

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 before we treat it 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 and residential uses.

Radioactive contaminants, which are naturally occurring.

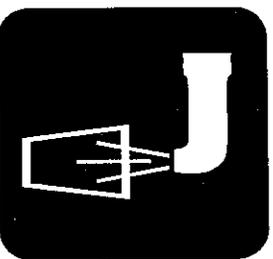
Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Special 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 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).



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 EPA's Safe Drinking Water Hotline (800-426-4791).



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. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Albemarle 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 use 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://epa.gov/safewater/lead>.

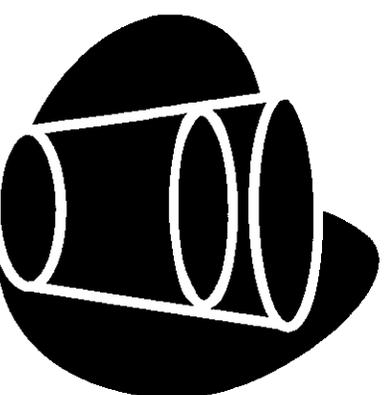
The Albemarle City Council meets on the first and third Mondays of each month at City Hall at 6:00 pm. Please feel free to participate in these meetings. For more information about Drinking Water Quality call 704-984-9630 and ask for Holly Overcash.

City of Albemarle
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2012 Drinking Water Quality Report

This report is a snapshot of the quality of the drinking water that the City of Albemarle provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and North Carolina standards. The City of Albemarle is committed to providing you with information because informed customers are our best allies.



2012 DRINKING WATER QUALITY REPORT

Thousands of tests were conducted on the City of Albemarle drinking water in 2012. The tables below list drinking water substances that were detected. Unless otherwise noted the data included in this report was collected between January 1 and December 31, 2012.

Regulated Substances (Unit)	Value	Range	MCL	MCLG	Major Sources
Fluoride (ppm)	.73	.01-1.2	4	4	Water additive promoting dental health
Dalapon (ppb)	ND	ND	200	200	Runoff from herbicide used on rights of way
Atrazine (ppb)	ND	ND	3	3	Runoff from herbicide used on row crops
Simazine (ppb)	ND	ND	4	4	Herbicide runoff
Turbidity (NTU) (% samples ≤ 0.3 NTU)	.067 100%	.03-2	TT	—	Soil runoff
Total Organic Carbon (ppm)	1.6	1.2-2.0	TT	—	Naturally present in the environment
Total Trihalomethanes (ppb)	55.75	29-84	80	—	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	37.33	24-49.16	60	—	By-product of drinking water chlorination
Chlorine (ppm)	1.85	.95-2.4	MRDL = 4	MRDLG = 4	Water additive used to control microbes
Total Asbestos (MFL) (2004)*	0.87	—	7	7	Decay of asbestos cement water mains
Gross Alpha (pCi/L) (2010)*	0.41	0.37 — 0.45	15	0	Erosion of natural deposits
Gross Beta (pCi/L) (2010)*	ND	ND	50	0	Decay of natural and man made deposits
Regulated Substances (Unit) (from Consumer Taps)	90th Percentile Value	# Sites exceed the Action Level	AL	MCLG	Major Sources
Copper (ppm) (2011)*	.111	0 out of 62	1.3	1.3	Corrosion of household plumbing systems.
Lead (ppb) (2011)*	<.0003	1 out of 62	15	0	Corrosion of household plumbing systems.
Unregulated Substances (Unit)	Value	Range	Major Sources		
Chloroform (ppb)	72	62-8	By-product of drinking water chlorination		
Bromodichloromethane (ppb)	11	9-12	By-product of drinking water chlorination		
Chlorodibromomethane (ppb)	0.1	1-2	By-product of drinking water chlorination		
Sulfate (ppm)	19.2	18.8-19.6	Naturally occurring mineral and Water additive		
Sodium (ppm)	18.2	17.63-18.76	Naturally occurring mineral and Water additive		

DEFINITIONS:
 ppm = parts per million or milligrams per liter. ppb = parts per billion or micrograms per liter. * **Last monitored in ** - Maximum Value**
 pCi/L = picocuries per liter (a measure of radiation). NTU = Nephelometric Turbidity Units. MFL = Million Fibers per Liter > 10 um
 Action Level (AL) = The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.
 90th Percentile Value = 90% of the samples taken for this substance are less than or equal to this value.
 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.
 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.
 Treatment Technique (TT) = A required process intended to reduce the level of a contaminant 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.
 MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
 Maximum Residual Disinfection Level (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. ND=Not Detected Above Required Reporting Limit

Drinking Water Sources



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 Road. The second source is the Tuckertown Reservoir located at the bridge on NC 49 near the Stanly County boundary. The water from the Narrows Reservoir is treated to produce drinking water at the Water Treatment Plant located on Hwy. 52 North. The water from the Tuckertown Reservoir is treated at the Tuckertown Water Treatment Plant. The drinking water from both of these Water Treatment Plants is blended together in the water distribution system. A few users in the northern section of Albemarle get their water solely from the Water Plant on Hwy. 52.

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 (PCSSs). 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 PCSSs 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 (PCSSs)

Source Name	Susceptibility Rating
Narrows Reservoir	Moderate
Tuckertown Reservoir	Moderate

The complete SWAP Assessment report for the City of Albemarle 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 (City of Albemarle), PWSID (01-84-010), 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 PCSSs in the assessment area.