

## Consumer Confidence Report Naval Air Facility Atsugi Drinking Water Systems 2024



Issued in accordance with Commander, Navy Installations Command Instruction 5090.1B, 15 Mar 2021. This report reflects monitoring data collected in 2024 and will be updated annually.

### 2024 NAVAL AIR FACILITY ATSUGI WATER QUALITY REPORT

This year's water quality report covers calendar year 2024 water quality testing. The *Consumer Confidence Report Rule* of the Federal Safe Drinking Water Act requires this information be provided to the public. This report provides information on the source of our water, what contaminants were found, and health risks associated with any contaminants that were found. Naval Air Facility (NAF) uses conventional treatment to remove contaminants from the water and continuously monitors drinking water quality throughout the system. The drinking water at NAF Atsugi is SAFE to drink. Our primary goal is, and always has been, to provide you with safe and dependable drinking water.

### **SOURCE OF WATER**

NAF Atsugi provides drinking water to all base housing and facilities derived from the Sagamino Gravel Layer (SGL) and Zama-Kyuryo Gravel Layer (ZGL) Aquifers, which is a groundwater source underlying the installation. Groundwater is pumped from SGL and ZGL Aquifers into the water distribution system by two production wells.

Your water is treated at the NAF Atsugi Water Treatment Plant located in main base with an air stripper (Figure 1) to remove Trichloroethylene (TCE), and is disinfected with sodium hypochlorite to protect against harmful bacteria and viruses. Fluoride is added to aid in dental hygiene (Figure 2).



**Figure 1: Air Stripper** 



Figure 2: Sodium Hypochlorite & Fluoride Tanks

#### **OVERSEAS DRINKING WATER PROGRAM**

NAF Atsugi is committed to providing safe, high-quality drinking water that meets or exceeds the standards set by both the Japan Environmental Governing Standards (JEGS) and the U.S. National Primary Drinking Water Regulations under the Safe Drinking Water Act of 1974. These are the same strict standards used across the United States to protect public health and the environment. They have been formally adopted for use at Department of Defense (DoD) installations in Japan under CNIC Instruction 5090.1B.

To ensure ongoing compliance and accountability, the Installation Commanding Officer established an Installation Water Quality Board (IWQB). This board oversees the safety and reliability of the drinking water provided at NAF Atsugi facilities and is actively working to meet all requirements of the Navy's Overseas Drinking Water (ODW) program. In December 2024, the Navy Overseas Water Quality Oversight Council (WQOC) issued NAF Atsugi full Certification to Operate for its water system. This certification confirms that NAF Atsugi water system is fully compliant and that the water it supplies is safe and fit for human consumption.

#### **IMPORTANT HEALTH INFORMATION**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 risks from infections. These people should seek advice about drinking water from their health care providers. EPA & Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

#### WHY ARE THERE CONTAMINANTS IN MY WATER?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, groundwater and wells (Figure 3). As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from 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.



Figure 3: Sources of drinking Water

#### **POSSIBLE SOURCE OF CONTAMINANTS**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791). <u>https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations</u>

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

\*Definitions from EPA website.

See http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/basicinformation.cfm for more information.

## **OTHER POTENTIAL CONTAMINANTS**

### TRICHLOROETHYLENE

In the early 1990's, TCE was found in local groundwater at levels exceeding the maximum contaminant level (MCL). Your Water Treatment Plant utilizes a process known as air stripping to reduce TCE levels below their MCL threshold. The air stripping process involves interaction between a contaminant-free gas (air) and the contaminated water to release the organics into the air. This process can effectively remove approximately 70 to 100 percent of TCE. The TCE removal facility was designed to treat an incoming TCE concentration of 15 parts-per-billion (ppb).

The TCE concentration both from the raw source water and the treated water is monitored quarterly to ensure that the TCE level is within the allowable limit. In CY2024, four consecutive quarterly samples were taken and all sample results showed no detection of TCE in treated water.

#### LEAD

Our public water system is committed to safeguarding the health of everyone on our installation, including those in housing, workplaces, and community facilities. However, we were unable to submit the required initial inventory of drinking water service lines by the October 16, 2024 deadline, which was intended to identify whether lines are made of lead, galvanized, non-lead, or unknown materials. At this time, the material of your service line has not yet been identified. There is a possibility it could be lead or galvanized pipe previously connected to lead. While our current water quality compiles with EPA lead and copper rule action levels, we are actively working to investigate and replace any lead service lines to ensure long-term public health protection.

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 annually. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

#### LEAD IN PRIORITY AREAS (LIPA)

In an effort to reduce children's potential exposure to lead, every five years, over 331 drinking water outlets at Shirley Lanham Elementary School (SLES), Child Development Centers and Youth Centers in priority areas are tested. In May 2024, the WQOC issued a new LIPA policy that lowered the lead screening level from 15 parts per billion (ppb) to 10 ppb.

In 2024, this routine testing occurred. Nine (9) outlets tested at or higher than the 10 parts per billion (ppb) screening level for lead. Of the 9 outlets that tested higher than 10 ppb, one (1) is in area of SLES that is no longer in use and was permanently removed. The remaining eight (8) outlets were secured and re-sampled after completing all corrective measures. After implementation corrective actions, the water outlets tested below the screening levels.

The next five year recurring sampling event will be conducted in July 2029 at NAF Atsugi priority area facilities. Results will be available on the CNIC website: <u>https://cnrj.cnic.navy.mil/Operations-and-Management/Water-Quality-Information/Lead-in-Priority-Area-Sampling-Program/</u>

# 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 FEDERAL OR JAPANESE REGULATION FOR PFAS IN DRINKING WATER?

On April 26, 2024, the US EPA published a National Primary Drinking Water Regulation (NPDWR) final on drinking water standards for six PFAS under the Safe Drinking Water Act (SDWA). The rule establishes the maximum contaminant levels (MCLs), see **Table 2**.

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 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.

PFAS Chemical	Maximum Contaminant Level (MCL)				
PFOA (Perfluoro-n-octanoic acid)	4.0 Parts Per Trillion (PPT)				
PFOS (Perfluorooctane sulfonic acid)	4.0 PPT				
PFNA (Perfluoro-n-nonanoic acid)	10 PPT				
PFHxS (Perfluorohexane sulfonic acid)	10 PPT				
HFPO-DA (GenX Chemicals)	10 PPT				
Mixture: PFNA, PFHxS, HFPO-DA, and PFBS	*Hazard Index (HI) of 1				

\*Hazard Index: The Hazard Index is an approach that EPA uses to understand health risk from chemical mixture (i.e. exposure to multiple chemicals). HI compares the level of each PFAS measured in the water to the health-base water concentration. Reference- EPA Final PFAS Fact Sheet.

### HAS NAF ATSUGI TESTED ITS WATER FOR PFAS in 2024?

Yes. In 2024 samples were collected from Building 470 (treated water), Monitoring Wells 1-4, Production Wells #1, #2a-2c, and #3.

# REGULATED PFAS DETECTED ABOVE MCL BUT BELOW THE 2016 EPA HA for PFOS/PFOA

We are informing you that PFOA and PFOS of the 25 PFAS covered by the sampling method were detected in your water system. The results, along with the Running Annual Averages (RAA) for the MCLs and Hazard Index (HI) are provided in **Table 3.** EPA does not have an MCL for all these compounds at this time. PFOA, PFOS, PFNA, PFHxS, and PFBS were detected. The RAAs are currently above the MCL trigger level.

#### WHAT IS NEXT?

NAF Atsugi's initial monitoring for PFAS in accordance with EPA requirements is complete. We will continue to monitor PFAS in the drinking water quarterly. Atsugi will plan operational controls or additional treatment to ensure our water complies with the PFAS MCLs and HI by April 2029.

Table 3. PFAS MONITORING RESULTS							
Contaminants	Unit	Sample Year	Detection Range Notes 1		RAA	Hazard Index	MCL
	à		Low	High	Note 2	Note 3	
Perfluoro-1-butane sulfonic acid (PFBS)	ppt	2024	N.D.	2.3	0.575	N/A	10
Perfluorohexane sulfonic acid (PFHxS)	ppt	2024	9.2	11	10.3	N/A	10
Perfluoro-n-nonanoic acid (PFNA)	ppt	2024	2.1	3.2	2.7	N/A	10
Perfluorooctane sulfonic acid (PFOS)	ppt	2024	14	20	16.75	N/A	4
Perfluoro-n-octanoic acid (PFOA)	ppt	2024	3.8	5.6	4.975	N/A	4
hexafluoropropylene oxide dimer acid (HFPO- DA)(GenX)	ppt	2024	N.D.	N.D.	N.D.	N/A	N/A
Mixture of PFNA, PFHxS, HFPO-DA, PFBS	Hazard Index (no units)	2024	1.23	1.52	1.41	1	N/A

Note 1: Detection Range is from individual sample results in your water system (treated water) from the calendar year covered by the report.

Note 2: Running Annual Average (RAA) of quarterly sampling analytical results.

Note 3: The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from chemical mixture. The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the highest level determined not to have risk of health effects.

### **2024 WATER QUALITY DATA**

The following data presented in the tables below are the results of monitoring for the reporting period of 1 January 2024 — 31 December 2024. Only constituents that are detected are listed in the table below. Contaminants that are not present on table were below the detection levels specified in the JEGS and 40 Code of Federal Regulations 141.151(d). Detection of contaminants in drinking water does not necessarily indicate that water poses a health risk.

#### **DEFINITIONS:**

1. Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or requirements such as additional testing, public notification, or improvements. 2. Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment

technology. 3. Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety. Values greater than MCLG but less than MCL have no known health risk.

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

5. Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits to control microbial contamination.

#### **ABBREVIATIONS:**

ppm: parts per million ppb: parts per billion ND: not detected (above laboratory detection limit)

MANDATORY S	TANDAR	DS AND H	IEALTH RE	ELATED ST	ANDARDS	S ESTABLIS	HED BY USEPA AND JEGS		
Contaminants (Units)	Sample	MCLG	MCL	Detection Range		Violation	Sources of Contamination		
	Year			Low	High				
INORGANIC CHEMICALS	(ppm)								
Fluoride	2024	4	4	0.6	0.84	No	Water additive which promotes strong teeth; Erosion of natural deposits		
Nitrate (measured as Nitrogen)	2024	10	10	ND	4.7	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits		
DISINFECTION BYPRODU	CTS (ppm	ĵ 👘							
Total Trihalomethanes [TTHM]	2024	Note 1	0.080	0.00046 0.0038 No		No	Byproduct of drinking water chlorination		
DISINFECTANT RESIDUAL	LS (ppm)								
Contaminants (Units)	Sample	MRDLG/	Your Water	Detection Range		Violation	Sources of Contamination		
	Year	MRDL		Low	High				
Residual Chlorine	2024	4	0.57 Note 2	0.21 0.85		No	Disinfectant water additive to control microbes		
LEAD (ppb) AND COPPER	(ppm)								
Contaminants (Units)	Sample	MCLG	AL	90th Percentile		Violation	Sources of Contamination		
Lead	2024	24 0 10 1.3 Note 3		.3 te 3	No	Corrosion of household plumbing systems; Erosion of natural deposits			
		Zero out of	f 20 samples	f the lead action level of 10 ppb					
Copper	2024	1.3	1.3	0.016 Note 3		No	Corrosion of household plumbing systems; Erosion of natural deposits		
	Z	Zero out of 20 samples were found to have copper levels in excess of the copper action level of 1.3 ppm							

Note 1: Although there is no collective MCLG for this group, there are individual MCLGs for some of the individual contaminants. TTHM: bromodichloromethane (zero), bromoform (zero), dibromo-chloromethane (0.080 ppm).

Note 2: Chlorine Residual is calculated based on quarterly Running Annual Average (highest reportable average).

Note 3: The AL is exceeded if the concentration of more than 10 percent of tap water samples collected (the "90th percentile" level) is greater than 1.3 ppm for copper and 10 ppb for lead.

#### **MONITORING VIOLATIONS**

This section provides the 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.

On June 2024, we missed the quarterly monitoring sampling for Synthetic Organic Chemicals (SOC). Although the results of quarterly samples were non-detect, monitoring was not consecutive quarters.

Resampling was conducted on missed SOC with adjusted monitoring for additional sampling in the next quarterly period to meet the monitoring frequency requirement. Our drinking water monitoring schedule and plans have been updated to include half year sampling request to prevent future occurrences. Additionally, implementation of calendar reminders and email alert for future sampling schedule deadlines.

#### HOW TO REPORT A WATER QUALITY COMPLAINT

If you notice discoloration in your drinking water, a funny taste, or if you have any concerns about your drinking water, we strongly encourage you to contact the Environmental Division at 315-264-4094. Arrangements can be made to have your water sampled and analyzed to ensure that it is safe to drink.

### 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.



### HOW TO OBTAIN ADDITIONAL INFORMATION

We are committed to ensuring the quality of NAF Atsugi drinking water to the highest standards possible. Public queries and additional information regarding this report can be obtained by contacting the NAF Atsugi Public Affairs Office at 315-264-4453.