



# 2015 Consumer Confidence Report

## Tengan Pier

### 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 Tengan Pier. 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.

This report explains where our water comes from and summarizes the quality of water we received at Tengan Pier in 2015. Our goal is to continue providing safe, dependable and clean drinking water. The drinking water at CFAO Tengan Pier facilities meets all standards for safe drinking water.

### Source of Water

The drinking water for Tengan Pier comes from the following surface water sources: Fukuji Dam, Arakawa Dam, Aha Dam, Fungawa Dam, Benoki Dam, Kanna Dam, Yamashiro Dam, and rivers that are located in the northern area 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 Tengan Pier.

### Water Distribution Systems

The Naval Facilities Engineering Command Far East Public Works Department Okinawa (PWD) operates the water distribution system servicing Tengan Pier.

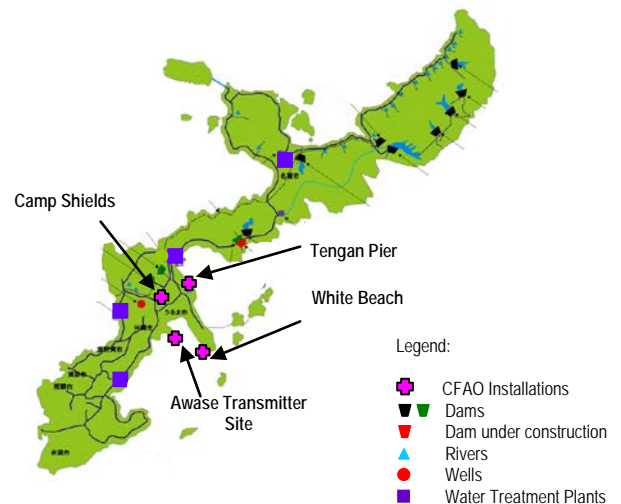


Figure 1 Water Sources and Water Facilities on Main Island of Okinawa

### Water Quality

Our drinking water is required to meet the water quality standards established in the Japan Environmental Governing Standards (JEGS) and the U.S. National Primary Drinking Water Regulations (NPDWR). The JEGS are 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. The U.S. Navy adopted the NPDWR in 2013 for the drinking water provided at the overseas U.S. Navy installations to meet U.S. drinking water quality standards. To continually ensure that our water is safe to drink, the JEGS and the NPDWR 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 adverse health effects, 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 and the NPDWR.

Contaminants	Frequency
pH and Chlorine Residual	Daily
Total Coliform	Monthly
Inorganic Chemicals (e.g. Nitrate/Nitrite & Arsenic), Organic Chemicals and Disinfection Byproducts (Total Trihalomethanes & Haloacetic Acids 5)	Annually
Lead and Copper	Once every 6 months
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 2015. Only those contaminants detected are listed in the table.

## 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 and Prevention:

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

### Kadena Air Force 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/80/181>

## 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,

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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.

**TENGAN PIER – DRINKING WATER CONTAMINANTS DETECTED IN 2015**

Contaminants	Unit of Measurement	Detected Level		Standard (AL*/ MCL/ MRDL**)	Violation	Possible Source of Contamination
		High	Low		Yes / No	
<b>INORGANIC CONTAMINANTS</b>						
Nitrate (as Nitrogen)	mg/L	0.11	-	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	mg/L	20.7	-	200	No	Erosion of natural deposits
Barium	mg/L	0.039	-	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Toluene	mg/L	0.6	-	1	No	Discharge from petroleum factories
Lead	mg/L	0.0547	-	0.015 <sup>1</sup>	No	Corrosion of plumbing systems Erosion of natural deposits
Copper	mg/L	0.225	-	1.3 <sup>1</sup>	No	Corrosion of plumbing systems; Erosion of natural deposits
<b>DISINFECTANTS &amp; DISINFECTION BYPRODUCTS</b>						
Residual Chlorine	mg/L	0.77	0.06	4.0 <sup>2</sup>	No	Water additive used to control microbes.
Total Trihalomethanes	mg/L	0.0414	-	0.08	No	By-product of drinking water disinfection
Halo Acetic Acids (HAA5)	mg/L	0.0134	-	0.06	No	By-product of drinking water disinfection

**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:**

<sup>1</sup> Lead and Copper - Action Level.

<sup>2</sup> 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.

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During August and September 2015 our drinking water monitoring contractor collected drinking water samples to test for inorganics, synthetic organic chemicals, lead and copper, volatile organic chemicals (VOCs) and disinfection byproducts (DBPs) drinking water quality parameters on our installation. It was later determined that our drinking water monitoring contractor contracted out the drinking water sample analysis to a lab that was not an EPA accredited lab. This created a monitoring violation situation. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct his situation. To correct this violation our drinking water monitoring contractor conducted resampling, and drinking water samples were analyzed utilizing a verified EPA accredited lab. At this time, the installation drinking water system has been returned to full compliance monitoring.

**What should I do?**

There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

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.

For more information on this report, please contact Darlene Ward, NAVFAC FE PWD Okinawa Environmental Division at 622-1379 or [darlene.ward@fe.navy.mil](mailto:darlene.ward@fe.navy.mil).