2020 Naval Air Station Jacksonville 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 2020 Water Quality Report. PWD provides a safe and dependable supply of drinking water through three deep wells which draw from the Floridan Aquifer.

In 2020, 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 **www.dep.state.fl.us/swapp.** Treatment of the water supply includes aeration for odor control and chlorination for disinfection. In 2003, Station began receiving potable water from JEA, therefore, some of the data in this report is from JEA testing.

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, 2020. Data obtained before Jan. 1, 2020 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

Below are the 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

Radiological 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
Gross Alpha (pCi/l) (JEA*/NAS)	02/17	N	7.07	ND – 7.07	0	15	Erosion of natural deposits
Radium 226&228 (pCi/l) (JEA*/NAS)	02/17	N	1.296	ND – 1.296	0	5	Erosion of natural deposits

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) (JEA*/NAS)	03/20	N	0.028	0.018-0.028	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

Lead (ppb) (JEA* only)	03/20	N	0.2	ND – 0.2	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe; casing and solder
Fluoride (ppm) (JEA*/NAS)	03/20	N	0.49	0.392-0.49	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
Nitrate (as Nitrogen) (JEA*/NAS)	03/20	N	0.12	ND - 0.12	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb) (JEA* only)	03/20	N	0.6	ND – 0.6	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm) (JEA*/NAS)	03/20	N	11	8.32-11	N/A	160	Salt water intrusion, leaching from soil

*****JEA results are from the Southwest Regional plant which feeds the interconnect with NAS JAX

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 2020	N	71.15	20.59-52.51	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	Quarterly 2020	N	16.42	2.44-16.25	N/A	60	By-product of drinking water chlorination
Chlorine Residual (ppm)	01/20-12/20	N	0.95	0.8-1.12	4	4.0	Water additive used to control microbes

Lead and Copper (Tap Water) (NAS only)

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	06-08/20	N	0.0646	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)	06-08/20	N	1.1	0 of 54 sites	0	15	Corrosion of household plumbing systems; erosion of natural deposits

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.

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 seen 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.