

2010 Annual Drinking Water Quality Report "TOWN OF OAKBORO"

PWS ID# "01-84-020"

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).

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

Our drinking water source is a mixture of purchased surface water and ground water. The Town of Oakboro purchases water from the City of Albemarle and Stanly County who also purchases from Albemarle. Albemarle treats surface water from the Narrows Reservoir and the Tuckertown Reservoir. The water from the two treatment plants are blended in the distribution system. The Town of Oakboro operates one well as a secondary water supply. We have a source water protection plan available from our office that provides more information regarding the protection of our water supplies, such as potential sources of contamination, and locations of water sources.

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 (PCS's). 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 Town of Oakboro was determined by combining the contaminant rating (number and location of PCS's 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:

<u>Susceptibility of Sources to Potential Contaminant Sources (PCSs)</u>	
Source Name	Susceptibility Rating
Narrows Reservoir	Moderate
Tuckertown Reservoir	Moderate
Well #3	Lower

The complete SWAP Assessment report for 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, 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.

The completed susceptibility assessment for the City of Albemarle, is available from the City of Albemarle at 704-984-9630. 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 Oakboro received a Notice Of Violation for the year 1-1-10 to 12-31-10 for failure to monitor for nitrate. Nitrate is tested for only annually. Failure to sample was an oversight.

Nitrate is a chemical found in fertilizers. Water sources can become contaminated with nitrate from agricultural sources. Nitrate can be toxic to infants and small children.

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 Town of Oakboro at 704-485-3351. 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 on the first Monday of every month at the town hall at 7:00 p.m.

Water Quality Data Table of Detected Contaminants

We routinely monitor for over 120 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, 2010.** 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.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

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.

Microbiological Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	ND	0	one monthly positive	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N	ND	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

Inorganics Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Antimony (ppb)						6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	01/29/02	N	7	7	7	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	01/29/02	N	ND			2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	01/29/02	N	ND			4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	01/29/02	N	ND			5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	01/29/02	N	ND			100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	01/29/02	N	ND			200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	01/29/02	N	0.11			4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (inorganic) (ppb)	01/29/02	N	ND			2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Selenium (ppb)	01/29/02	N	ND			50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium (ppb)	01/29/02	N	ND			0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

Nitrate/Nitrite Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
			Low	High			
Nitrate (as Nitrogen) (ppm)	N	ND		N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Unregulated Inorganics Contaminant

Contaminant (units)	Sample Date	Your Water	Range		Proposed MCL
			Low	High	
Sulfate (ppm)	01/29/02	18.0	18	18	500

Volatile Organic Chemical Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
cis-1,2-Dichloroethylene (ppb)	2003	N	0.37	ND	0.6	70	70	Discharge from industrial chemical factories
Trichloroethylene (ppb)	2003	N	2.0	2.0	2.0	0	5	Discharge from metal degreasing sites and other factories

Unregulated VOC Contaminants

Contaminant (units)	Sample Date	Your Water	Range	
			Low	High
Chloroform (ppb)	2003	70.4	ND	150.0
Bromodichloromethane (ppb)	2003	1.1	1.1	1.1
Bromoform (ppb)	2003	0.6	ND	12.0
Chlorodibromomethane (ppb)	2003	1.1	ND	3.3
Bromomethane (ppb)	2003	0.1	ND	1.0
Chloromethane (ppb)	2003	5.9	ND	19.0

Asbestos Contaminant

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Total Asbestos (MFL)	2004	N	0.2	ND	7.0	7	7	Decay of asbestos cement water mains; erosion of natural deposits

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)	2007	0.040	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90 th percentile)	2007	0.002	0	0	AL=15	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)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/l)	N	ND	0	15	Erosion of natural deposits
Beta/photon emitters (pCi/l)	N	ND	0	50	Decay of natural and man-made deposits
Combined radium (pCi/l)	N	ND	0	5	Erosion of natural deposits
Uranium (pCi/l)	N	ND	0	20.1	Erosion of natural deposits

Disinfection By-Product Contaminants

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	Y	0.035	ND 0.074	N/A	80 or 100	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	Y	0.024	ND 0.063	N/A	60	By-product of drinking water disinfection

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Consumer Confidence Report Certification Form

Water System Name: Town of Oakboro

PWS ID#: 01 - 84 - 020 Report Year: 2010 Population Served: 2662

The community water system named above hereby confirms that all provisions under 40 CFR parts 141 and 142 requiring the development of, distribution of, and notification of a consumer confidence report have been executed. Further, the CWS certifies the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the primacy agency by their NC certified laboratory.

Certified by: Name: David Nichols Title: ORC

Signature: David Austin Nichols

Phone #: 704-485-3351 Date: 5-17-2011

Check methods used and complete:

Systems serving 100,000 or more persons must post the CCR on a publicly-accessible Internet site which is www.

Systems serving 10,000 or more persons must distribute the CCR by mail or direct delivery.
Date Delivered: _____ and specify direct delivery methods: _____

Systems serving less than 10,000 persons but more than 500 persons must either distribute the CCR by mail or direct delivery. Date Delivered: 6-29-11 and specify direct delivery method: direct mail

OR (mailing waiver option of the CCR itself) (Voided if using CCR for Tier III Public Notification!)

notify by "direct means" that the CCR is not being mailed, but it will be published in what newspaper(s) and when (attach copy of notice)
Date Delivered: _____ and specify "direct means" of delivery of the notice: _____

and the complete CCR was printed in the local newspaper(s)
 and a copy of the CCR was made available upon request

Systems serving 500 or fewer persons must either distribute the CCR by mail or direct delivery.
Date Delivered: _____ and specify direct delivery methods: _____

OR (mailing waiver option of the CCR itself) (Voided if using CCR for Tier III Public Notification!)

notify by "direct means" that the CCR is not being mailed, but how a copy may be obtained (attach copy of notice)
Date Delivered: _____ and specify "direct means" of delivery of the notice: _____

and a copy of the CCR was made available upon request

"Good faith" efforts (in addition to the above required methods) were used to reach non-bill paying consumers such as industry employees, apartment tenants, etc. Those extra efforts included the following methods:

posting the CCR on the Internet at www.TownofOakboro.com

mailing the CCR to postal patrons within the service area

advertising the availability of the CCR in news media (attach copy of announcement)

publication of the CCR in local newspaper (attach copy)

posting the CCR in public places such as: (attach list if needed) town hall

delivery of multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers

delivery to community organizations such as: (attach list if needed) _____

Note: For the mailing waiver option, the Direct Means allowed are a letter, a bill stuffer, a door hanger, or a postcard dedicated to the CCR.