

Consumer Confidence Report Drinking Water Systems 2024 Commander, Fleet Activities Sasebo



Issued in accordance with OPNAVINST 5090.1D and OPNAV M-5090.1, implemented in 2021. This report is updated annually and reflects monitoring data collected in 2024.

The Navy is pleased to provide the annual Consumer Confidence Report (CCR) of Drinking Water Systems that support Sasebo Main Base, Hario Housing, Akasaki, Iorizaki, Harioshima, Maebata, and Yokose. This report provides information about the water delivered to Commander, Fleet Activities Sasebo (CFAS) in calendar year 2024. It describes where our water comes from, what it contains, and how it compares to standards for safe drinking water. **The drinking water at CFAS is safe to drink. Our goal is, and always has been, to provide safe and dependable drinking water.**

Source of Water

Potable drinking water at CFAS is purchased from two sources:

- 1. Sasebo City Waterworks Bureau
- 2. Saikai City Waterworks Bureau

The Sasebo City Waterworks Bureau provides drinking water to Main Base, Maebata, Hario Housing, Akasaki, and Iorizaki. The Saikai City Waterworks Bureau provides drinking water to Yokose. These Waterworks Bureaus filter and chlorinate the drinking water before it is provided to CFAS. 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 City Chubu Water Treatment Plant. Harioshima Ordnance Area continues to receive clean hauled and containerized water to three holding tanks. The water truck filling point, located on CFAS Main Base, is monitored for all primary and secondary drinking water contaminants on a regular basis.

Water Distribution Systems

NAVFAC Far East Public Works Department (PWD) at CFAS operates the water distribution system servicing your area. The distribution system is comprised of pipes, valves, storage tanks and pumps, which maintain a minimum positive water pressure of 20 pounds per square inch (psi) at all times. The Sasebo City and Saikai City Waterworks Bureaus do not fluorinate the water supplies. NAVFAC PWD supplements chlorination to improve water provided by Saikai City Waterworks Bureau only at Yokose.

Water Quality

This year, as in years past, CFAS drinking water met all criteria established in the Japan Environmental Governing Standards (JEGS) 2024, Commander Navy Installations Command Instruction 5090.1A, and applicable sections of the National Primary Drinking Water regulations promulgated under the Safe Drinking Water Act of 1974. The JEGS intent is to ensure Department of Defense (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 that safe drinking water is available to all installation personnel. The standards require us to monitor and test our water for contaminants on a regular basis to ensure 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. Contaminants that may be present in 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 naturally occur or result from urban storm water run-off, industrial or domestic wastewater discharge, oil and gas production, mining or farming.
- **Pesticides and Herbicides**, which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **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 storm water runoff, and septic systems.
- **Radioactive Contaminants**, which can naturally-occur or be the result of oil and gas production and mining activities.
- **Disinfection Byproducts** can form in water when disinfectants, such as chlorine used to control microbial pathogens, combine with naturally occurring materials found in source water.

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.

Other Potential Contaminants

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 sampling results meet the requirements for drinking water set forth in the JEGS and the EPA Lead and Copper Rule.** When water has been unused for several hours, you can further minimize the potential for lead exposure by flushing the 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.

Lead in Priority Areas (LIPA) Sampling (Screening for Lead at Tap Sources)

CFAS samples all drinking water faucets for Lead at Priority Areas every five years in an effort to reduce children's potential exposure (CNIC Instruction 5090.6). Priority Areas include DoD schools, child development centers, and youth centers across CFAS. The Navy LIPA screening level was lowered to 10 parts per billion (ppb) lead from the 15 ppb used in the previous round of sampling (2019). Sampling was performed at CFAS in March and April of 2024 at 434 faucets at nine facilities. Results were received April 2024. Twenty (20) fixtures (faucets and water fountains) located at buildings 1530 (the Youth Center at Dragonvale), 1665 (EJ King High School), and 5114 (Darby Elementary School at Hario Housing) exceeded the screening level, and these fixtures were taken out of service pending further analysis and corrective action. All faucets were replaced, taken out of permanent service, or scheduled for replacement soon. All of these actions or out of service fixtures did not affect water service to students or children using these facilities and notifications were provided to all affected buildings. All replacement fixtures tested under the current screening level of 10 ppb.

PFAS

What are per- and polyfluoroalkyl substances and where do they come from?

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of man-made chemicals. PFAS have been used in a variety of industries and consumer products around the globe, including in the U.S., since the 1940s. PFAS are found in many consumer products, as well as in industrial products, like certain firefighting agents called aqueous film forming foam (AFFF). PFAS is also found in essential use applications such as in microelectronics, batteries, and medical equipment. PFAS chemicals are persistent in the environment, and some are persistent in the human body – meaning they do not break down and they can accumulate over time.

Is there a regulation for PFAS in drinking water?

On April 26, 2024, the United States Environmental Protection Agency (EPA) published a National Primary Drinking Water Regulation (NPDWR) final rule on drinking water standards for six PFAS under the Safe Drinking Water Act (SDWA). The rule establishes the following maximum contaminant levels (MCLs):

Chemical	Maximum Contamina nt Level (MCL)
perfluorooctanoic acid (PFOA)	4 ppt
perfluorooctane sulfonic acid (PFOS)	4 ppt
perfluorononanoic acid (PFNA)	10 ppt
perfluorohexane sulfonic acid (PFHxS)	10 ppt
hexafluoropropylene oxide dimer acid (HFPO- DA, known as GenX chemicals)	10 ppt

Chemical (con't)	Maximum Contamina nt Level (MCL)
HI MCL for PFHxS, PFNA, perfluorobutane sulfonic acid (PFBS), and GenX	1 (Unitless)

Under the NPDWR, regulated public water systems (PWS) are required to complete initial monitoring by April 26, 2027. Beginning April 26, 2027, regulated PWSs will conduct ongoing compliance monitoring in accordance with the frequency dictated by the rule and as determined by the initial compliance monitoring results. Regulated PWSs must demonstrate compliance with the Maximum Contaminant Levels (MCLs) by April 26, 2029.

In order to provide safe drinking water to all Department of Defense (DoD) personnel, OSD policy extends this requirement to all DoD systems which provide drinking water for human consumption, regardless of size of the drinking water system. In addition to the six regulated compounds, DoD-owned systems are required by DoD policy to monitor for all 25 compounds detected when using EPA Method 533.

Protecting the health of our personnel, their families, and the communities in which we serve is a priority for the Department. DoD is committed to complying with requirements of the NPDWR and the continued provision of safe drinking water to those that work and live on DoD installations.

Has CFAS tested its water for PFAS in 2024?

Yes. In March, June, and December samples were collected from Akasaki. Previous to that, CFAS conducted initial testing in 2023 with EPA method 533 at Akasaki, Maebata, Iorizaki, Yokose, Main Base, Hario Village, and Harioshima as part of the previous requirement.

PFAS Detected but below the new PFAS MCLs

We are informing you that 1 of 29 PFAS compounds covered by the sampling method were detected above the method reporting limit (MRL) for PFPeA at Akasaki. The results are provided in the table VIII. EPA does not have an MCL for all of these compounds at this time. PFOA, PFOS, PFNA, PFHxS, PFBS, and Gen X were not detected. There is no immediate cause for concern, but we will continue to monitor the drinking water closely.

What is next?

CFAS' initial monitoring for PFAS in accordance with EPA requirements is complete. Based on these results, the installation will begin triennial monitoring for PFAS in 2027.

Drinking Water Monitoring

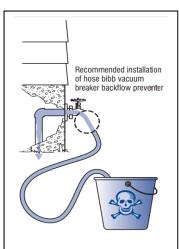
CFAS uses EPA approved laboratory methods to analyze drinking water. The EPA and JEGS allow some contaminants to be monitored less than once per year because the concentrations of these contaminants do not change frequently. For example, Lead and Copper and Volatile Organic Compounds (VOCs) were sampled in 2018, and Radionuclides and Synthetic Organic Compounds (SOCs) were sampled in 2019; these are monitored every three years and their levels are not expected to vary significantly from year to year. Also, the water samples for each method were collected from multiple locations. For example, Total Coliform is monitored at 26 locations each month throughout CFAS, including 12 locations at Main Base. The collected samples are analyzed individually. Frequencies of constituents sampled at CFAS are provided below.

Frequency
Daily
Monthly
Quarterly
Quarterly and Annually ²
Annually
Every 3 years
Every 9 years
Every 2 years ³

¹ Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). ² Main Base and Hario Housing DBPs are monitored quarterly, other sites annually. Annual sampling of DBPs is performed in August when it is warmer. Harioshima hauled water is monitored at Main Base and Harioshima. ³ PFAS is monitored more frequently depending on the concentrations found.

Tables I – **IX** list all the constituents detected above laboratory detectable limits at each one of the CFAS drinking water systems during sampling in 2024. A complete list of constituents analyzed in 2024 including

informative data from other years is shown in these tables. The presence of contaminants does not necessarily indicate that the water poses a health risk. None of the samples



Cross-connection and Backflow Prevention Tip

Did you know that any connection between a public drinking water system and a separate source of questionable quality is considered a crossconnection?

For example, an ordinary garden hose submerged in a bucket of water, car radiator, or swimming pool can result in backflow contamination. To protect our water supply, a simple screw-on vacuum breaker must always be attached to the faucet when a garden hose is used.



Vacuum Breaker

exceeded the JEGS and other applicable drinking water health standards. As such, <u>CFAS' drinking</u> water is safe and fit for human consumption.

The Surface Water Treatment Rule

Surface water is a common source of water within the United States and the rest of the world. As Japanese water authorities, The City of Sasebo and the City of Saikai Water Treatment Plants are not required to adhere to the American water regulations and standards for surface water. However, this does not mean that the water is not safe to drink. CFA Sasebo Public Works monitors the drinking water received from The City of Sasebo and the City of Saikai to ensure all 7 systems meet the required American water regulations and standards to include the Surface Water Treatment Rule imposed in the United States. In 2024, CFA Sasebo Public Works started work with Naval Facilities Engineering Systems Command (NAVFAC) Pacific (PAC) in the development of a compliance plan to demonstrate that the Japanese water authorities of the City of Sasebo and the city of Saikai use a host of high technological and effective treatment methods that either meet or surpass the required treatment techniques of an American water authority. The compliance plan is projected to be completed in late 2024 and requires the approval of Commander Navy Installations Command (CNIC) subject matter experts on drinking water to ensure that the Japanese water authority is complying with the Surface Water treatment Rule (SWTR).

Important Health Information

Some individuals may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as those undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, the elderly, and infants can be particularly at risk from infections. These individuals should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (EPA) and the Center for Disease Control and Prevention have established guidelines on the appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants. This information can be obtained by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791.

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 to provide its customers with a water quality report known as a Consumer Confidence Report (CCR). The CCR is an overview of the water quality delivered from 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. Any exceedances of applicable regulations or guidance will be reported.

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) to ensure that there is a reliable supply of drinking water for all persons using CFAS facilities.

Installation Commander.	252-3456
Chief Staff Officer	252-3444
Public Works Officer	252-3452
U.S. Naval Clinic	252-2586
Public Affairs Officer	252-3029
Public Works Production Director	252-2210
Public Works Environmental Director	252-3369

For questions on drinking water in general please contact: CFAS Public Works Department-Environmental Division at 252-3369

Addendum. Public Notice on Lead Service Line Inventory at CFAS

1. Our public water system is focused on protecting the health of every person living and working in our facilities and housing (family and unaccompanied) on our installations. This notice contains important information about your drinking water. Please share this information with anyone who consumes water (drinking, showering, bathing, dishwashing, cooking, and oral hygiene) at this location. In addition to the people directly served at this property, this should include people in barracks, family housing, military treatment facilities, schools, Child Development Centers, and workplaces.

2. We were required to develop and make publicly available an initial inventory of service lines connected to our distribution system by October 16, 2024. Our system failed to submit this initial inventory of service lines to Commander, Navy Installations Command (CNIC). The inventory must identify the service line materials as galvanized, lead, non-lead or unknown. We are working diligently to identify and ultimately remove lead and galvanized service lines as soon as possible. This an important way to protect public health.

3. Because your service line material is unknown, there is the potential that some or all of the service line could be made of lead or galvanized pipe that was previously connected to lead.

4. Galvanized service lines that have adsorbed lead can contribute to lead in drinking water.

5. People living in homes with a galvanized service line, that has adsorbed lead, may have an increased risk of exposure to lead from their drinking water.

6. CFAS' current water quality is in compliance with U.S. Environmental Protection Agency (EPA) lead and copper rule action levels, but we are committed to further investigation to determine if these lines require replacement.

7. If you have questions concerning any of the information provided in this notice, or if you have information that could help us better describe your service line, contact us via: Add Public Works Trouble Desk at DSN 252-3535

8. Health effects of lead: Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or worsen existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have an increased risk of these negative health effects. Adults can have increased risks of heart disease, high blood pressure, and kidney, or nervous system problems.

9. Steps you can take to reduce lead in drinking water: Below are recommended actions that you may take, separately or in combination, if you are concerned about lead in your drinking water. The list also includes where you may find more information and is not intended to be a complete list or to imply that all actions equally reduce lead in drinking water.

a) Use your filter properly. Using a filter can reduce lead in drinking water. If you use a filter, it should be certified to remove lead. Read any directions provided with the filter to learn how to properly install, maintain, and use your cartridge and when to replace it. Using the cartridge after it has expired can make it less effective at removing lead. Do not run hot water through the filter. For more information on facts and advice on home water filtration systems, visit EPA's website at https://www.epa.gov/water-research/consumer-tool-identifying-point-use-and-pitcher-filters-certified-reduce-lead.

b) Clean your aerator. Regularly remove and clean your faucet's screen (also known as an aerator). Sediment, debris, and lead particles can collect in your aerator. If lead particles are caught in the aerator, lead can get into your water.

c) Use cold water. Do not use hot water from the tap for drinking, cooking, or making baby formula as lead dissolves more easily into hot water. Boiling water does not remove lead from water.

d) Run your water. The more time water has been sitting in pipes the more lead it may contain. Before drinking, flush your home's pipes by running the tap, taking a shower, doing laundry, or doing a load of dishes. The amount of time to run the water will depend on whether your home has a lead service line or not, as well as the length and diameter of the service line and the amount of plumbing in your home. It is recommended to flush for at least 3 to 5 minutes before using water for drinking or cooking, especially if the water hasn't been used for several hours. For water that has been sitting overnight, flushing for 5 minutes or longer is advisable.

10. Get your child tested to determine lead levels in their blood. If you have any health-related questions or concerns about lead exposure or a blood lead test, you are encouraged to contact your health care provider, or if you are a TRICARE beneficiary, use the REGION Appointment Center to schedule an appointment with your primary care provider.

The Centers for Disease Control and Prevention and the Navy recommend public health actions when the level of lead in a child's blood is 3.5 micrograms per deciliter (µg/dL) or more. For more information and links to the CDC's website, please visit <u>https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water</u>.

11. For more information on reducing lead exposure from your drinking water and the health effects of lead, visit EPA's website at <u>http://www.epa.gov/lead</u>.

These notices can also be accessed at our Installation Drinking Water Webpage at https://cnrj.cnic.navy.mil/Operations-and-Management/Water-Quality-Information/

TABLE I SASEBO MAIN BASE – DRINKING WATER CONSTITUENTS DETECTED IN 2024

	Unit of	Detected Level		Standard	Violation?						
Contaminant	Measurement	High Low		(MCL/ MRDL)	Yes / No	Possible Sources of Contamination					
INORGANIC CONTAMINANTS											
Barium	mg/L	0.005	-	2.0	No	Erosion of natural deposits.					
Nitrate (as Nitrogen)	mg/L	0.68	0.38	10	No	Runoff from fertilizer and erosion of natural deposits.					
Sodium	mg/L	7.3	-	-	No	Erosion of natural deposits.					
DISINFECTANTS & DISINFECTION	DISINFECTANTS & DISINFECTION BYPRODUCTS										
Residual Chlorine	mg/L	0.90	0.41	4.0*	No	Disinfectant added for water treatment.					
Total Trihalomethanes	mg/L	0.0220	0.0210	0.080	No	By-product of drinking water chlorination.					
Halo Acetic Acids	mg/L	0.0130	0.0120	0.060	No	By-product of drinking water chlorination.					
BACTERIA											
Total Coliform	Presence	Ne	gative	> 1+/mo.	No	Treatment or distribution system issues.					
OTHER CONTAMINANTS OF CONC	OTHER CONTAMINANTS OF CONCERN										
VOCs (Various)	mg/L	Not I	Detected	Various	No	Industrial activity, accidental release.					
Water Quality Parameters	mg/L	Within	Standard	Various	No						

Notes:

PFAS Results are shown in Table VIII

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

* Residual Chlorine - Maximum Residual Disinfectant Level allowed in drinking water.

Abbreviations and Definitions:

AL: Action Level.

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.

mg/L: milligrams per Liter.

ppt: parts per trillion, or nanograms per Liter

Not Detected: There was no detection of the analyte to the limits of the test procedure or equipment.

TABLE II HARIO HOUSING – DRINKING WATER CONSTITUENTS DETECTED IN 2024

	Unit of	Detect	ed Level	Standard	Violation?						
Contaminant	Measurement	High	Low	(MCL/ MRDL)	Yes / No	Possible Sources of Contamination					
INORGANIC CONTAMINANTS											
Barium	mg/L	0.012	-	2.0	No	Erosion of natural deposits.					
Nitrate (as Nitrogen)	mg/L	0.53	0.09	10	No	Runoff from fertilizer and erosion of natural deposits.					
Sodium	mg/L	10	-	-	No	Erosion of natural deposits.					
DISINFECTANTS & DISINFECTION BYPRODUCTS											
Residual Chlorine	mg/L	0.81	0.21	4.0*	No	Disinfectant added for water treatment.					
Total Trihalomethanes	mg/L	0.0280	0.0210	0.080	No	By-product of drinking water chlorination.					
Halo Acetic Acids	mg/L	0.0210	0.0110	0.060	No	By-product of drinking water chlorination.					
BACTERIA											
Total Coliform	Presence	Neg	Negative		No	Treatment or distribution system issues.					
OTHER CONTAMINANTS OF CO	NCERN										
VOCs (Various)	mg/L	Not I	Not Detected		No	Industrial activity, accidental release.					
Water Quality Parameters	mg/L	Within	Standard	Various	No						

Notes:

PFAS Results are shown in Table VIII

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

* Residual Chlorine - Maximum Residual Disinfectant Level.

Abbreviations and Definitions:

AL: Action Level.

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. mg/L: milligrams per Liter.

Not Detected: There was no detection of the analyte to the limits of the test procedure or equipment.

ppt: parts per trillion, or nanograms per Liter

TABLE III AKASAKI FUEL TERMINAL – DRINKING WATER CONSTITUENTS DETECTED IN 2024

	Unit of	Detecte	Detected Level		Violation?						
Contaminant	Measurement	High	Low	(MCL/ MRDL)	Yes / No	Possible Sources of Contamination					
INORGANIC CONTAMINANTS											
Barium	mg/L	0.00600	-	2.0	No	Erosion of natural deposits.					
Nitrate (as Nitrogen)	mg/L	0.67	0.39	10	No	Runoff from fertilizer and erosion of natural deposits.					
Sodium	mg/L	7.4	-	-	No	Erosion of natural deposits.					
DISINFECTANTS & DISINFECTIO	DISINFECTANTS & DISINFECTION BYPRODUCTS										
Residual Chlorine	mg/L	0.83	0.59	4.0*	No	Disinfectant added for water treatment.					
Total Trihalomethanes	mg/L	0.0230	-	0.080	No	By-product of drinking water chlorination.					
Halo Acetic Acids	mg/L	0.0150	-	0.060	No	By-product of drinking water chlorination.					
BACTERIA											
Total Coliform	Presence	Nega	ative	> 1+/mo.	No	Treatment or distribution system issues.					
OTHER CONTAMINANTS OF CO	OTHER CONTAMINANTS OF CONCERN										
VOCs (Various)	mg/L	Not D	Detected	Various	No	Industrial activity, accidental release.					
Water Quality Parameters	mg/L	Within	Standard	Various	No						

Notes:

PFAS Results are shown in Table VIII

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

* Residual Chlorine - Maximum Residual Disinfectant Level.

Abbreviations and Definitions:

AL: Action Level.

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.

mg/L: milligrams per Liter.

ppt: parts per trillion, or nanograms per Liter

Not Detected: There was no detection of the analyte to the limits of the test procedure or equipment.

TABLE IV HARIOSHIMA ORDNANCE AREA* – DRINKING WATER CONSTITUENTS DETECTED IN 2024

	Unit of	Detected Level		Standard	Violation?						
Contaminant	Measurement	High	Low	(MCL/ MRDL)	Yes / No	Possible Sources of Contamination					
INORGANIC CONTAMINANTS											
Barium	mg/L	0.00500	-	2.0	No	Erosion of natural deposits.					
Nitrate (as Nitrogen)	mg/L	0.69	0.39	10	No	Runoff from fertilizer and erosion of natural deposits.					
Sodium	mg/L	7.3	-	-	No	Erosion of natural deposits.					
DISINFECTANTS & DISINFECTI	DISINFECTANTS & DISINFECTION BYPRODUCTS										
Residual Chlorine	mg/L	0.85	0.26	4.0**	No	Disinfectant added for water treatment.					
Total Trihalomethanes	mg/L	0.0270	0.0210	0.080	No	By-product of drinking water chlorination.					
Halo Acetic Acids	mg/L	0.0140	0.0120		No	By-product of drinking water chlorination.					
BACTERIA											
Total Coliform	Presence	Neg	gative	> 1+/mo.	No	Treatment or distribution system issues.					
OTHER CONTAMINANTS OF CO	NCERN										
VOCs (Various)	mg/L	Not D	Detected	Various	No	Industrial activity, accidental release.					
Water Quality Parameters	mg/L	Within	Standard	Various	No						

Notes:

PFAS Results are shown in Table VIII

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

* Harioshima Ordnance Area continues to receive hauled, containerized water to three holding tanks adjacent to the facilities using the water. 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. These results shown on Table IV include inorganics and disinfectant byproducts, which were measured on Main Base, and residual chlorine, which is measured at Main Base and Harioshima. ** Residual Chlorine - Maximum Residual Disinfectant Level allowed in drinking water.

Abbreviations and Definitions:

AL: Action Level.

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.

mg/L: milligrams per Liter.

ppt: parts per trillion, or nanograms per Liter

Not Detected: There was no detection of the analyte to the limits of the test procedure or equipment.

TABLE V IORIZAKI FUEL TERMINAL – DRINKING WATER CONSTITUENTS DETECTED IN 2024

	Unit of	Unit of Detected I									
Contaminant	Measurement	High	Low	(MCL/ MRDL)	Yes / No	Possible Sources of Contamination					
INORGANIC CONTAMINANTS											
Barium	mg/L	0.00540	-	2.0	No	Erosion of natural deposits.					
Nitrate (as Nitrogen)	mg/L	0.68	0.67	10	No	Runoff from fertilizer and erosion of natural deposits.					
Sodium	mg/L	7.5	-	-	No	Erosion of natural deposits.					
DISINFECTANTS & DISINFECTION BYPRODUCTS											
Residual Chlorine	mg/L	0.58	0.28	4.0*	No	Disinfectant added for water treatment.					
Total Trihalomethanes	mg/L	0.0300	0.0280	0.080	No	By-product of drinking water chlorination.					
Halo Acetic Acids	mg/L	0.0130	0.0130	0.060	No	By-product of drinking water chlorination.					
BACTERIA											
Total Coliform	Presence	Neg	gative	> 1+/mo.	No	Treatment or distribution system issues.					
OTHER CONTAMINANTS OF CO	OTHER CONTAMINANTS OF CONCERN										
VOCs (Various)	mg/L	Not D	Detected	Various	No	Industrial activity, accidental release.					
Water Quality Parameters	mg/L	Within	Standard	Various	No						

Notes:

PFAS Results are shown in Table VIII

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

* Residual Chlorine - Maximum Residual Disinfectant Level.

Abbreviations and Definitions:

AL: Action Level.

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. **mg/L:** milligrams per Liter.

Not Detected: There was no detection of the analyte to the limits of the test procedure or equipment.

ppt: parts per trillion, or nanograms per Liter

TABLE VIMAEBATA ORDNANCE AREA – DRINKING WATER CONSTITUENTS DETECTED IN 2024

	Unit of	Detected Level		Standard	Violation?						
Contaminant	Measurement	High	Low	(MCL/ MRDL)	Yes / No	Possible Sources of Contamination					
INORGANIC CONTAMINANTS											
Barium	mg/L	0.0120	-	2.0	No	Erosion of natural deposits.					
Nitrate (as Nitrogen)	mg/L	0.47	0.09	10	No	Runoff from fertilizer and erosion of natural deposits.					
Sodium	mg/L	9.8	-	-	No	Erosion of natural deposits.					
DISINFECTANTS & DISINFECTIO	DISINFECTANTS & DISINFECTION BYPRODUCTS										
Residual Chlorine	mg/L	0.98	0.64	4.0*	No	Disinfectant added for water treatment.					
Total Trihalomethanes	mg/L	0.0250	0.0230	0.080	No	By-product of drinking water chlorination.					
Halo Acetic Acids	mg/L	0.0160	0.0140	0.060	No	By-product of drinking water chlorination.					
BACTERIA											
Total Coliform	Presence	Neg	ative	> 1+/mo.	No	Treatment or distribution system issues.					
OTHER CONTAMINANTS OF CO	NCERN										
VOCs (Various)	mg/L	Not I	Detected	Various	No	Industrial activity, accidental release.					
Water Quality Parameters	mg/L	Within	Standard	Various	No						

Notes:

PFAS Results are shown in Table VIII

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

* Residual Chlorine - Maximum Residual Disinfectant Level.

Abbreviations and Definitions:

AL: Action Level.

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. **mg/L:** milligrams per Liter.

Not Detected: There was no detection of the analyte to the limits of the test procedure or equipment.

ppt: parts per trillion, or nanograms per Liter

TABLE VIIYOKOSE FUEL TERMINAL – DRINKING WATER CONSTITUENTS DETECTED IN 2024

	Unit of	Detected Level		Standard	Violation?						
Contaminant	Measurement	High	Low	(MCL/ MRDL)	Yes / No	Possible Sources of Contamination					
INORGANIC CONTAMINANTS											
Barium	mg/L	0.00880	-	2.0	No	Erosion of natural deposits.					
Nitrate (as Nitrogen)	mg/L	1.4	1.1	10	No	Runoff from fertilizer and erosion of natural deposits.					
Sodium	mg/L	10	-	-	No	Erosion of natural deposits.					
DISINFECTANTS & DISINFECTION BYPRODUCTS											
Residual Chlorine	mg/L	1.04	0.12	4.0*	No	Disinfectant added for water treatment.					
Total Trihalomethanes	mg/L	0.0290	0.0240	0.080	No	By-product of drinking water chlorination.					
Halo Acetic Acids	mg/L	0.0160	0.0110	0.060	No	By-product of drinking water chlorination.					
BACTERIA											
Total Coliform	Presence	Nega	Negative		No	Treatment or distribution system issues.					
OTHER CONTAMINANTS OF CO	NCERN										
VOCs (Various)	mg/L	Not E	Not Detected		No	Industrial activity, accidental release.					
Water Quality Parameters	mg/L	Within	Standard	Various	No						

Notes:

PFAS Results are shown in Table VIII

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

* Residual Chlorine - Maximum Residual Disinfectant Level.

Abbreviations and Definitions:

AL: Action Level.

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. **mg/L:** milligrams per Liter.

Not Detected: There was no detection of the analyte to the limits of the test procedure or equipment.

ppt: parts per trillion, or nanograms per Liter

TABLE VIIIPFAS AND PFOA DETECTED AT CFAS IN 2024

	Contominant	Unit of	Detect	ed Level	Above		ПА	TTA	Violation?	Passible Sources of Contamination
Location	Contaminant	Measurement	High	Low	MRL?		Yes / No	Possible Sources of Contamination		
CONTAMINANTS DETECTED										
Akasaki	Perfluoropentanoic acid (PFPeA)	ng/L	6.6	-	No	70	No	Material and Fabric Coatings, Fire Fighting Foams		

Notes:

In cases where there is a contaminant listed in repetition, it was detected with a different EPA Analytical Method. CFAS is required to test for PFAS/PFOA using EPA Analytical Method 537.1 and Method 533

* Tested above the MRL with EPA method 533. This results in enhanced testing frequency for this constituent, but it is well below the project Health Advisory level

Abbreviations and Definitions:

HA: Health Advisory Level

ng/L: nanograms per Liter

MRL: minimum reporting limit

Not Detected: There was no detection of the analyte to the limits of the test procedure or equipment.

TABLE IXCOPPER AND LEAD TESTING AT CFAS in 2024

Location	Contaminant	# Samples Exceeding AL	90 th %	AL (mg/L)	Violation?	Possible Sources of Contamination
Main Base	Copper	0	0.049	1.3	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Main Base	Lead	0	0.0013	0.010	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Hario Housing	Copper	0	0.042	1.3	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Hario Housing	Lead	0	0.0008	0.010	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Akasaki	Copper	0	0.004	1.3	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Akasaki	Lead	0	0.0005	0.010	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Harioshima	Copper	0	0.053	1.3	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Harioshima	Lead	0	0.0004	0.010	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Iorizaki	Copper	0	0.014	1.3	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Iorizaki	Lead	0	0.0009	0.010	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Maebata	Copper	0	0.018	1.3	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Maebata	Lead	0	0.001	0.010	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Yokose	Copper	0	0.035	1.3	No	Corrosion of household plumbing systems. Erosion of natural deposits.
Yokose	Lead	0	0.0008	0.010	No	Corrosion of household plumbing systems. Erosion of natural deposits.

Abbreviations and Definitions:

AL: Action Level.

mg/L: milligrams per Liter.

Not Detected: There was no detection of the analyte to the limits of the test procedure or equipment.