacteria potentially present in the water before consumption. After the problem is resolved and water quality verified, PWD lifts the advisory.

WHITE BEACH – DRINKING WATER CONTAMINANTS DETECTED IN 2012

Contaminants	Unit of Measurement	Detected Level		Standard (AL*/MCL/MRDL**)	Violation	Possible Source of Contamination
		High	Low		Yes / No	
INORGANIC CONTAMINANTS						
Barium	mg/L	0.0073	-	2.0	No	Erosion of natural deposits
Nitrate (as Nitrogen)	mg/L	0.06	-	10	No	Erosion of natural deposits
Sodium	mg/L	15	-	200	No	Erosion of natural deposits
Lead *	mg/L	0.0086	0.0021	0.015 *	No	Corrosion of plumbing systems Erosion of natural deposits
Copper *	mg/L	0.191	0.058	1.3 *	No	Corrosion of plumbing systems Erosion of natural deposits
DISINFECTANTS & DISINFECTION BYPRODUCTS						
Residual Chlorine **	mg/L	0.49	0.20	4.0**	No	Disinfectant
Total Trihalomethanes	mg/L	0.062	0.017	0.08	No	By-product of chlorination
Halo Acetic Acids (HAA5)	mg/L	0.0053	-	0.06	No	By-product of chlorination

Abbreviations and Definitions:

AL (Action Level): The concentration of a contaminant in water that establishes the appropriate treatment for a water system.

MCL (Maximum Contaminant Level): The highest level of a contaminant allowed in drinking water.

MRDL (Maximum Residual Disinfectant Level): The level of a disinfectant added for water treatment measured at the consumer's tap, which may not be exceeded without the unacceptable possibility of adverse health effects.

mg/L: milligrams per liter.

Notes:

* Lead and Copper - Action Level.

** Residual Chlorine - Maximum Residual Disinfectant Level .

CFAO monitors for many contaminants and only those detected by laboratory analysis or at sampling locations are listed above.

For more information on this report or water quality at Awase Transmitter Site and Tengan Pier, please contact Tomoe Wakida, NAVFAC FE PWD Okinawa Environmental Division at 622-1378 or Tomoe.Wakida.JA@fe.navy.mil .