

2010 Annual Drinking Water Quality Report
Town of Farmville
PWS ID# 04-74-020

We are pleased to present 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. **If you have any questions about this report or concerning you water, please contact Carroll Griffin at 252-753-6707. We want our valued customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Tuesday of each month at 7:30 p.m. in the Courtroom on the second floor of the Municipal Building.**

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 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. [Name of Utility] 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 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 of public health.

When You Turn on Your Tap, Consider the Source

The water that is used by this system is groundwater from 10 wells which draws water from the Upper Cape Fear Aquifer. Each of these wells are within a locked fence and the well houses within the fence are locked. The Pitt County Sheriff's Office, the Farmville Police Department and the Town of Farmville Utility Crews regularly patrol these sites.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply Section (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 assessments 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 Farmville 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:

Susceptibility of Sources to Potential Contaminant Sources (PCS's)

Source Name	Susceptibility Rating
Lewis Store Well	Lower
Hwy 258 North Well	Lower
Langs Crossroads Well	Lower
Ghost Hollow Well	Lower
Middle Swamp Well	Lower
Dale Well	Lower
Stantonsburg Well	Lower
Lincoln Park Well	Moderate
Marlboro Well	Moderate
Chinquapin Well	Lower

The complete SWAP Assessment for the Town of Farmville may be viewed on the Web at: <http://www.deh.enr.state.nc.us/pws/swap>. Please 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, N.C. 27699-1634, or email requests 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

During 2010, or during any compliance period that ended in 2010, there were no violations for the Town of Farmville Water System

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 of 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, 2010 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 the 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:

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a waster 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 (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.

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water which below there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCLs 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 effect.

Microbiological Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	0	One positive monthly sample	Naturally Present in the Environment

Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	6/7/10	N	0.19 – 0.25 Highest Test Result 0.25	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Unregulated VOC Contaminants

Contaminant (units)	Sample Date	Your Water	Range	
			Low	High
All VOC's	6/16/10	Not Detected	0.000	0.000

Disinfectants and Disinfection Byproducts Contaminants

Contaminant (units)	MCL/MR DL Violation Y/N	Your Water (AVG)	Range		MCLG	MCL	Likely Source of Contamination
			Low	High			
TTHM (mg/l) (Total Trihalomethanes)	N	0.0054	.002	.007	N/A	.080 mg/l	By-product of drinking water chlorination
HAA5 (mg/l) (Total Haloacetic Acids)	N	0.0045	.0041	.0051	N/A	.060 mg/l	By-product of drinking water chlorination

Lead and Copper Contaminants (Distribution System)

Contaminant (units)	Sample Date	Your Water	# sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	7/14/09	0.403	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	7/14/09	0.014	0	0	AL=15	Corrosion of household plumbing systems, Erosion of natural deposits

Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Gross Alpha (pCi/L)	7/15/09	N	E17 3.16	0	15	Erosion of natural deposits
Uranium (pCi/L)	7/15/09	N	Not Detected	0	20.1	Erosion of natural deposits

Testing Completed at Sample Points (E11, E06, E08, E09, E13, E12, E14, E15, E16 and E17)

Nitrate/Nitrite Contaminants

Contaminant (units)	MCL/M RDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	N	Not Detected	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	N	Not Tested	N/A	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Tested on 5/18/10 at Test Sites (E06, E09, E11, E12, E13, E14, E15, E16 and E17)

Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Iron (ppm)	06/07/2010	0.11	0.06-0.22	0.3
Manganese (ppm)	06/07/2010	0.02	0.01-0.02	0.05
Nickel (ppm)			N/A	N/A
Sodium (ppm)	06/07/2010	69.56	62-84	N/A
pH	06/07/2010	7.1	6.9-7.5	6.5 to 8.5

Synthetic Organic Chemical (SOC) Contaminants Including Pesticides and Herbicides)

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Endrin (ppb)	See Below	N	Not Detected	N/A		2	2	Residue of Banned pesticide
Lindane (ppt)	See Below	N	Not Detected	N/A		200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	See Below	N	Not Detected	N/A		40	40	Runoff/leaching from insecticides used on fruits, vegetables, alfalfa, livestock
Toxaphene (ppb)	See Below	N	Not Detected	N/A		0	3	Runoff/leaching from insecticides used on cotton and cattle
Dalapon (ppb)	See Below	N	Not Detected	N/A		200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl)adipate (ppb)	See Below	N	Not Detected	N/A		400	400	Discharge from chemical factories
Oxamyl (vydate) (ppb)	See Below	N	Not Detected	N/A		200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
Simazine (ppb)	See Below	N	Not Detected	N/A		4	4	Herbicide Runoff
Picloram (ppb)	See Below	N	Not Detected	N/A		500	500	Herbicide Runoff
Dinoseb (ppb)	See Below	N	Not Detected	N/A		7	7	Runoff from herbicide use on soybeans and vegetables
Hexachlorocyclopentadiene (ppb)	See Below	N	Not Detected	N/A		50	50	Discharge from chemical factories
Carbofuran (ppb)	See Below	N	Not Detected	N/A		40	40	Leaching of soil fumigant used on rice and alfalfa
Atrazine (ppb)	See Below	N	Not Detected	N/A		3	3	Runoff from herbicide used on row crops
Alachlor (ppb)	See Below	N	Not Detected	N/A		0	2	Runoff from herbicide used on row crops
Heptachlor (ppt)	See Below	N	Not Detected	N/A		0	400	Residue of banned pesticide
Heptachlor Epoxide (ppt)	See Below	N	Not Detected	N/A		0	200	Breakdown of heptachlor
2-4-D (ppb)	See Below	N	Not Detected	N/A		70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex) (ppb)	See Below	N	Not Detected	N/A		50	50	Residue of banned herbicide
Hexachlorobenzene	See	N	Not	N/A		0	1	Discharge from metal refineries and

(ppb)	Below		Detected				agricultural chemical factories
Di(2-ethylhexyl)phthalate (ppb)	See Below	N	Not Detected	N/A	0	6	Discharge from chemical and rubber factories
Benzo(a)pyrene (ppt)	See Below	N	Not Detected	N/A	0	200	Leaching from linings of water storage tanks and distribution lines
Pentachlorophenol (ppb)	See Below	N	Not Detected	N/A	0	1	Discharge from wood preserving factories
PCB's (as decachlorobiphenol) (ppt)	See Below	N	Not Detected	N/A	0	500	Runoff from landfills; discharge of waste chemicals
DBCP (Dibromochloropropane) (ppt)	See Below	N	Not Detected	N/A	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples and orchards
Ethylene Dibromide (EDB) (ppt)	See Below	N	Not Detected	N/A	0	50	Discharge from petroleum refineries
Chlordane (ppb)	See Below	N	Not Detected	N/A	0	2	Residue of banned termiticide

All parameters listed above were tested on April 7, 2008 at test points (EO6, EO8, E09, E11, E12, E13, E15, E16 and E17)

All parameters listed above were tested on May 27, 2008 at test point E14.

All parameters listed above were tested on July 21, 2008 at test points (EO6, E08, E09, E11, E12, E13, E14, E15, E16 and E17)