

2016 Annual Drinking Water Quality Report
Pinebluff Water System
PWS ID# 03-63-030

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 from where your water comes, 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.

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 microbiological 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. The Town of Pinebluff 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 your 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

The water that is used by this system is well water and is located in the Town Pinebluff.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environment and Natural Resources (DENR), 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 Pinebluff Water System 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
Well #1	Moderate
Well #2	Moderate
Well #3	Moderate
Well #4	Moderate
Well #5	Moderate

The complete SWAP Assessment report for the Pinebluff Water System may be viewed on the Web at: <http://www.deh.enr.state.nc.us/pws/swap> To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh NC 27699-1634, or email request to swap@ncmail.net. Please indicate your system name, PWSID, 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 919-715-2633.

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the systems’ potential to become contaminated by PCS’s in the assessment area

Violations that Your Water System Received for the Report Year

The Town of Pinebluff has exceeded the MCL for combined Radium in one the entry points, The entry point is 040 and is well # 5, and is now being sampled quarterly until it is back in compliance. The Violation was for exceeding the annual mcl which is 5.5 pCi/l, Well #5 combined annual average was 5.74 pCi/l.

What If I Have Any Questions Or Would Like to Become More Involved?

If you have any questions about this report or concerning your water, please contact **Steve Minks at (910) 281-3124**. 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 at the Pinebluff Town Hall every 3rd Thursday at 7:30 PM.

Water Quality Data Table of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the 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, 2016** The EPA or the State requires 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.

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

Important Drinking Water Definitions:

Not-Applicable (N/A) – Information not applicable/not required for that particular water system or for that particular Rule.

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

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 treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfection Level Goal – The “Level” (MRDLG) 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.

Maximum Residual Disinfection Level – The “Highest Level” (MRDL) of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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.

Extra Note: MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	2015	0.73	None	0	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90 th percentile)	2015	ND	None	0	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Beta/photon emitters (pCi/l)	2008	No	N/a	0	50	Decay of natural and man-made deposits
Gross Alpha	2011	No	7.8	15	15	Decay of natural and man made deposits
Combined radium Well # 5	2015	No	5.74	5.5	5	

* running annual average.

Disinfection By-Product Contaminants

Chlorine (ppm)	No	.44	.3 –1.5	MRDLG = 4	MRDL = 4	Water additive used to control microbes
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Total Trihalomethanes Ellory Home Styles B02	No	0.0130	0	.080	By Product of chlorination
Total Trihalomethanes 271 Spring Meadows B01	No	0.0015	0	.080	By Product of chlorination
Total haloacetic Acids Ellory Home Styles B02	No	0.0034	0	.060	By Product of Chlorination
Total haloacetic Acids 271 Spring Meadows B01	No	0.0011	0	.060	By Product of Chlorination

Pesticides and synthetic organic chemicals (SOC) (note only in one quarter)

location	Contaminant	Method Code	Required reporting limit	Not Detected	Quantified results	Allowable limit
Well # 1	Di(2=ethylhexyl)phthalate	525.2	0.00132 mg/l		0.002500	0.0060
Well #2	Di(2=ethylhexyl)phthalate	525.2	0.00132 mg/l		0.015000	0.0060
Well #3	Di(2=ethylhexyl)phthalate	525.2	0.00132 mg/l		0.002000	0.0060
Well #4	Di(2=ethylhexyl)phthalate	525.2	0.00132 mg/l		0.002700	0.0060

Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Iron (ppm)	2014	.06	N/A	0.3
Manganese (ppm)	2014	0.010	N/A	0.05
Sodium (ppm)	2014	9.31	8.69-13.1	N/A
pH	2014	6.81	6.51-7.10	6.5 to 8.5

Nitrates 2015

Contaminant (units)mg/L	Sample Date	Your Water	Action level	
Nitrate	2016	2.3 mg/L	10 mg/L	Well #1
Nitrate	2016	3.6 mg/L	10 mg/L	Well #2
Nitrate	2016	2.5 mg/L	10 mg/L	Well #3
Nitrate	2016	2.6 mg/L	10 mg/L	Well #4
Nitrate	2016	2.4 mg/L	10 mg/L	Well #5

In addition to the compounds listed above, the water is tested daily for the following constituents which are indicators for appearance, taste, and odor.

Compound	Annual Average
Alkalinity, mg/l	10.0
Color, mg/l	5.9
Carbon Dioxide, mg/l	5.4
Hardness, mg/l	15.1
Iron, mg/l	0.030
Manganese, mg/l	0.021
Chloride, mg/l	10.4
Orthophosphate, mg/l	0.65
pH, SC	7.8 – 6.2


COMPLIANCE CORNER

All required monitoring completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Any violations of contaminant levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Southern Pines Water Treatment Plant is required to collect fifteen samples and test for Total Coliform on a monthly basis. The State requires the sample results to be uploaded to their system by the 10th of every month. During the month of May, 2016, all of the required fifteen samples were collected and analyzed. Two of the required fifteen sample results failed to upload to the State's information system which resulted in the Town receiving a Notice of Violation.

What Does All This Mean?

The water distributed by the Town of Southern Pines is perfectly safe for human consumption.

<p>If you have any questions concerning this information, please call Mr. David McKew, Southern Pines Water Treatment Plant Manager, at (910) 281-4719.</p> 
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Special Warning

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