2020 Annual Drinking Water Quality Report Naval Air Station Pensacola/Corry

We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

Where Does My Water Come From?

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.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Our water source is ground water from ten (10) active wells. The wells draw from the Sand and Gravel Aquifer. Because of the excellent quality of our water, the only treatments applied are chlorine for disinfection purposes, fluoride for dental health purposes, orthophosphate for corrosion control, and caustic soda for pH adjustment. Granular Activated Carbon (GAC) filters are installed on ten (10) wells to remove organic contaminants.

Naval Air Station Pensacola routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2020. Data obtained before January 1, 2020 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

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

Level 1 Assessment: A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Maximum Contaminant Level or 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.

Maximum Contaminant Level Goal or MCLG: 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 disinfectant level or 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 or 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.

"ND" means not detected and indicates that the substance was not found by laboratory analysis.

Parts per million (ppm) or Milligrams per liter (mg/l) – one part by weight of analyte to 1 million parts by weight of the water sample. One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (μ g/l) – one part by weight of analyte to 1 billion parts by weight of the water sample. One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

Picocurie per liter (pCi/L) - measure of the radioactivity in water.

2020 CONTAMINANTS TABLE

| Contaminant and Unit of Measurement | Dates of sampling | MCL Violation | Level Detected | Range of Results | MCLG | MCL | Likely Source of Contamination |
|---|---|------------------|-------------------|------------------|------|-----|--------------------------------|
| Alpha emitters (pCi/L) | Mar-Jul 2014, Apr-Oct 2017, Mar 2018, Mar-Apr 2020 | No | 6.3 | ND-6.3 | 0 | 15 | Erosion of natural deposits |
| Radium 226 + 228 or combined radium (pCi/L) | Apr 2017, Mar-Sep 2018, Jun 2019, Mar-Jun 2020 | No | 3.16 | ND-3.3 | 0 | 5 | Erosion of natural deposits |

| Inorganic Contaminants | | | | | | | | |
|---|-------------------|------------------|-------------------|---------------------|------|-----|---|--|
| Contaminant and Unit of Measurement | Dates of sampling | MCL Violation | Level Detected | Range of Results | MCLG | MCL | Likely Source of Contamination | |
| Barium (ppm) | Mar-Oct 2020 | No | 0.055 | 0.0084-0.054 | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits | |
| Chromium (ppb) | Mar-Oct 2020 | No | 0.9 | ND-0.9 | 100 | 100 | Discharge from steel and pulp mills; erosion of natural deposits | |
| Fluoride (ppm) | Mar-Oct 2020 | No | 0.49 | ND-0.49 | 4 | 4.0 | Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7ppm | |
| Lead (point of entry) (ppb) | Mar-Oct 2020 | No | 0.9 | ND-0.9 | 0 | 15 | Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder | |
| Nitrate (as Nitrogen) (ppm) | Mar-Oct 2020 | No | 4.3 | 1.1-4.3 | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits | |
| Sodium (ppm) | Mar-Oct 2020 | No | 17.3 | 4.9-17.3 | N/A | 160 | Salt water intrusion, leaching from soil | |

| Stage 2 Disinfectants and Disinfection By-Products | | | | | | | |
|---|-------------------|-----------------------------|-------------------|---------------------|------------------|----------------|---|
| Disinfectant or Contaminant and Unit of Measurement | Dates of sampling | MCL or MRDL Violation | Level Detected | Range of Results | MCLG or MRDLG | MCL or MRDL | Likely Source of Contamination |
| Chlorine (ppm)(Stage 1) | Jan-Dec 2020 | No | 0.83 | 0.73-0.91 | MRDLG = 4 | MRDL = 4.0 | Water additive used to control microbes |
| Haloacetic Acids (five) (HAA5) (ppb) | Aug 2020 | No | 4.9 | 4.1-4.9 | NA | MCL = 60 | By-product of drinking water disinfection |
| TTHM [Total trihalomethanes] (ppb) | Aug 2020 | No | 33.3 | 27.1-33.3 | NA | MCL = 80 | By-product of drinking water disinfection |

| Copper (Tap Water) | | | | | | | | |
|---|------------------|----------------|------------------------------|--|------|----------------------|--|--|
| Contaminant and Unit of Measurement | Dates of samplin | AL Exceeded | 90th Percentile Result | No. of sampling sites exceeding the AL | MCLG | AL (Action Level) | Likely Source of Contamination | |
| Copper (tap water) (ppm) | Jun -Sep 2020 | No | 0.11 | 1 of 30 | 1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives | |
| Lead (tap water) (ppb) | Jun-Sep 2020 | No | 0.9 | 0 of 30 | 0 | 15 | By-product of drinking water disinfection | |

| Unregulated Contaminants | | | | | | | | | |
|---|---|--------|----------|---------|--|--|--|--|--|
| Contaminant and Unit of Measurement | Unit of Dates of sampling (mo/yr) Level Detected (average) Range Likely Source of Contamination | | | | | | | | |
| Dieldrin (ppb) | Jan – Dec 2020 | 0.0005 | ND-0.016 | Unknown | | | | | |

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. During the past year, we were required to conduct a Level 1 assessment in August due to having more than 1 total coliform positives that month. A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system. The one Level 1 assessment was completed on September 3, 2020. We were required to take 2 corrective actions as a result of this assessment. We have reviewed and updated our sampling plan to prevent this from reoccurring.

We failed to submit Disinfection By-Products lab results on time to The Department and therefore were in violation of monitoring and reporting requirements. The monitoring period was July 1, 2020 through September 30, 2020. The report was due on 09/10/2020 and was submitted on 10/07/20. We reviewed our administrative procedures to ensure we comply with all future due dates.

The Copper results presented in this report were collected and analyzed in 2020 and there was no exceedance of Lead action level. The results reported showed the Naval Air Station/Corry water system to be in full compliance with the Lead and Copper Rule.

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. Naval Air Station Pensacola is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your 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 you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

In 2020, the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are eight (8) potential sources of contamination identified for this system with low to moderate susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from Joelle O'Daniel-Lopez (850) 452-2269.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact Joelle O'Daniel-Lopez (850) 452-2269. We encourage our valued customers to be informed about their water utility.