Consumer Confidence Report

Commander Fleet Activities Sasebo

Issued in accordance with OPNAVINST 5090.1D and OPNAV M-5090.1, implemented in January 2014

This report reflects monitoring data collected in 2015 and will be updated annually.

The Navy is pleased to provide you with this annual Consumer Confidence Report (CCR) of Drinking Water Systems that support Sasebo Main Base, Maebata, Hario Housing, Akasaki, Iorizaki and Yokose. This report provides information about the water delivered to Commander Fleet Activities Sasebo (CFAS) in 2015. It describes where our water comes from, what it contains, and how it compares to standards for safe drinking water. The drinking water at Sasebo is safe to drink. Our goal is, and always has been, to provide safe and dependable drinking water.

Source of Water

Our potable drinking water is purchased from two sources. The Sasebo City Waterworks Bureau provides water to the Main Base, Maebata, Hario Housing, Akasaki and Iorizaki areas. The Saikai City Waterworks Bureau provides potable drinking water to Yokose. These waterworks filter and chlorinate the drinking water provided to us. Both waterworks obtain their water from one or more of the following surface water sources: Yamanota water treatment plant, Hirota water treatment plant and Saikai-shi Chubu water treatment plant.

Hario-shima ordnance area continues to receive trucked, containerized water to three holding tanks adjacent to facilities using the water; therefore this report does not include the water at Hario-shima. The Hario-shima distribution system does not currently have the infrastructure to perform daily monitoring, however, the water truck filling point which is located on CFAS Main Base is monitored for all primary and secondary drinking water contaminants on a regular basis and test results show the water is safe.

Water Distribution Systems

NAVFAC Public Works Department (PWD) at CFAS operates the water distribution system servicing your area. The distribution system comprised of pipes, valves and pumps which maintain a minimum positive water pressure of 20 pounds per square inch (psi) at all times. The Sasebo and Saikai City Waterworks Bureaus do not fluorinate their water supplies.

Water Quality

This year, as in years past, our drinking water met all criteria established in the Japan Environmental Governing Standards (JEGS) 2012, Commander, Navy Installations Command Instruction 5090.1, and applicable parts of the National Primary Drinking Water regulations promulgated under the Safe Drinking Water Act of 1974. The JEGS 2012 intent is to ensure DoD activities and installations in Japan protect human health and the natural environment through the promulgation of specific environmental compliance criteria. Our drinking water standards are derived from the same standards used in the U.S.

to ensure safe drinking water is available to all installation personnel. They require us to monitor and test our water for contaminants on a regular basis, ensuring it is safe to drink.

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 activity. 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. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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.

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 https://www.epa.gov/ground-water-and-drinking-water/table-regulated-drinking-water-contaminants

Potential Contaminants

Barium

Barium is present as a trace element in both igneous and sedimentary rocks as well as other man-made products. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Nitrate

Nitrates are naturally present in soil, water, and food. They are used primarily to make fertilizer. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Last year, as in years past, our tap water did NOT exceed harmful Nitrate/Nitrite drinking water health standards thresholds set forth in the JEGS. Information on Nitrate in drinking water is available at:

https://www.epa.gov/ground-water-and-drinking-water/table-regulated-drinking-water-contaminants

Sodium

Sodium is the sixth most abundant element on Earth and is widely distributed in soils, plants, water, and foods. Most of the world has significant deposits of sodium-containing minerals. Sodium is a normal component of the body, and adequate levels of sodium are required for good health. Very high oral doses of sodium chloride may cause nausea, vomiting, inflammation of the gastrointestinal tract, thirst, muscular twitching, convulsions, and possibly death. For long-term, lower level exposures, the primary health effect of concern is increased blood pressure (hypertension). Drinking water does not play a significant role in sodium exposure for most individuals. Those that are

under treatment for sodium-sensitive hypertension should consult with their health care provider regarding sodium levels in their drinking water supply and the advisability of using an alternative water source or point-of-use treatment to reduce the sodium.

Lead

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. CFAS lead samplings during our annual monitoring did NOT exceed the lead drinking water health standards requirements set forth in the JEGS 2012. When your water has been sitting for several hours, you can further 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 https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

Copper

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Disinfection Byproducts (DBPs)

Byproduct Precursors, and Disinfectant Residuals: Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA sets standards for controlling the levels of disinfectants and DBPs in drinking water, including Trihalomethanes and Haloacetic acids.

Tribalomethanes

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

Haloacetic Acids

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Drinking Water Monitoring

We use Japanese and EPA approved laboratory methods to analyze our drinking water. CFA Sasebo monitors its drinking water for the following constituents.

| Constituent | Frequency | | |
|--|----------------------|--|--|
| pH, Conductivity, Turbidity, Chlorine Residue, | Real Time Monitoring | | |
| Water Temperature, and Water Pressure | | | |
| Turbidity | Daily | | |
| Total Coliform | Monthly | | |
| Disinfection byproducts (Total Trihalomethanes | Quarterly | | |
| (TTHM) and Haloacetic Acids (HAA5)); Nitrates | | | |
| Lead, Copper, Inorganic Chemicals, and Organic | Annually | | |
| Chemicals | | | |
| PCBs, Herbicides, and Pesticides | Once every 3 years | | |
| Radionuclides | Once every 4 years | | |
| Asbestos | Once every 9 years | | |

The following tables list constituents detected during the latest round of required sampling. Only those contaminants detected are listed. The presence of contaminants does not necessarily indicate that the water poses a health risk. None of the samples exceeded the JEGS 2012 and other applicable drinking water health standards. As such, <u>Sasebo's drinking water is safe and fit for human consumption</u>. The water samples were collected from multiple locations. For example, for Total Coliform, we monitored 22 locations a month throughout CFA Sasebo with twelve sample locations at Sasebo Main Base. The collected samples are analyzed individually.

Priority Areas Sampling

In an effort to reduce children's potential exposure to lead, this year we concluded an extensive lead sampling project in priority areas. Corrective actions were taken on all taps which exceeded an action level set forth in the CNIC memorandum 5090 N45/14U132588. Priority areas included all Department of Defense Schools, Child Development Centers and Youth Centers at CFA Sasebo installations. Water samples were collected from approximately 476 kitchen, classrooms, and bathroom faucets, bubblers, refrigerated water coolers, and exterior water faucets with 33 locations initially in Sasebo Main Base and Hario Housing exceeding 20 parts per billion (ppb) screening level. Following corrective actions to include replacement of fixtures and re-testing, an additional 25 drinking water fixtures were made available for use while eight were taken off-line. Test results are available at:

http://www.cnic.navy.mil/regions/cnrj/installations/cfa_sasebo/om/public_works.html

Frequently Asked Questions

Does the annual consumer confidence report indicate there is something wrong with the water, or that it's unsafe?

Each U.S. Navy overseas installation is required by CNIC policy letter to provide its customers with a water quality report also known as a Consumer Confidence Report (CCR). The CCR is a general overall overview of the water quality delivered by your community water system. This report lists the regulated contaminants the community water system detected in the treated water and the level at which they were found for the preceding calendar year.

Why does the water sometimes look rusty?

Rusty or reddish tinted water may occur when a sudden change in pressure in the water distribution system causes rust in the distribution pipes to become dislodged. Iron causes the discoloration; it is not a health risk. If water looks rusty, flush your tap for three minutes or until clear before using water. Running the water will clear the piping system. If hot tap water is rusty, the water heater may need to be flushed.

I don't like the taste/smell/appearance of my tap water. What's wrong with it?

Even when water meets standards, you may still object to its taste, smell or appearance. Taste, smell and appearance are aesthetic characteristics and do not pose health risks. Common complaints about water aesthetics include temporary cloudiness (typically caused by air bubbles) or chlorine taste (which can be improved by letting the water stand exposed to the air). If you want to improve the taste, smell and appearance of your water, you can install a home water filter. Please keep in mind that filters require regular maintenance and replacement, and if ignored, water taste, smell, or appearance issues may reoccur.

Installation Water Quality Board

The Installation Commanding Officer has established an Installation Water Quality Board (IWQB) tasked with ensuring there is a reliable supply of drinking water for all persons using CFA, Sasebo facilities.

Installation Water Quality Board

| Commander | 3456 |
|-------------------------------------|------|
| Chief Staff Officer | 3444 |
| Public Works Officer | 3452 |
| U.S. Naval Clinic | 2586 |
| Public Affairs Officer | 3029 |
| Public Works Production Officer | 2210 |
| Public Works Environmental Director | 3369 |

For questions regarding Priority Area Sampling please contact CFA Sasebo Public Affairs Officer.

For questions on drinking water in general please contact: CFA Sasebo Public Works Department Environmental at 252-3723.

SASEBO MAIN BASE – DRINKING WATER CONSTITUENTS DETECTED IN 2015

TABLE I

| Contaminant | Unit of | Detecte | d Level | Standard | Violation? | Possible Sources of Contamination | |
|-------------------------------|-------------|---------|---------|------------|------------|--|--|
| Contaminant | Measurement | High | Low | (AL*/ MCL) | Yes / No | Possible Sources of Contamination | |
| Inorganic Contaminants | | | | | | | |
| Barium | mg/L | 0.0054 | ı | 2.0 | No | Erosion of natural deposits. | |
| Nitrate (as Nitrogen) | mg/L | 0.7 | 0.6 | 10 | No | Erosion of natural deposits. | |
| Sodium | mg/L | 7.2 | ı | 200 | No | Erosion of natural deposits. | |
| Lead | ma/I | 0.010 | ND | 0.015 | No | Corrosion of household plumbing systems. | |
| Leau | mg/L | 0.010 | ND | 0.013 | INU | Erosion of natural deposits. | |
| Connor | ma/I | 0.29 | ND | 1.3 | No | Corrosion of household plumbing systems. | |
| Copper | mg/L | 0.29 | ND | 1.3 | INO | Erosion of natural deposits. | |
| Disinfection Byproducts | | | | | | | |
| Total Trihalomethenes | mg/L | 0.0178 | 0.0057 | 0.080 | No | By-product of drinking water chlorination. | |
| Halo Acetic Acids | mg/L | 0.0159 | 0.004 | 0.060 | No | By-product of drinking water chlorination. | |

Notes:

*Lead and Copper - Action Level.

CFA Sasebo monitors for many contaminants, only those detected during laboratory analysis are listed above.

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.

mg/L: milligrams per Liter.

TABLE II

MAEBATA NMC ORDNANCE – DRINKING WATER CONSTITUENTS DETECTED IN 2015

| Contaminant | Unit of | Detecte | d Level | Standard | Violation? | Possible Sources of Contamination | | | |
|-------------------------------|------------------------|---------|---------|------------|------------|--|--|--|--|
| Contammant | Measurement | High | Low | (AL*/ MCL) | Yes / No | Possible Sources of Contamination | | | |
| Inorganic Contaminants | Inorganic Contaminants | | | | | | | | |
| Barium | mg/L | 0.017 | - | 2.0 | No | Erosion of natural deposits. | | | |
| Nitrate (as Nitrogen) | mg/L | 0.65 | 0.27 | 10 | No | Erosion of natural deposits. | | | |
| Sodium | mg/L | 11.0 | - | 200 | No | Erosion of natural deposits. | | | |
| Lead | mg/L | ND | ND | 0.015 | No | Corrosion of household plumbing systems. Erosion of natural deposits. | | | |
| Copper | mg/L | 0.03 | 0.01 | 1.3 | No | Corrosion of household plumbing systems. Erosion of natural deposits. | | | |
| Disinfection Byproducts | | | | | | | | | |
| Total Trihalomethenes | mg/L | 0.0294 | 0.019 | 0.080 | No | By-product of drinking water chlorination. | | | |
| Halo Acetic Acids | mg/L | 0.0214 | 0.014 | 0.060 | No | By-product of drinking water chlorination. | | | |

Notes:

*Lead and Copper - Action Level.

CFA Sasebo monitors for many contaminants, only those detected during laboratory analysis are listed above.

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.

mg/L: milligrams per Liter.

TABLE III

HARIO HOUSING – DRINKING WATER CONSTITUENTS DETECTED IN 2015

| Contaminant | Unit of | Detecte | d Level | Standard | Violation? | Possible Sources of Contamination | | | |
|-------------------------------|------------------------|---------|---------|-----------|------------|---|--|--|--|
| Contammant | Measurement | High | Low | (AL*/MCL) | Yes / No | Possible Sources of Contamination | | | |
| Inorganic Contaminants | Inorganic Contaminants | | | | | | | | |
| Barium | mg/L | 0.017 | 1 | 2.0 | No | Erosion of natural deposits. | | | |
| Nitrate (as Nitrogen) | mg/L | 0.65 | 0.27 | 10 | No | Erosion of natural deposits. | | | |
| Sodium | mg/L | 11.0 | 1 | 200 | No | Erosion of natural deposits. | | | |
| Lead | mg/L | 0.003 | ND | 0.015 | No | Corrosion of household plumbing systems. Erosion of natural deposits. | | | |
| Copper | mg/L | 0.02 | ND | 1.3 | No | Corrosion of household plumbing systems. Erosion of natural deposits. | | | |
| Disinfection Byproducts | | | | | | | | | |
| Total Trihalomethenes | mg/L | 0.027 | 0.022 | 0.080 | No | By-product of drinking water chlorination. | | | |
| Halo Acetic Acids | mg/L | 0.017 | 0.016 | 0.060 | No | By-product of drinking water chlorination. | | | |

Notes:

CFA Sasebo monitors for many contaminants, only those detected during laboratory analysis are listed above.

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.

mg/L: milligrams per Liter.

^{*}Lead and Copper - Action Level.

TABLE IV

AKASAKI FUEL TERMINAL – DRINKING WATER CONSTITUENTS DETECTED IN 2015

| Contaminant | Unit of | Detecte | d Level | Standard | Violation? | Possible Sources of Contamination | | | |
|-------------------------------|------------------------|---------|---------|-----------|------------|--|--|--|--|
| Contammant | Measurement | High | Low | (AL*/MCL) | Yes / No | Possible Sources of Contamination | | | |
| Inorganic Contaminants | Inorganic Contaminants | | | | | | | | |
| Barium | mg/L | 0.0054 | - | 2.0 | No | Erosion of natural deposits. | | | |
| Nitrate (as Nitrogen) | mg/L | 0.7 | 0.6 | 10 | No | Erosion of natural deposits. | | | |
| Sodium | mg/L | 7.2 | - | 200 | No | Erosion of natural deposits. | | | |
| Lead | mg/L | 0.001 | ND | 0.015 | No | Corrosion of household plumbing systems. Erosion of natural deposits. | | | |
| Copper | mg/L | ND | ND | 1.3 | No | Corrosion of household plumbing systems. Erosion of natural deposits. | | | |
| Disinfection Byproducts | | | | | | | | | |
| Total Trihalomethenes | mg/L | 0.0236 | 0.011 | 0.080 | No | By-product of drinking water chlorination. | | | |
| Halo Acetic Acids | mg/L | 0.0159 | 0.005 | 0.060 | No | By-product of drinking water chlorination. | | | |

Notes:

*Lead and Copper - Action Level.

CFA Sasebo monitors for many contaminants, only those detected during laboratory analysis are listed above.

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.

mg/L: milligrams per Liter.

TABLE V

IORIZAKI FUEL TERMINAL – DRINKING WATER CONSTITUENTS DETECTED IN 2015

| Contaminant | Unit of | Detecte | d Level | Standard | Violation? | Possible Sources of Contamination | | |
|-------------------------------|------------------------|---------|---------|-----------|------------|--|--|--|
| Contammant | Measurement | High | Low | (AL*/MCL) | Yes / No | Possible Sources of Contamination | | |
| Inorganic Contaminants | Inorganic Contaminants | | | | | | | |
| Barium | mg/L | 0.0054 | - | 2.0 | No | Erosion of natural deposits. | | |
| Nitrate (as Nitrogen) | mg/L | 0.7 | 0.6 | 10 | No | Erosion of natural deposits. | | |
| Sodium | mg/L | 7.2 | - | 200 | No | Erosion of natural deposits. | | |
| Lead | mg/L | | | 0.015 | No | Corrosion of household plumbing systems. | | |
| Lead | mg/L | - | | 0.013 | INO | Erosion of natural deposits. | | |
| Copper | mg/L | | | 1.3 | No | Corrosion of household plumbing systems. | | |
| Соррег | mg/L | - | - | 1.5 | INO | Erosion of natural deposits. | | |
| Disinfection Byproducts | | | | | | | | |
| Total Trihalomethenes | mg/L | - | - | 0.080 | No | By-product of drinking water chlorination. | | |
| Halo Acetic Acids | mg/L | - | _ | 0.060 | No | By-product of drinking water chlorination. | | |

Notes:

CFA Sasebo monitors for many contaminants, only those detected during laboratory analysis are listed above.

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.

mg/L: milligrams per Liter.

^{*}Lead and Copper - Action Level.

TABLE VI

YOKOSE FUEL TERMINAL – DRINKING WATER CONSTITUENTS DETECTED IN 2015

| Contaminant | Unit of | Detecte | d Level | Standard | Violation? | Possible Sources of Contamination | | | |
|-------------------------------|------------------------|---------|---------|-----------|------------|--|--|--|--|
| Contammant | Measurement | High | Low | (AL*/MCL) | Yes / No | Possible Sources of Contamination | | | |
| Inorganic Contaminants | Inorganic Contaminants | | | | | | | | |
| Barium | mg/L | 0.014 | 1 | 2.0 | No | Erosion of natural deposits. | | | |
| Nitrate (as Nitrogen) | mg/L | 1.20 | 0.99 | 10 | No | Erosion of natural deposits. | | | |
| Sodium | mg/L | 9.3 | ı | 200 | No | Erosion of natural deposits. | | | |
| Lead | mg/L | 0.001 | ND | 0.015 | No | Corrosion of household plumbing systems. Erosion of natural deposits. | | | |
| Copper | mg/L | 0.05 | ND | 1.3 | No | Corrosion of household plumbing systems. Erosion of natural deposits. | | | |
| Disinfection Byproducts | | | | | | | | | |
| Total Trihalomethenes | mg/L | 0.0242 | 0.017 | 0.080 | No | By-product of drinking water chlorination. | | | |
| Halo Acetic Acids | mg/L | 0.0154 | 0.0077 | 0.060 | No | By-product of drinking water chlorination. | | | |

Notes:

*Lead and Copper - Action Level.

CFA Sasebo monitors for many contaminants, only those detected during laboratory analysis are listed above.

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.

mg/L: milligrams per Liter.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Drinking Water Monitoring and Testing Procedure Deficiencies

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 our drinking water meets health standards. During 2015 we completed all sampling requirements; however sampling results from the September and October 2015 samples were considered invalid because the subcontracted laboratory did not have the proper accreditation. While we do not have verified laboratory data during that time, subsequent re-sampling conducted in February and April 2016 met all standards. Although that data gap was not emergent, you have a right to know what happened and what we did to correct the situation.

Should you have concerns, please contact the CFAS Public Affairs Office 252-3029.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly.

*Reference: Navy Overseas Drinking Water Laboratory Policy dated 17 July 2015