2018 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.

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, 2018. Data obtained before January 1, 2018, 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.

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.

2018 CONTAMINANTS TABLE

Radioactive Contaminants								
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)	May 2014 – Mar 2018	No	7.9	ND-7.9	0	15	Erosion of natural deposits	
Radium 226 + 228 or combined radium (pCi/L)	Apr 2017– Sep 2018	Yes	6.56	ND-10	0	5	Erosion of natural deposits	

The Naval Air Station Pensacola/Corry Water System had an MCL violation for Combined Radium 226 and 228 in January 2018 at Well 9. However, since that time, the running annual average taken for 226 and 228 at Well 9, has been below the MCL violation limits, so the levels served to the public are expected to be lower. This is evident in the fact that the samples taken at the Entry Point to distribution at the plant have not resulted in MCL violations. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. We will continue to sample as required by rule and work with the Department as needed.

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)	Jan-Dec 2017 & Mar 2018	No	0.059	0.0084- 0.059	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits		
Cyanide (ppb)	Jan-Dec 2017 & Mar 2018	No	2.6	ND-2.6	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories		
Fluoride (ppm)	Jan-Dec 2017 & Mar 2018	No	0.71	ND-0.71	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)	Jan-Dec 2017 & Mar 2018	No	4.5	ND-4.5	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder		
Nickel (ppb)	Jan-Dec 2017 & Mar 2018	No	4.5	ND-4.5	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.		
Nitrate (as Nitrogen) (ppm)	Jan-Jun 2018	No	3.8	0.31-3.8	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Sodium (ppm)	Jan-Dec 2017 & Mar 2018	No	15	4-15	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 2018	No	0.78	0.62-0.81	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes	
Haloacetic Acids (five) (HAA5) (ppb)	July 2018	No	3.56	3.55-3.56	NA	MCL = 60	By-product of drinking water disinfection	
TTHM [Total trihalomethanes] (ppb)	July 2018	No	13.33	12.94- 13.33	NA	MCL = 80	By-product of drinking water disinfection	

Copper (Tap Water)								
Contaminant and Unit of Measurement	Dates of sampling	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 2017	No	0.14	0 of 30	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	

Unregulated Contaminants								
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	Level Detected (average)	Range	Likely Source of Contamination				
Dieldrin (ppb)	Jan – Nov 2018	0.00007	ND-0.018	Unknown				

2018 CCR Unregulated Contaminants (UCMR4)

Unregulated Contaminants								
Contaminant (Unit of Measurement= ppb)	Dates of sampling (mo/yr)	Level Detected (average)	Range	Likely Source of Contamination				
HAA5	October/2018	3.89	3.1 – 4.67	Unavailable				
HAA6Br	October/2018	3.66	3.1 – 4.21	Unavailable				
HAA9	October/2018	5.59	4.5 – 6.68	Unavailable				
Bromide	September/2018	38.53	31.7 – 47.5	Unavailable				
Manganese	September/2018	3.3	N/A	Unavailable				

We monitored for unregulated contaminants (UCs) in 2018 as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) or likely sources have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. All detections are shown on the table, but if you would like a copy of all our 2018 UC data, contact this water system at the number provided in this report.

We will also be monitoring the first 6-month period of 2019 for UCs. They will be published as required in our 2019 Water Quality Report. However, if you would like a copy of the results sooner, please contact Joelle O'Daniel-Lopez (850) 452-3131 x 3027 to get a copy as soon as they are received by us. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

The Copper results presented in this report were collected and analyzed in 2017 and there was no presence of Lead detected. 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 2018, 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 high 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) 452-3131 x3027.

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) 452-3131 x3027. We encourage our valued customers to be informed about their water utility.