

Consumer Confidence Report 2021



Yokohama Fleet Mail Center Drinking Water System



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 2021 and will be updated annually.

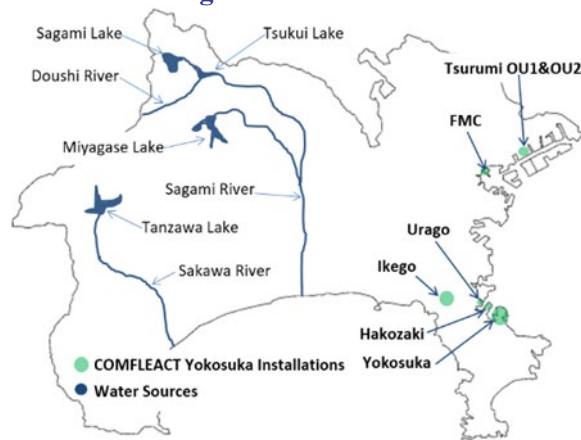
The Navy is pleased to provide you with this annual Consumer Confidence Report (CCR) of the Drinking Water System that supports Yokohama Fleet Mail Center (FMC). This report provides information about the water delivered to FMC in 2021. It describes where our water comes from, what it contains, and how it compares to standards for safe drinking water. **The drinking water at FMC is safe to drink. Our goal is, and always has been, to provide safe and dependable drinking water.**

Source of Water

Drinking water at FMC 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.

Water Distribution Systems

Commander, Fleet Activities (FLEACT) Yokosuka Public Works Department (PWD) operates the water distribution system servicing our area. Purchased water is directly distributed throughout FMC 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, Public Works Department 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 the 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 health care 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 of 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 be 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. The 3 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.	Tier 1 notification is via 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 doesn't 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.	Tier 2 notification is via 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.	Tier 3 notification is 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>

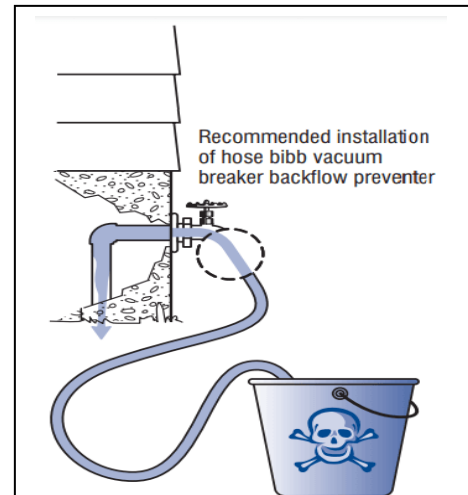
Drinking Water Monitoring

Commander, FLEACT Yokosuka uses Japanese and EPA approved laboratory methods to analyze and monitor our drinking water. Table 2 lists the contaminant and required sampling frequency.

Table 2: Monitoring Frequency	
Constituent	Frequency
pH, Residual Chlorine, Turbidity	Hourly
Total Coliform	Monthly
Disinfection Byproducts (Total Trihalomethanes and Haloacetic Acids)	Annually
Lead and Copper	Annually/ Triennial ¹
Inorganic Chemicals	Annually/ Quarterly ²
Volatile Organic Compounds	Annually ³
Synthetic Organic Compounds	Once every 3 years
Asbestos	Once every 9 years

Notes:

1. Lead and Copper monitoring frequency reduced from annually to once every 3 years.
2. Surface water baseline monitoring frequency for Total Nitrate/Nitrite.
3. Increased monitoring frequency for Toluene.



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

Water Quality Data

The following section lists constituents detected during the most recent round of required sampling. Table 3 lists only those constituents detected. The presence of a contaminant does not necessarily indicate the water poses a health risk. As such, Yokohama FMC drinking water is safe and fit for human consumption.

Table 3: Constituents Detected							
Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Range		Sample Date	Violation	Typical Source
			Low	High			
Disinfectants & Disinfection By-Products							
Residual Chlorine (ppm)	4	4 ¹	0.54	0.80	2021	No ²	Disinfectant water additive to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	NA ³	11.0	2021	No	By-product of drinking water chlorination
TTHMs (Total Trihalomethanes) (ppb)	NA	80	NA ³	14.0	2021	No	By-product of drinking water disinfection
Inorganic Contaminants							
Nitrate [measured as Nitrogen] (ppm)	10	10	0.090	1.1	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium (ppm)	2	2	NA	0.0027	2021	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	NA	NA	NA ³	7.6	2021	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	90 th percentile	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper (ppm) ⁴	1.3	1.3	0.079	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb) ⁴	0	15	2.0	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 2021. Results provided are from the last LCR sampling event conducted in September 2020.							

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.

Monitoring Violations

There are no monitoring violations to report.

Point of Contact

Contact PWD Environmental for additional information or questions:

Loreal Spear, 243-9520, Loreal.spear@fe.navy.mil

Seiichi Abe, 243-9578, Seiichi.Abe.JA@fe.navy.mil