2023 Annual Drinking Water Quality Report PFEIFFER-NORTH STANLY WATER ASSOCIATION, INC.

Water System Number: 01-84-025

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) 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 to providing you with this information because informed customers are our best allies. If you have any questions about this report or concerning your water, please contact Pfeiffer-N. Stanly Water Association, Inc. at 704-463-7117. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held annually on the third Saturday of September at 10:00 a.m. Members will receive notice of this meeting on their water bill that will state the location of the meeting. Our Board of Directors also meets quarterly.

What EPA Wants You to Know

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 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 (800-426-4791).

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. Pfeiffer-N. Stanly Water Association, Inc. 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.

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 storm water 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 storm water 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 storm water runoff, and septic systems; and 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

When You Turn on Your Tap, Consider the Source

Pfeiffer-N. Stanly Water Association, Inc. obtains its drinking water from the City of Albemarle. The City of Albemarle obtains its drinking water from two surface water sources. The first source is the Narrows Reservoir located at the end of Pumphouse Rd. The second source is the Tuckertown Reservoir located at the bridge on NC Hwy 49 near the Stanly County line. The water from the Narrows Reservoir is treated to produce drinking water at the Water Treatment Plant located on Hwy 52 N. The water from the Tuckertown Reservoir is treated to produce drinking water at the Jack F. Neel Water Treatment Plant. The drinking water from both of these sites is blended together in the water distribution system.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower. The relative susceptibility rating of each source for **the City of Albemarle** 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 assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Narrows Reservoir/Badin Lake	Moderate	September 2020
Tuckertown Reservoir	Higher	September 2020

The complete SWAP Assessment report for the City of Albemarle may be viewed on the Web at: https://www.ncwater.org/pws/swap. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@ncdenr.gov. Please indicate your system name, number, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

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

Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2020. The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Important Drinking Water Definitions:

Parts per million (ppm) or Milligrams per liter (mg/L)

Parts per billion (ppb) or Micrograms per liter (ug/L)

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

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

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 (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 (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.

Tables of Detected Contaminants

REVISED TOTAL COLIFORM RULE:

Microbiological Contaminants in the Distribution System - For systems that collect less than 40 samples per month

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	No	Absent	0	0	Naturally present in the environment
E. coli (presence or absence)	No	Absent	0	0	Human and animal fecal waste

CCR Health Effects Language for the RTCR: Level 1 or 2 Assessment Not Due to E. coli MCL Violation

CCR Language	Citation	
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.	40 CFR 141.153(h)(7)(i)(A)	
During the past year we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. In addition, we were required to take one corrective action and we completed one of these actions.	40 CFR 141.153(h)(7)(i)(B)	

The following tables list contaminants detected at the water plant or in the PNSWA distribution system. Note they are all well below the MCL. The City of Albemarle also tests for over 70 other contaminants at the plant most of which were below the non-detectable level.

PNSWA TEST RESULTS FROM 2023 (Unless noted otherwise)						
Regulated Substances	Unit	Value	Range	MCL	MCLG	Likely Source
Asbestos (FEB. 2021)	MFL	ND	N/A	7	7	Decay of Asbestos Cement Pipe
Total Trihalomethanes	Ppb	1.1	.1-6	80		By-Product of Chlorination
Total Haloacetic Acids	Ppb	1.1	.2-5	60		By-Product of Chlorination
Chlorine	Ppm	1.32	.17-2.2	4	4	Additive to Control Microbes
Regulated Substances (unit) (from consumer top)		Sites Exceeding Action Level		Action Level	MCLG	Major Source
Copper (August 2023)	.167	0 Out Of 20		1.3	1.3	Corrosion of Plumbing & Service Line
Lead (August 2023)	ND	0 Out Of 20		15	0	Corrosion of Plumbing & Service Line

CITY OF ALBEMARLE TEST RESULTS FROM 2023 (Unless noted otherwise)						
Regulated Substances	Unit	Value	Range	MCL	MCLC	Likely Source
Fluoride	Ppm	.65	.6570	4	4	Additive for dental health
Mercury	Ppb	.001	ND to 1PPb	2	2	**Erosion of natural deposits and from Industrial activity
Total Organic Carbon	Ppm	1.45	1.28-1.61	TT		Natural Organics
Unregulated Substance		a Projektor (1991) je				Major Source
Sulfate	ppb	19.3	19.3-25.9	250		Natural occurring Mineral & Additive
Sodium	ppb	12.78	12.78-16.75	N/A		Natural occurring Mineral & Additive

For information concerning unregulated contaminants, you may call the EPA Hot Line at 1-800-426-4791

Fluoride, Mercury, Sulfate and Sodium samples were taken at the water treatment plant. All other samples shown were from the distribution system.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. This may require us to do more periodic flushing and interruption of service, which may cause momentary cloudiness or decrease of pressure in your water. Please be patient during these times but call our office if this situation persists.

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