

Naval Air Station Jacksonville 2023 Water Quality Report

The Naval Facilities Engineering Command Southeast (NAVFAC SE) Public Works Department (PWD), as the Naval Air Station Jacksonville water utility service provider, is releasing the 2023 Water Quality Report. PWD provides a safe and dependable supply of drinking water through three deep wells which draw from the Floridian Aquifer.

In 2023, the Department of Environmental Protection (DEP) performed a source water assessment that identified no potential sources of contamination near Station wells. Assessment results are on the DEP Source Water Assessment and Protection Program website at <https://prodapps.dep.state.fl.us/swapp/>. Treatment of the water supply includes aeration for odor control and chlorination for disinfection.

In 2003, Station started receiving potable water from JEA, but in 2023, less than 5 percent of the total water was received from them.

PWD Jacksonville routinely monitors for contaminants in your drinking water according to federal and state laws and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period Jan. 1 to Dec. 30, 2023. Data obtained before Jan. 1, 2023 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

The following are definitions of terms and abbreviations used in the report:

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is 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.

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

Maximum Residual Disinfection Level (MRDL) – 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.

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 of the use of disinfectants to control microbial contaminants

Non-Detects (ND) – indicates that the substance was not found by laboratory analysis.

Not Applicable (N/A) – No value limit or restriction has been applied to this particular parameter.

Parts per billion (ppb) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per million (ppm) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in

water.

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

NON-SECONDARY TEST RESULTS TABLE – NAS JACKSONVILLE							
Inorganic Contaminants							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	07/2023	N	0.032	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	07/2023	N	0.56	N/A	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Sodium (ppm)	07/2023	N	14	N/A	N/A	160	Salt water intrusion, leaching from soil
Stage 2 Disinfectants and Disinfection By-Products							
For chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.							
For haloacetic acids or TTHM, the level detected is the highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations.							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Total Trihalomethanes (TTHM) (ppb)	Quarterly 2023	N	56.84	32.11 – 65.74	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	Quarterly 2023	N	23.48	11.07 – 32.18	N/A	60	By-product of drinking water chlorination
Stage 1 Disinfectants and Disinfection By-Products							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine Residual (ppm)	Monthly 2023	N	0.98	0.8 – 1.15	4	4.0	Water additive used to control microbes
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90 th Percentile Result	No. of sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	06 – 09/23	N	0.14	0 of 54 sites	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Lead (tap water) (ppb)	06 – 09/23	N	1.9	1 of 54 sites	0	15	Corrosion of household plumbing systems; erosion of natural deposits
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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. To ensure tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. NAVFAC SE is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If there are concerns about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps to take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

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 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) currently used for fighting petroleum fires at airfields and in industrial fire suppression processes. 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 10, 2024, the EPA established MCLs for a subset of PFAS chemicals.

Chemical	Maximum Contaminant Level (MCL)
PFOA	4.0 ppt
PFOS	4.0 ppt
PFNA	10 ppt
PFHxS	10 ppt
HFPO-DA (GenX chemicals)	10 ppt
Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS	Hazard Index of 1

The EPA requires implementation of sampling in accordance with the new MCLs within three years of the publication date and implementation of any required treatment within five years. These limits did not apply for the 2023 calendar year because they had not been published. However, the DoD proactively promulgated policies to monitor drinking water for PFAS at all service owned and operated water systems at a minimum of every two 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 health advisory level of 70 ppt, water systems must take immediate action to reduce exposure to PFOS or PFAS. For levels less than 70 ppt but above the 4 ppt level (draft at the time of policy publication), DoD committed to planning for implementation of the levels once EPA’s published MCLs take effect.

Has NAS Jacksonville tested its water for PFAS in 2023?

Yes. In July 2023, samples were collected from the NAS Jacksonville Water Treatment Plant.

Below Method Reporting Limit (MRL)

These drinking water testing results were below the MRL for all 29 PFAS compounds covered by the sampling method, including PFOA and PFOS. This means that PFAS were not detected in your water system. In accordance with DoD policy, the water system will be resampled every two years for your continued protection.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those undergoing chemotherapy, have undergone organ transplants, those with HIV/AIDS and some elderly or infants can be at risk from infections. Please see advice about drinking water from healthcare providers. EPA and Center for Disease Control guidelines on

appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

All 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 the water poses a health risk.

For more information or questions concerning this report, NAS Jax housing residents should contact the housing office and base employees should contact PWD Jacksonville Utilities at (904) 542-6440.