Cleveland County water

2012 Annual Water Quality Report

What the 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 with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune 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 lesson the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791). The sources of drinking 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 discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come form 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.

The Source Water for the Cleveland County Water is the First Broad River. The Source Water Intake in located just above Lawndale on Caser-Lawndale Road**.**

Source Water Assessment Program (SWAP) Results: The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply Section, Source Water Assessment Program conducted assessments for all drinking water source across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking source to Potential Contaminants Sources. 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 Cleveland County Water was determined by combining the contaminant rating and the inherent vulnerability rating. The assessment findings are summarized in the table below:

SOURCE NAME	**SUSCEPTIBILITY RATING**
FIRST BROAD RIVER	**MODERATE**

The complete SWAP Assessment report for Cleveland County Water may be viewed at http://www.deh.enr.state.nc.us/pws/swap. To obtain a printed copy of the this report, please mail a written request to 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 that systems' potential to become contaminated by PCS's in the assessment area.

If you have any questions or want additional information about any part of this report call the Water Production Manager, Lanny Ollis at 704-538-9033.

Water Quality Data Table of Detected Contaminants:

Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31 2012.

Total Coliform Bacteria (present or absence)	N	0	0	5% of monthly samples are positive	Naturally present in the environment
Fecal Coliform or E. coli (present or absence)	N	0	0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	Human and animal fecal waste

Turbidity

Contaminants	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	N	0.27 ntu	N/A	TT= 1 NTU	Soil runoff
Turbidity (NTU)	N	96%		TT= percentage of samples < 0.3 NTU	Soil runoff

Inorganic Contaminants

Contaminants	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Fluoride	N	0.95 mg/L	2	2	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits
Unregulated Inorganic Contaminants	Sample Date	Your Water	Range High low	Secondary MCL	

Nitrate/Nitrite

Contaminants	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Nitrate(as Nitrogen) mg/L	N	0.16mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage: erosion of natural deposits

We monitor 32 Synthetic Organic Chemical including Pesticides and Herbicides; 13 Unregulated Synthetic Organic Chemicals the tests did not show any of this contaminate. The Cleveland County Water received a waiver For Asbestos until the year 2016 because we do not have any asbestos pipe in our distribution system.

Lead and Copper Contaminants

Contaminants	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Lead (ppb) (90th Percentile	N	4 ppb	0	15 ppb	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm) (90th Percentile)	N	0.239 mg/L	1.3	1.3 mg/L	Corrosion of household plumbing systems; erosion of natural deposits

Radiological Contaminants

Contaminants	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Radium 228 (pCi/L)	N	1.28	0	2	Erosion of natural deposits

Disinfection By-Product Precursors Contaminants

Contaminants	MCL Violation Y/N	Your Water	Range Low	Range High	MCLG	MCL	Likely source of Contamination
Total Organic Carbon (mg/L) Raw Water	N	mg/L	<1.0 mg/L	4.5	N/A	TT	Naturally present in the environment
Total Organic Carbon (mg/L) Treated Water	N	2.1 mg/L	1.0 mg/L	1.4	N/A	TT	Naturally present in the environment

Depending on the TOC in our source water the system must have a certain % removal of TOC or must achieve alternative compliance criteria. If we do not achieve that % removal there is an "alternative % removal". If we fail to meet that, we are in violation of a Treatment Technique. Our system used Step 1 and ACC 1 as a method to comply with D/Dbp treatment technique requirements.

Disinfection By-Product Contaminants

Contaminants	MCL Violation Y/N	Your Water (AVG)	Range Low	Range High	MCLG	MCL	Likely source of Contamination
Total Trihalomethanes mg/L	N	0.0388 mg/L	0.0177 mg/L	0.063 mg/L	N/A	0.08 mg/L	By-Product of drinking water disinfection
Total Haloacetic Acids mg/L	N	0.0344 mg/L	0.0107 mg/L	0.0377 mg/L	N/A	0.064 mg/L	By-Product of drinking water disinfection
Chlorine mg/L	N	1.01 mg/L	0.74 mg/L	1.01 mg/L	N/A	4 mg/L	Water additives used to control microbes

Water Characteristics Contaminants

Contaminants	Sample Date	Your Water	MCLG	MCL
Sodium	12/19/2012	14.3 mg/L	N/A	N/A
sulfate	12/19/2012	23.7	N/A	N/A
pH	12/19/2012	7.4	N/A	N/A

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.

Milligrams per liter (mg/L)- one milligram per liter corresponds to one penny in $1,000,000.
Parts per billion (ppb)- one part per billion corresponds to one penny in $10,000,000.
Picocuries per liter (pCi/L)-picocuries per liter is a measure of the radioactivity of water.
Nephelometric Turbidity Unit (NTU)- the measurement of the clarity of the water.
Treatment Technique (TT)- is a required process intended to reduce the level of a contaminant in the drinking water.
Maximum Residual Disinfection Level (MCLG)- the highest level of a disinfectant allowed in drinking water.
Maximum Residual Disinfection Level Goal (MRDLG)- the level of a drinking water disinfectant below which there is no known or expected risk to health.

Water Conversation Tips

For cold drinks keep a pitcher of water in the refrigerator instead of running the tap. This way, every drop goes down you and not the drain.

Put food coloring in your toilet tank. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it can save up to 1,000 gallons a month.

Collect water from your roof to water your garden.

Install a rain sensor on your irrigation controller so your system won't run when it's raining.

Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.

Know where your master water shut-off valve is located. This could save water and prevent damage to your home.

Use a commercial car wash that recycles water.

Use a rain gauge, or empty tuna can, to track rainfall on your lawn. Then reduce your watering accordingly.

Learn how to shut off your automatic watering system in case it malfunctions or you get an unexpected rain.

If your toilet flapper doesn't close after flushing, replace it.

Install an instant water heater near your kitchen sink so you don't have to run the water while it heats up. This also reduces energy costs.

Report broken pipes, open hydrants and errant sprinklers to the property owner or your water provider.

Turn off the water while you wash your hair or brushing your teeth to save up to 150 gallons a month.