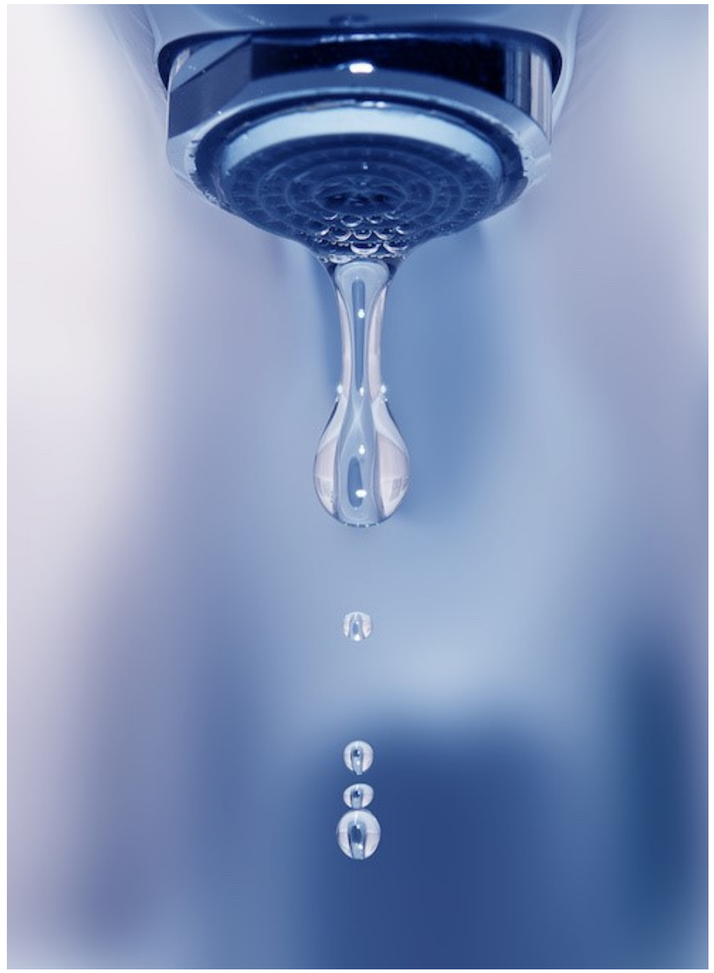
2020

NAVAL AIR FACILITY ATSUGI

WATER QUALITY

CONSUMER CONFIDENCE REPORT



PUBLIC WORKS DEPARTMENT

ENVIRONMENTAL DIVISION

315-264-4095

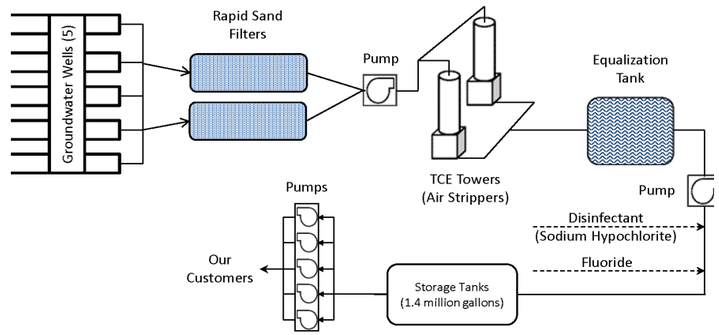
2020 NAVAL AIR FACILITY ATSUGI WATER QUALITY REPORT

NAF Atsugi is pleased to provide the Consumer Confidence Report for water quality in 2020 and report that the drinking water at NAF Atsugi is SAFE to drink. This report is provided In accordance with the JEGS, DOD Community Water System (CWS) to provide a water quality report (i.e, Consumer Confidence
Report) to the population served by the CWS annually by July 1. This report provides information on the source of our water and how it compares to standards for safe drinking water. Naval Air Facility (NAF) Atsugi uses state-of-the-art techniques to remove contaminants from the water and continuously monitors drinking water quality throughout the system. Again, 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 NAF Atsugi Aquifer, which is a groundwater source underlying the installation. Groundwater is pumped from the underground aquifer into the water distribution system by five (5) wells.

Your water is treated with sand filters to remove particulates, with an air stripper 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. Diagram 1 (above) highlights Atsugi's water treatment process.



(see diagram below).

OVERSEAS DRINKING WATER PROGRAM

NAF Atsugi is required to meet or exceed all criteria established in the Japan Environmental Governing Standards (JEGS). This is to ensure human health and the natural environment are protected through the promulgation of specific environmental compliance criteria.

NAF Atsugi is currently taking steps to meet all requirements of the Navy's Overseas Drinking Water (ODW) program. In 2018, the Regional Water Quality Board (RWQB) granted NAF Atsugi a Conditional Certification to Operate (CTO) for its water system. This affirms that the system is safe and the water is fit for human consumption. NAF Atsugi is expected to receive a full CTO when all significant deficiencies identified during the Sanitary Survey are corrected. All remaining significant deficiencies are expected to be corrected no later than November 2021.

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, 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, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

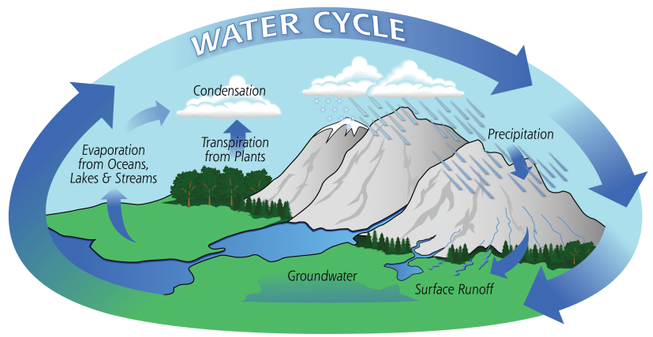
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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 by-products of industrial processes and petroleum production, and 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.



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).

IMPORTANT HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemo-therapy, 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/CDC 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).

2020 WATER QUALITY DATA

The following data presented in the tables below are the results of monitoring for the reporting period of 1 January 2020 — 31 December 2020. Only constituents that are detected are listed in the table below. Contaminants that are not present in the 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 (or milligrams per liter)
ppb: parts per billion (or micrograms per liter) N/A:: Not Applicable

MANDATORY STANDARDS AND HEALTH RELATED STANDARDS ESTABLISHED BY USEPA AND JEGS

Contaminants (Units)	Sample Year	MCLG	MCL	Detection Range		Violation	Source(s) of Contamination	Location(s) Detected
				Low	High			
INORGANIC CHEMICALS (ppm)								
Fluoride	2019	4	4	0.83	0.83	No	Water additive which promotes strong teeth Erosion of natural deposits;	Within the Distribution System
Nitrate (measured as Nitrogen)	2020	10	10	5.1	5.1	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	B470
Sodium	2020	N/A	N/A	8.6	8.6	No	Erosion of natural deposits	B470
DISINFECTION BYPRODUCTS (ppb)								
Five Haloacetic Acids [HAA5]	2020	N/A *Note 1*	60	0.25 *Note 2*	1.5 *Note 2*	No	Byproduct of drinking water chlorination	B974, B1077, B3001, B3134, B3143, J85
Total Trihalomethanes [TTHM]	2020	N/A *Note 1*	80	0.24 *Note 2*	5 *Note 2*	No	Byproduct of drinking water chlorination	B974, B1077, B3001, B3134, B3143, J85
Contaminants	**Sample Year**	**MRDLG**	**MRDL**	**Detection Range**		**Violation**	**Sources of Contamination**	**Location(s) Detected**
				Low	**High**			
DISINFECTANT RESIDUAL (ppm)								
Residual Chlorine	2020	4	4	0.38 *Note 3*	0.79 *Note 3*	No	Disinfectant water additive to control microbes	Within the Distribution System
Contaminants (Units)	**Sample Year**	**MCLG**	**AL**	**90th Percentile Value**		**Violation**	**Sources of Contamination**	**Location(s) Detected**
LEAD (ppb) AND COPPER (ppm)								
Lead	2020	0	15	0.51 *Note 4*		No	Corrosion of household plumbing systems; Erosion of natural deposit	Within the Distribution System
	Zero out of 20 samples were found to have lead levels in excess of the lead action level of 15 ppb							
Copper	2020	1.3	1.3	0.14 *Note 4*		No	Corrosion of household plumbing systems; Erosion of natural deposit	Within the Distribution System
	Zero out of 20 samples were found to have copper levels in excess of the copper action level of 1.3 ppm							

NOTES:

Note 1: Although there is no collective MCLG for this group, there are individual MCLGs for some of the individual contaminants. **HAA:** monochloroacetic acid (70ppb), dichloroacetic acid (zero), tri-chloroacetic acid (20 ppb). **THM:** bromodichloromethane (zero), bromoform (zero), dibromo-chloromethane (60 ppb).

Note 2: Result is based on the highest calculated Running Annual Average (RAA)

Note 3: Chlorine result is based on the highest calculated Running Annual Average (RAA).

Note 4: 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 15 ppb for lead.

PER- AND POLYFLUOROALKYL SUBSTANCES

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 United States, since the 1940s. 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 at airfields and in industrial fire suppression processes because they rapidly extinguish fires, saving lives and protecting property. 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?

There is currently no established federal water quality regulation for any PFAS compounds. In May 2016, the EPA established a 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.

Out of an abundance of caution for your safety, the Department of Defense's (DoD) PFAS testing and response actions go beyond EPA Safe Drinking Water Act requirements. In 2020 the DoD promulgated a policy to obtain drinking water results for PFAS at all purchased water systems .

The EPA's health advisory states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than 70 ppt, water systems should quickly undertake additional sampling to assess the level, scope, and localized source of contamination to inform next steps. Japan promulgated a water quality safety guideline of 50 ppt for PFAS in drinking water in April 2020 applicable to our host nation suppliers.

HAS NAVAL AIR FACILITY ATSUGI TESTED ITS WATER FOR PFAS?

Yes. In November 2020 samples were collected from building 470.

We are informing you that 7 of the 18 PFAS compounds covered by the sampling method were detected above the method reporting limit (MRL). PFOA and PFOS were below the EPA HA level. The results are provided in the water quality data table below.

PFAS MONITORING RESULTS

Contaminants (Units)	Sample Date	Detected Level	MRL	Health Advisory	Violation	Location Detected
PER- AND POLYFLUOROALKYL SUBSTANCES						
Perfluoro-1-butane sulfonic acid (PFBS)	11/30/2020	1.9	0.34	N/A	No	B470
Perfluoro-n-heptanoic acid (PFHpA)	11/30/2020	2.3	0.34	N/A	No	B470
Perfluorohexane sulfonic acid (PFHxS)	11/30/2020	11	0.34	N/A	No	B470
Perfluoro-n-hexanoic acid (PFHxA)	11/30/2020	4.1	0.34	N/A	No	B470
Perfluoro-n-nonanoic acid (PFNA)	11/30/2020	1.9	0.69	N/A	No	B470
Perfluorooctane sulfonic acid (PFOS)	11/30/2020	18	0.34	70	No	B470
Perfluoro-n-octanoic acid (PFOA)	11/30/2020	5.7	0.34	70	No	B470

OTHER POTENTIAL CONTAMINANTS

TRICHLOROETHYLENE

In the early 1990's, Trichloroethylene (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). In 2020, four consecutive quarterly samples were taken and all sample results showed no detection of TCE in treated water.

The TCE concentration both from the raw source water and the treated water is monitored quarterly to ensure that the TCE level is below the allowable limit.

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 two 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 http://www.epa.gov/safewater/lead.

LEAD IN PRIORITY AREAS

To reduce children's exposure to lead from facility drinking water, over 400 drinking water outlets were tested for lead in 2018 and 2019. These facilities include Shirley Lanham Elementary School, Child Development Center (CDC), Halsey and Ranger Gyms, Outdoor Pool, and Youth and Teen Center.

17 outlets tested higher than 15 parts per billion (ppb) screening level for lead. This is the Navy's designated level for action with additional testing and corrective measures. Of the 17 outlets that tested higher than 15 ppb, 10 are in areas of SLES that are no longer in use; these outlets were permanently secured with signs and access controlled by the school. The remaining 7 outlets were secured and re-sampled after completing all corrective measures.

After implementing corrective actions, the water outlets tested below the screening level.

The latest test results are available at the following link:
https://www.cnic.navy.mil/regions/cnrj/installations/naf_atsugi/om/Environmental.html

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 315-264-4095. Arrangements can be made to have your water sampled and analyzed to ensure that it is safe to drink.

HOW TO OBTAIN ADDITIONAL INFORMATION

Public queries and/or additional information regarding this report can be obtained by contacting the NAF Atsugi Public Affairs Office at 315-264-4452. Printed copies of this report can be obtained at the NAF Atsugi library, or at the Environmental Division Office.