ANNUAL WATER OUALITY REPORT

Reporting Year 2024





Presented By MCAS Cherry Point

PWS ID#: NC0425035



Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Important Information About PFAS and Your Drinking Water

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of human-made chemicals that have been used in a variety of industrial and consumer products around the world for decades. Due to the widespread use and environmental persistence of these substances, most people have been exposed to PFAS. They have been used to make coatings and oil and water repellents in carpets,

clothing, paper packaging for food, and cookware. The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). These have been phased out of production and use in the United States, but other countries may still manufacture and use them.

During the 2024 reporting period, Department of Defense (DOD)-owned public water supply systems were required under DOD policy to monitor water treatment plant production water for PFAS and notify customers of the results. On August 28,



2024, MCAS Cherry Point sampled production water at the point where it is introduced into the distribution system and detected no PFAS compounds, therefore meeting the current standards for maximum concentration levels (MCLs). Detailed information regarding PFAS testing at MCAS Cherry Point can be obtained from the Environmental Affairs Department at (252) 466-4598.

Where Does My Water Come From?

The source of Marine Corps Air Station (MCAS) Cherry Point's drinking water is groundwater from the Castle Hayne Aquifer, which extends from southern Virginia to Wilmington, North Carolina. Water is



removed from depths of 195 to 329 feet below the surface by 28 wells and then pumped to the on-station water treatment plant. Three additional source water wells are presently under construction.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 drink-

> ing water from their health-care providers. U.S. Environmental Protection Agency (U.S. EPA)/ Centers for Disease Control and Prevention (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 at (800) 426-4791 or epa.gov/safewater.

Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use three to six gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

QUESTIONS?

For more information about this report, or for questions relating to your drinking water, please call Richard Weaver of the Environmental Affairs Department at (252) 466-4598.

Substances That Could Be in 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 occur naturally in the soil or groundwater or may 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 occur naturally or as the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that 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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800) 426-4791 or visiting epa.gov/safewater.

Source Water Assessment

The North Carolina Department of Environmental Quality (NCDEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP), conducted assessments for all drinking water sources across North Carolina. The assessment determines the susceptibility of each drinking water well to potential contaminant sources (PCSs). Results are available in SWAP assessment reports that include maps, back-

ground information, and a relative susceptibility rating of higher, moderate, or lower.

The SWAP report dated September 10, 2020, indicates a susceptibility rating of moderate for Wells 4, 11, 21, and 26 and



lower for all other wells. The relative susceptibility rating of each source was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area).

The complete SWAP assessment report for MCAS Cherry Point is updated periodically and may differ from the results that were available at the time this Consumer Confidence Report (CCR) was prepared. To receive a copy of the report, contact the Environmental Affairs Department at (252) 466-4598. If you have any questions about the SWAP report, please contact the source water assessment staff at (919) 707-9098.

It is important to understand that a higher susceptibility rating does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

What's a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at Cany point where a drinking water line connects to equipment (boilers), systems containing chemicals (air-conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage). Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection.

Test Results

Sodium (ppm)

The water provided by MCAS Cherry Point is monitored for many different kinds of substances on a sampling schedule determined by the state. The following tables present the monitoring results for those substances that were detected in our water. Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all substances below their respective maximum allowed levels. During 2024 your drinking water met all federal and state requirements.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

REGULATED SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Chlorine (ppm)	2024	[4]	[4]	1.85	0.6–1.85	No	Water additive used to control microbes	
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	23	20–23	No	By-product of drinking water disinfection	
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	27	27–27	No	By-product of drinking water disinfection	
Tap water samples were collected for lead and copper analyses from sample sites throughout the community 1								

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE	
Copper (ppm)	2024	1.3	1.3	0.073	ND-0.115	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead (ppb)	2024	15	0	ND	NA	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits.	
SECONDARY SUBSTANCES									

NA

	SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	:	
	Iron (ppb)	2023	300	NA	60	ND-60	No	Leaching from natural deposits; Industrial wastes		
	UNREGULATED SU	¹ This table summarizes our most rea								
SUBSTANCE YEA (UNIT OF MEASURE) SAMF		YEAR		AMOUNT DETECTED	RANGE LOW-HIG	E GH TYPICAL SOURCE		sampling data. If you would like to tap sampling data, please contact t		

ND-7.63

How Does Cherry Point Treat and Purify Its Water?

11/16/2023

In February 2021, drinking water processing transitioned from an ozone treatment plant to a nanomembrane treatment plant. Groundwater is first pumped through strainers to remove sand and silt particles. The flow then goes to the membrane treatment trains, which are monitored by certified operators. The water is disinfected and filtered to remove iron, manganese, and naturally occurring organic materials. Booster pumps then send the water through air strippers that remove carbon dioxide and adjust pH balance. Final pH and hardness adjustments are made, along with disinfection, before the water is pumped to storage tanks. Finished water is distributed through 140 miles of piping to consumers.

7.63

This table summarizes our most recent lead and copper tap sampling data. If you would like to review the complete lead tap sampling data, please contact the Environmental Affairs Department at (252) 466-4598.

²Unregulated contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.



Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

MCL (Maximum Contaminant Level):

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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual

Disinfectant Level): 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.

MRDLG (Maximum Residual

Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum

Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

BY THE NUMBERS

3.4 BILLION

The daily volume in gallons of water recycled and reused in the U.S., reducing waste and conserving resources.

28%

The percent reduction in per capita water use in the U.S. since 1980, thanks to efficiency improvements.

99.99%

The percent effectiveness of modern water treatment plants in removing harmful bacteria and viruses from drinking water.

1.2 million

The length in miles of drinking water pipes in the U.S. delivering clean water to millions of homes and businesses daily.

1.7 million

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0

The number of jobs supported by the U.S. water sector.

Lead in Home Plumbing

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. MCAS Cherry Point is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead and wish to have it tested, contact MCAS Cherry Point at (252) 466-4598. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. Information on the lead service inventory may be attained through the Environmental Affairs Department. Please contact us at (252) 466-4598 if you would like more information about the inventory or any lead sampling that has been done.

Why save water?

Although 80% of the Earth's surface is water, only 1% is suitable for drinking. The rest is either salt water or is permanently frozen, and we can't drink it, wash with it, or use it to water plants.