Consumer Confidence Report
Drinking Water Systems 2022
Commander, Fleet Activities Yokosuka

Issued in accordance with Commander, Navy Installations Command Instruction 5090.1B, 15 Mar 2021.
This report reflects monitoring data collected in 2022 and will be updated annually.

The Navy is pleased to provide you with this annual Consumer Confidence Report (CCR) of the Drinking Water System that supports *Main Base, Ikego Housing Area, Hakozaki Fuel Terminal, Tsurumi Fuel Terminal OU-1 & OU 2, Fleet Mail Center and Urago Ordnance Storage Area*. This report provides information about the water delivered to Commander, Fleet Activities (FLEACT) Yokosuka area of responsibility in 2022. It describes where our water comes from, what it contains, and how it compares to standards for safe drinking water. **The drinking water at FLEACT Yokosuka is safe to drink. Our goal is, and always has been, to provide safe and dependable drinking water.**

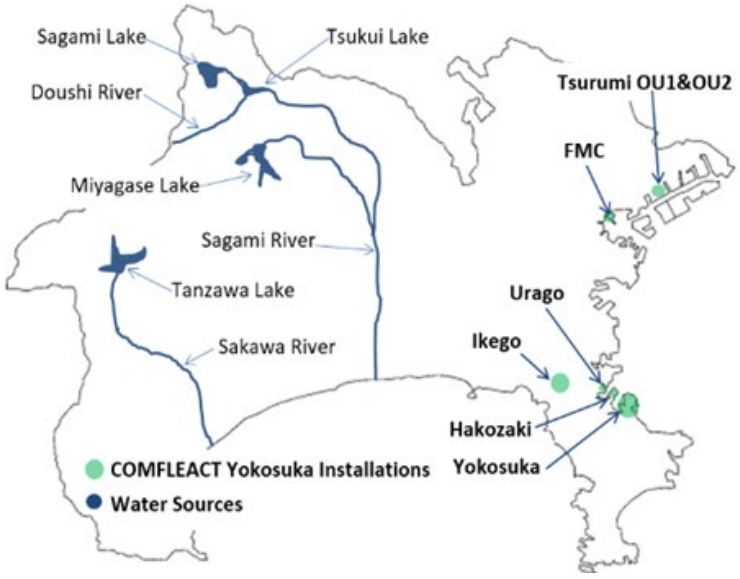
Source of Water

Yokosuka Main Base • Hakozaki Fuel Terminal • Urago Ordnance Storage Area

Drinking water at Yokosuka Main Base, Hakozaki Fuel Terminal, and Urago Ordnance Storage Area is combined surface water from the Sagami River and the Sakawa River purchased from the Yokosuka City Waterworks and Sewerage Bureau. The supplier filters and chlorinates the drinking water with a conventional rapid sand filtration system before providing to Yokosuka Main Base.

Ikego Housing Area

Drinking water at Ikego Housing Area is surface water from the Sagami River purchased from the Kanagawa Prefectural Waterworks. The supplier filters and chlorinates the drinking water with a conventional rapid sand filtration system before providing to Ikego Housing Area.



Fleet Mail Center (FMC) • Tsurumi OU-1 & 2

Drinking water at FMC and Tsurumi is surface water from the Sagami River purchased from the Yokohama Waterworks Bureau. The supplier filters and chlorinates the drinking water with a conventional rapid sand filtration system before providing to FMC and Tsurumi OU-1 & 2.

Water Distribution Systems

Commander, FLEACT Yokosuka Public Works Department (PWD) operates the water distribution system. In Yokosuka Main Base, Ikego Housing Area, and Hakozaki Fuel Terminal purchased water is temporarily stored in tanks, and the water provided to housing areas is fluoridated prior to distribution.

Purchased water is directly distributed throughout FMC, Tsurumi OU-1 & 2, and Urago without any treatment by the PWD.

Compliance with Drinking Water Requirements

U.S. Navy overseas installations are required to meet or exceed National Primary Drinking Water regulations promulgated under the Safe Drinking Water Act of 1974, which was adopted by Commander, Navy Installations Command (CNIC) Instruction 5090.1B and are the same standards used in the U.S. to ensure safe drinking water. Commander, FLEACT Yokosuka is also required to meet all criteria established in the latest Japan Environmental Governing Standards (JEGS), intended 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.

The Installation Commanding Officer has established an Installation Water Quality Board (IWQB) tasked with ensuring a reliable supply of drinking water for all persons using FLEACT Yokosuka facilities. IWQB is currently taking steps to meet all requirements of the Navy's Overseas Drinking Water (ODW) program, and the Regional Water Quality Board granted Commander, FLEACT Yokosuka a Conditional Certificate to Operate (CTO) for its water systems. Commander, FLEACT Yokosuka is expected to receive a Full CTO when all significant deficiencies identified during the sanitary survey are corrected. All deficiencies have either been corrected or are in the process of implementing corrective actions.

Source Water Assessment

The Navy Water Quality Oversight Council (WQOC) conducts a comprehensive sanitary survey of the FLEACT Yokosuka drinking water systems every three years. This survey provides an evaluation of the adequacy of the drinking water source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water. In addition to sanitary surveys, PWD regularly conducts environmental audits to verify compliance. The last comprehensive sanitary survey was conducted in August 2021. FLEACT Yokosuka is continually improving the drinking water system based on recommendations in the report.

Important Health Information

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 healthcare providers. U.S. Environmental Protection Agency (EPA) and Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Possible Source Contaminants

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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or visiting the EPA website at https://www.epa.gov/dwstandardsregulations/drinking-water-contaminant-human-health-effects-information

Sources of drinking water (both tap water 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, radioactive material. It can also pick up other contaminants resulting from the presence of animals or human activity. 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 be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production. They can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and JEGS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in US-sourced bottled water which must provide the same protection for public health.

EPA established a three-tier public notification plan for drinking water, summarized in **Table 1**. FLEACT Yokosuka follows this outline to ensure you are notified in a timely manner, when necessary.

Table 1: Three Tiers of Public Notification*

	Required Distribution Time	Distribution Method
Tier 1: Immediate Notice	Any time a situation occurs where there is the potential for human health to be immediately impacted, water suppliers have 24 hours to notify people who may drink the water of the situation	All Hands E-mail message and Facebook post
Tier 2: Notice as Soon as Possible	Any time a water system provides water with levels of a contaminant that exceed EPA or state standards or that hasn't been treated properly, but that does not pose an immediate risk to human health, the water system must notify its customers as soon as possible, but within 30 days of the violation	All Hands E-mail message and Facebook post
Tier 3: Annual Notice	When water systems violate a drinking water standard that does not have a direct impact on human health (for example, failing to take a required sample on time), the water supplier has up to a year to provide a notice of this situation to its customers	Published annually in this document, the Consumer Confidence Report

*Definitions from EPA website.
See http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/basicinformation.cfm for more information.

Other Potential Contaminants

Lead

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. 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 2 minutes before using the water for drinking or cooking. Drinking water samples are collected from consumer taps, including family housing units, to analyze for lead every three years. FLEACT Yokosuka lead sampling results meet the requirements for drinking water set forth in the JEGS and the EPA Lead and Copper Rule. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead

Lead in Priority Areas (LIPA)

In an effort to reduce children's potential exposure to lead, drinking water in priority area facilities was tested in 2014 to establish a baseline at all DoD Schools, Child Development Centers (CDCs) and Youth Centers (YCs). In March 2019, the WQOC issued a new LIPA policy that lowered the lead screening level from 20 parts per billion (ppb) to 15 ppb. Effective April 2019, the policy required corrective actions for any outlets that previously tested greater than 15 ppb.

In 2020, the U.S. EPA required, for the first time, testing for lead in drinking water in schools and daycare centers. Navy leadership has adopted the U.S. EPA guidelines for sampling and testing for lead in schools and childcare facilities as policy. This proactive approach to the identification and elimination of potential sources of lead in facilities that cater to children shows our commitment to the safety and well-being of our Navy families. FLEACT Yokosuka samples all drinking water faucets for Lead in Priority Areas every five years in an effort to reduce children's potential exposure, as required by Navy policy.

Ikego Housing Area

In May 2022, LIPA sampling was conducted at Ikego Housing Area facilities including Ikego Elementary School, Ikego CDC, Ikego Youth Center and the Ikego School Age Care Center. All corrective actions have been completed and results are below the 15 ppb lead screening level. Results are available on the CNIC website: https://cnrj.cnic.navy.mil/Operations-and-Management/Water-Quality-Information/Lead-in-Priority-Area-Sampling-Program/

Yokosuka Main Base

The next five year recurring sampling event will be conducted in 2023 at Yokosuka Main Base priority area facilities. Results will be available on the CNIC website: https://cnrj.cnic.navy.mil/Operations-and-Management/Water-Quality-Information/Lead-in-Priority-Area-Sampling-Program/

Per- and Polyfluoralkyl Substances

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 industrial and consumer products around the globe, including in the U.S., for decades. Due to their widespread use and environmental persistence, most people in the United States have been exposed to certain PFAS. PFAS have been used to make coatings and products that are used as

oil and water repellents for carpets, clothing, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) used for fighting petroleum fires.

Is there a federal or Japanese regulation for PFAS in drinking water?

There is currently no federal drinking water standard for any PFAS compounds. In May 2016, the U.S. EPA established a lifetime drinking water health advisory (HA) level at 70 parts per trillion (ppt) for individual or combined concentrations of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). Both chemicals are types of PFAS.

In 2020, the DoD issued a policy to monitor drinking water for PFAS at all DoD owned and operated water systems at a minimum of every three years. The DoD policy states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than the 2016 EPA HA level of 70 ppt, water systems would 1) take immediate action to reduce exposure to PFOS or PFOA, to include providing alternative drinking water; and 2) undertake additional sampling to assess the level, scope, and localized source of contamination.

In April 2020, Japan promulgated a water quality safety guideline of 50 ppt for PFAS in drinking water, applicable to our host nation suppliers.

What about the EPA's 2022 interim Health Advisories or proposed regulations?

In 2022, EPA issued interim Health Advisories for PFOS and PFOA. However, these newer levels are below quantifiable limits (i.e., below detection levels). EPA is expected to issue a proposed regulation on PFAS drinking water standards for public comment in the next few months. DoD looks forward to the clarity that a nationwide regulatory standard for PFOS and PFOA in drinking water will provide.

In anticipation of this EPA drinking water regulation and to account for emerging science that shows potential health effects of PFOS and PFOA at levels lower than 70 ppt, DoD is evaluating its efforts to address PFAS in drinking water, and what actions we can take to be prepared to incorporate this standard, such as reviewing our current data and collecting additional sampling where necessary. DoD remains committed to communicating and engaging with our communities throughout this process.

Has FLEACT Yokosuka tested its water for PFAS?

Yes. In October 2022 samples were collected from Main Base (Bldg. C3), Ikego Housing Complex (Bldg. 657), Hakozaki (Bldg. 8600378), FMC (Bldg. 106), Tsurumi OU1 (Bldg. 33), Urago (Bldg. 8700800).

PFAS detected, but PFOA/PFOS were below the 2016 EPA HA

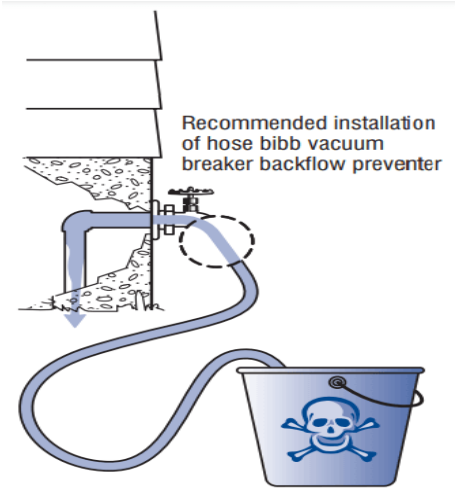
We are informing you that 6 of the 18 PFAS compounds covered by the sampling method of the water provided by Yokosuka City Waterworks were detected above the method reporting limit (MRL). PFOA and PFOS were below the EPA HA level. Results are provided in **Table 2**. As PFOA and PFOS were below the EPA HA of 70 parts per trillion, there is no immediate cause for concern.

Table 2: PFAS Results Constituent (ppt)	EPA Health Advisory Level (HA)	Main Base Bldg. C3	Ikego Bldg. 657	Hakozaki Bldg. 8600378	FMC Bldg. 106	Tsurumi OU1 Bldg. 33	Urago Bldg. 8700800
1. Hexafluoropropylene oxide dimer acid (GenX)	N/A	ND	ND	ND	ND	ND	ND
2. N-ethylperfluoro-1-octanesulfonamidoacetic acid (EtFOSAA)	N/A	ND	ND	ND	ND	ND	ND
3. N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	N/A	ND	ND	ND	ND	ND	ND
4. Perfluoro-1-butance sulfonic acid (PFBS)	N/A	ND	ND	ND	ND	ND	ND
5. Perfluoro-n-decanoic acid (PFDA)	N/A	ND	ND	ND	ND	ND	ND
6. Perfluoro-n-dodecanoic acid (PFDoA)	N/A	ND	ND	ND	ND	ND	ND
7. Perfluoro-n-heptanoic acid (PFHpA)	N/A	0.96	.88	.85	ND	ND	1.1
8. Perfluorohexance sulfonic acid (PFHxS)	N/A	1.5	1.5	1.3	ND	1.3	1.6
9. Perfluoro-n-hexanoic acid (PFHxA)	N/A	1.4	1.3	1.2	.07	1.3	1.6
10. Perfluoro-n-nonanoic acid (PFNA)	N/A	0.66	ND	ND	ND	0.75	0.76
11. Perfluorooctance sulfonic acid (PFOS)	70	3.1	3	2.8	1.6	2.8	3.3
12. Perfluoro-n-octanoic acid (PFOA)	70	2.1	2.1	2	1.4	2.1	2.2
13. Perfluoro-n-tetradecanoic acid (PFTeDA)	N/A	ND	ND	ND	ND	ND	ND
14. Perfluoro-n-tridecanoic acid (PFTrDA)	N/A	ND	ND	ND	ND	ND	ND
15. Perfluoro-n-undecanoic acid (PFUdA)	N/A	ND	ND	ND	ND	ND	ND
16. 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CL-PF3OUdS)	N/A	ND	ND	ND	ND	ND	ND
17. 9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9CL-PF3ONS)	N/A	ND	ND	ND	ND	ND	ND
18. 4,8-dioxa-3H-perfluorononanoic acid (ADONA)	N/A	ND	ND	ND	ND	ND	ND

Cross-connection and Backflow Prevention

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

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

Drinking Water Monitoring

Commander, FLEACT Yokosuka uses Japanese and EPA approved laboratory methods to analyze and monitor drinking water. **Table 3** lists the contaminants and required sampling frequency.

Table 3: Monitoring Frequency (Main Base)						
Constituent	**Main Base**	**Ikego**	**Hakozaki**	**Tsurumi**	**FMC**	**Urago**
pH, Residual Chlorine, Turbidity	Hourly	Hourly	Monthly	Hourly	Hourly	Monthly
Total Coliform	Monthly					
Fluoride	Daily/Monthly[1]		N/A			
Disinfection Byproducts	Quarterly		Annually			
Lead and Copper	Triennial					
Inorganic Chemicals	Annually / Quarterly[2]					
Toluene (Increase monitoring)	Quarterly					N/A
Volatile Organic Compounds	Annually					
Synthetic Organic Compounds	Once every 3 years					
Radionuclides	Once every 4 years		N/A			
Asbestos	Once every 9 years					

Notes:

1. Fluoride is analyzed and collected on a monthly basis in conjunction with bacteriological (Total Coliform) samples.
2. Surface water baseline monitoring frequency for Total Nitrate/Nitrite.

Water Quality Data

FLEACT Yokosuka conducts extensive monitoring to ensure your water meets all water quality standards. The results of the monitoring are reported on the following tables:

Table 4: Constituents Detected (Yokosuka Main Base)
Table 5: Constituents Detected (Ikego Housing Area)
Table 6: Constituents Detected (Hakozaki)
Table 7: Constituents Detected (Tsurumi)
Table 8: Constituents Detected (FMC)
Table 9: Constituents Detected (Urago)

The tables only list the results of constituents detected. The presence of a contaminant does not necessarily indicate the water poses a health risk. As such, FLEACT Yokosuka's drinking water is safe and fit for human consumption.

Table 4: Constituents Detected (Main Base)							
Contaminants	**Unit of Measurement**	**Level Detected**		**Standard**		**Violation**	**Typical Source**
		Low	**High**	**MCLG or MRDLG**	**MCL, TT, or MRDL**		
Disinfectants & Disinfection By-Products							
Residual Chlorine	ppm	0.15	0.85	4	4[1]	No[2]	Disinfectant water additive to control microbes
Haloacetic Acids (HAA5)	ppb	7.9	16	N/A	60	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	ppb	14	36	N/A	80	No	By-product of drinking water disinfection
Inorganic Contaminants							
Barium	ppm	0.0024	0.0026	N/A	2.0	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	ppm	0.053	1.1	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen]	ppm	0.91	1.1	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	ppm	7.3	7.4	N/A	N/A	No	Erosion of natural deposits; Leaching

Notes:

1. Residual Chlorine - Maximum Residual Disinfectant Level.

2. Chlorine residual should be maintained to ensure against bacteriological growth in the distribution system. No bacteria has ever been detected in the drinking water.

Contaminants	**MCLG**	**AL**	**90th percentile**	**Sample Date**	**# Samples Exceeding AL**	**Exceeds AL**	**Typical Source**
Inorganic Contaminants							
Copper (ppm)[3]	1.3	1.3	0.061	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)[3]	0	15	3.8	2020	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

Notes:

3. Lead and Copper (LCR) is conducted Triennial (every 3 years). No samples were collected in 2022. Results provided are from the last LCR sampling event conducted in September 2020. Upcoming LCR sampling will be conducted in 2023.

Table 5: Constituents Detected (Ikego Housing Area)							
Contaminants	**Unit of Measurement**	**Level Detected**		**Standard**		**Violation**	**Typical Source**
		Low	**High**	**MCLG or MRDLG**	**MCL, TT, or MRDL**		
Disinfectants & Disinfection By-Products							
Residual Chlorine	ppm	0.3	0.83	4	4[1]	No[2]	Disinfectant water additive to control microbes
Haloacetic Acids (HAA5)	ppb	8.3	15	N/A	60	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	ppb	11	19	N/A	80	No	By-product of drinking water disinfection
Inorganic Contaminants							
Barium	ppm	N/A[3]	0.0027	N/A	2.0	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	ppm	0.61	0.87	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen]	ppm	0.94	1.1	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	ppm	N/A[3]	7.9	N/A	N/A	No	Erosion of natural deposits; Leaching

Notes:

1. Residual Chlorine - Maximum Residual Disinfectant Level.
2. Chlorine residual should be maintained to ensure against bacteriological growth in the distribution system. No bacteria has ever been detected in the drinking water.
3. A single sample was used to determine compliance and no range is reported.

Contaminants	**MCLG**	**AL**	**90th percentile**	**Sample Date**	**# Samples Exceeding AL**	**Exceeds AL**	**Typical Source**
Inorganic Contaminants							
Copper (ppm)[4]	1.3	1.3	0.033	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)[4]	0	15	1.1	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Notes:

4. Lead and Copper (LCR) is conducted Triennial (every 3 years). No samples were collected in 2022. Results provided are from the last LCR sampling event conducted in September 2020. Upcoming LCR sampling will be conducted in 2023.

Table 6: Constituents Detected (Hakozaki Fuel Terminal)							
Contaminants	**Unit of Measurement**	**Level Detected**		**Standard**		**Violation**	**Typical Source**
		Low	**High**	**MCLG or MRDLG**	**MCL, TT, or MRDL**		
Disinfectants & Disinfection By-Products							
Residual Chlorine	ppm	0.34	0.71	4	4[1]	No[2]	Disinfectant water additive to control microbes
Haloacetic Acids (HAA5)	ppb	NA[3]	19	N/A	60	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	ppb	NA[3]	26	N/A	80	No	By-product of drinking water disinfection
Inorganic Contaminants							
Barium	ppm	NA[3]	0.0024	N/A	2.0	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	ppm	NA[3]	0.066	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen]	ppm	0.93	1.1	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	ppm	NA[3]	7.8	N/A	N/A	No	Erosion of natural deposits; Leaching

Notes:

1. Residual Chlorine - Maximum Residual Disinfectant Level.
2. Chlorine residual should be maintained to ensure against bacteriological growth in the distribution system. No bacteria has ever been detected in the drinking water.
3. A single sample was used to determine compliance and no range is reported.

Contaminants	**MCLG**	**AL**	**90th percentile**	**Sample Date**	**# Samples Exceeding AL**	**Exceeds AL**	**Typical Source**
Inorganic Contaminants							
Copper (ppm)[4]	1.3	1.3	0.028	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)[4]	0	15	1.7	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Notes:

4. Lead and Copper (LCR) is conducted Triennial (every 3 years). No samples were collected in 2022. Results provided are from the last LCR sampling event conducted in September 2020. Upcoming LCR sampling will be conducted in 2023.

Table 7: Constituents Detected (Tsurumi)							
Contaminants	**Unit of Measurement**	**Level Detected**		**Standard**		**Violation**	**Typical Source**
		Low	**High**	**MCLG or MRDLG**	**MCL, TT, or MRDL**		
Disinfectants & Disinfection By-Products							
Residual Chlorine	ppm	0.36	0.72	4	4[1]	No[2]	Disinfectant water additive to control microbes
Haloacetic Acids (HAA5)	ppb	NA[3]	16	N/A	60	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	ppb	NA[3]	26	N/A	80	No	By-product of drinking water disinfection
Inorganic Contaminants							
Fluoride	ppm	NA[3]	0.051	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen]	ppm	0.94	1.1	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	ppm	NA[3]	7.2	N/A	N/A	No	Erosion of natural deposits; Leaching

Notes:

1. Residual Chlorine - Maximum Residual Disinfectant Level.
2. Chlorine residual should be maintained to ensure against bacteriological growth in the distribution system. No bacteria has ever been detected in the drinking water.
3. A single sample was used to determine compliance and no range is reported.

Contaminants	**MCLG**	**AL**	**90th percentile**	**Sample Date**	**# Samples Exceeding AL**	**Exceeds AL**	**Typical Source**
Inorganic Contaminants							
Copper (ppm)[4]	1.3	1.3	0.056	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)[4]	0	15	4.3	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Notes:

4. Lead and Copper (LCR) is conducted Triennial (every 3 years). No samples were collected in 2022. Results provided are from the last LCR sampling event conducted in September 2020. Upcoming LCR sampling will be conducted in 2023.

Table 8: Constituents Detected (FMC)							
Contaminants	**Unit of Measurement**	**Level Detected**		**Standard**		**Violation**	**Typical Source**
		Low	**High**	**MCLG or MRDLG**	**MCL, TT, or MRDL**		
Disinfectants & Disinfection By-Products							
Residual Chlorine	ppm	0.34	0.72	4	4[1]	No[2]	Disinfectant water additive to control microbes
Haloacetic Acids (HAA5)	ppb	NA[3]	13	N/A	60	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	ppb	NA[3]	16	N/A	80	No	By-product of drinking water disinfection
Inorganic Contaminants							
Barium	ppm	NA[3]	0.003	N/A	2.0	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	ppm	NA[3]	0.1	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen]	ppm	0.86	1	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	ppm	NA[3]	7.5	N/A	N/A	No	Erosion of natural deposits; Leaching
Volatile Organic Contaminants							
Toluene	ppm	ND	0.0005	1	1	No	Discharge from petroleum factories

Notes:

1. Residual Chlorine - Maximum Residual Disinfectant Level.
2. Chlorine residual should be maintained to ensure against bacteriological growth in the distribution system. No bacteria has ever been detected in the drinking water.
3. A single sample was used to determine compliance and no range is reported.

Contaminants	**MCLG**	**AL**	**90th percentile**	**Sample Date**	**# Samples Exceeding AL**	**Exceeds AL**	**Typical Source**
Inorganic Contaminants							
Copper (ppm)[4]	1.3	1.3	0.052	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)[4]	0	15	1.95	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Notes:

4. Lead and Copper (LCR) is conducted Triennial (every 3 years). No samples were collected in 2022. Results provided are from the last LCR sampling event conducted in September 2020. Upcoming LCR sampling will be conducted in 2023.

Table 9: Constituents Detected (Urago)							
Contaminants	**Unit of Measurement**	**Level Detected**		**Standard**		**Violation**	**Typical Source**
		Low	**High**	**MCLG or MRDLG**	**MCL, TT, or MRDL**		
Disinfectants & Disinfection By-Products							
Residual Chlorine	ppm	0.4	0.76	4	4[1]	No[2]	Disinfectant water additive to control microbes
Haloacetic Acids (HAA5)	ppb	NA[3]	22	N/A	60	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	ppb	NA[3]	29	N/A	80	No	By-product of drinking water disinfection
Inorganic Contaminants							
Barium	ppm	NA[3]	0.0029	N/A	2.0	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	ppm	NA[3]	0.073	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen]	ppm	0.94	1.1	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	ppm	NA[3]	7.4	N/A	N/A	No	Erosion of natural deposits; Leaching

Notes:

1. Residual Chlorine - Maximum Residual Disinfectant Level.
2. Chlorine residual should be maintained to ensure against bacteriological growth in the distribution system. No bacteria has ever been detected in the drinking water.
3. A single sample was used to determine compliance and no range is reported.

Contaminants	**MCLG**	**AL**	**90th percentile**	**Sample Date**	**# Samples Exceeding AL**	**Exceeds AL**	**Typical Source**
Inorganic Contaminants							
Copper (ppm)[4]	1.3	1.3	0.042	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)[4]	0	15	1.6	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Notes:

4. Lead and Copper (LCR) is conducted Triennial (every 3 years). No samples were collected in 2022. Results provided are from the last LCR sampling event conducted in September 2020. Upcoming LCR sampling will be conducted in 2023.

Monitoring Violations

Yokosuka Main Base and Ikego Housing Complex

This section provides Tier 3 notification in accordance with EPA procedures. Tier 3 notifications do not have an impact on human health but are required by the EPA (See Table 1).

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. Drinking water constituents for Disinfectants and Disinfection By-Products (DDBP) are monitored on a quarterly basis at Yokosuka Main Base and Ikego Housing Complex. Due to a shipping delay, samples collected 17 June 2022 for 3rd quarter DDBP monitoring were outside the of temperature limit when they arrived at the laboratory. Resampling was conducted on 27 June 2022, however due to a disruption caused by the Laboratory Information Management System the samples missed the 14 day hold time. The laboratory resampled for DDBP on 29 July 2022 in the 4th quarter. Although the results of samples collected in July were below the Maximum Contaminant Level (MCL), we cannot be sure of the quality of your drinking water during each quarter. Since this incident, we have continued to monitor for DDBP within the correct monitoring frequency requirements according to our drinking water monitoring schedule and plans. We consider this an isolated issue. Still, we will continue working with the laboratory to minimize shipping delays to the greatest extent possible.

Abbreviations and Definitions

AL: Action Level. The concentration of a contaminant in water that establishes the appropriate treatment for a water system. AL is based on a 90th percentile value.

MCL: Maximum Contaminant Level. The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG: Maximum Contaminant Level Goal. The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL: Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfection Level Goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not Applicable.

ND: Not Detected.

ppm: parts per million, or milligrams per liter (mg/L).

ppb: parts per billion, or micrograms per liter (µg/L).

ppt: parts per trillion ppt (ng/L).

TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

90th percentile: Represents the highest value found out of 90 percent of the samples taken. If the 90th percentile value is greater than the AL, a treatment evaluation and/or mitigation actions must be conducted on the water system.

Point of Contact

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