

## *The Water We Drink*

The City of Kings Mountain, N.C.  
PWSID # 01-23-020

MARCH 17, 2011

Following is the Annual Water Quality Report for **2010**. Our goal is to provide to you a safe and dependable supply of drinking water. Our water source is Moss Lake on the Clear Fork of Buffalo Creek. Moss Lake is a surface water source.

If you have any questions about this report or concerning your water utility, please contact Newt Henson, Jr. at 482-7131 from 7:00AM until 3:00PM weekdays. We want our valued customers to be informed. If you want to learn more, please attend any of our regularly scheduled City Council meetings. They are held on the last Tuesday of each month at the Kings Mountain City Hall Council Chambers at 6:00 PM.

Kings Mountain monitors for contaminants in our drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2010 and the last test results of contaminants that were not due to be tested in 2010..

As water travels over land or underground it can pick up contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled water, may be expected to contain at least small amounts of contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

In this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*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.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

*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.

### **What does all this mean?**

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

MCL's are set at very stringent levels. To help you understand the possible health effects described for many regulated constituents, a person would have to drink 1/2 gallon 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:** 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 flush your tap for 30 seconds before using tap water. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

The water supply for the City of Kings Mountain is sufficient for many years, and is of excellent quality. The distribution system is near the life expectancy of the material used, in some areas. Regulations are constantly changing as more is learned about the health effects of contaminants in drinking water. In our continuing efforts to maintain a safe and dependable water supply it will, from time to time, be necessary to make improvements in your water system. Costs of these improvements may be reflected in future rate structures.

Some people are more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have had 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).

Thank you for allowing us to serve you with quality water for the past year. We look forward to many years of continuing this service at the present level of quality, and beyond.

We of the City of Kings Mountain water system work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

## *The City of Kings Mountain*

### Consumer Confidence Report



**Microbiological Contaminants Sampled Daily In 2010**

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	0	one monthly positive	Naturally present in the environment
Fecal Coliform or E. coli (presence 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 - Continuous Monitoring In 2010**

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	N	.098	N/A	TT = 5 NTU	Soil runoff
		100 %		TT = percentage of samples < 0.5 NTU	

\* Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be below 0.5 NTU.

**Inorganic Contaminants - Sampled Daily**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low / High	MCL	MCLG	Likely Source of Contamination
Fluoride (ppm)	2010	N	0.99 AVG.	0.89 - 1.09	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

**PEST/SOC DETECTED 2009**

Contaminant (units)	Sample Date	Your Water	Range ppm Low High	MCL	Likely source of contamination
Dalapon	2010	.0016	.0014 .0019	0.2 ppm	Inorganic chemical widely used in herbicides

**Lead and Copper Contaminants Sampled During September 2010**

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 <sup>th</sup> percentile)	9/10	<0.003	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90 <sup>th</sup> percentile)	9/10	.07	0	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

**Radical Contaminants - Sampled Quarterly In 2006**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/l)	2006	N	ND	0	15	Erosion of natural deposits
Radium 228 (pCi/l)	2006	N	ND	0	2	Decay of natural and man-made deposits
Radium 226 (pCi/l)	2006	N	ND	0	3	Erosion of natural deposits
Uranium (pCi/l)	2006	N	ND	0	20.1	Erosion of natural deposits

**Disinfection By-Product Precursors Contaminants - Sampled Monthly 2010**

Contaminant (units)	Sample Date	MCL/TT Violation Y/N	Your Water	Range Low/High	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (ppm) (TOCs)-RAW	2010	N	2.89	2.64 - 3.77	N/A	TT	Naturally present in the environment
Total Organic Carbon (ppm) (TOCs)-TREATED	2010	N	1.66	1.25 - 2.12	N/A	TT	Naturally present in the environment

Note: 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.

**Secondary Contaminates, Sampled In 2010**

Contaminant	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCL	Likely Source of Contamination
Iron	2010	N	.002	.001 - .008	0.30	Naturally present in the environment
Manganese	2010	N	.005	.001 - .010	0.05	Naturally present in the environment

**Asbestos Contaminant**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Total Asbestos (MFL)	09/09/02	N	<0.18	N/A	7	7	Decay of asbestos cement water mains; erosion of natural deposits

**Other Analysis In 2010**

<b>Sodium</b>	<b>7.45 mg/l</b>	<b>MCL 20mg/l</b>
<b>Volatiles Organic Chemicals (VOCs)</b>	<b>No Detection of 21 VOC Contaminants</b>	<b>MCL varies dependent on contaminant</b>

**Disinfection By-Products, Sampled Monthly In 2009**

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	Y	56	43 - 100	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	Y	41	20 - 69	N/A	60	By-product of drinking water disinfection
Bromate (ppb)		N/A		0	10	By-product of drinking water chlorination
Chlorite (ppm)		N/A		0	1	By-product of drinking water chlorination
Chlorine dioxide (ppb)		N/A		MRDLG = 800	MRDL = 800	Water additive used to control microbes
Chloramines (ppm)		N/A		MRDLG = 4	MRDL = 4	Water additive used to control microbes
Chlorine (ppm)*	N	1.32	0.66 - 1.82	MRDLG = 4	MRDL = 4	Water additive used to control microbes

\*Note: Chlorine Continuously Monitored

**SOURCE WATER ASSESSMENT PROGRAM (SWAP)**

**RESULTS:** The North Carolina Department of Environment and Natural Resources, Public Water Supply Section conducted assessments for all drinking water sources in North Carolina. The purpose of these assessments are to determine the susceptibility of each drinking water source for potential contaminants sources. It is important to understand that the susceptibility rating does not mean poor water quality, only the potential to become contaminated by sources in the assessment area.

**SOURCE NAME: JOHN H MOSS LAKE**  
**SUSCEPTIBILITY RATING: MODERATE**

The complete SWAP Report may be viewed at <http://www.deh.enr.state.nc.us/pws/swap>. To obtain a printed copy, mail a written request to WATER ASSESSMENT PROGRAM-REPORT REQUEST, 1634 MAIL SERVICE CENTER, RALEIGH, NC 27699-1634 or E-mail request to [swap@ncmail.net](mailto:swap@ncmail.net). Please include your water system name, PWSID and your name, address and phone number with your request. You may also call 919-715-2633 with any questions