



City of Claremont

2011 Annual Drinking Water Quality Report

Public Water Supply ID: NC01-18-035

We are pleased to present to you this year's Annual Drinking Water Quality Report. Our goal is to provide you with a safe and reliable supply of drinking water. We are continually working to improve the water treatment process, protect our water resources and provide you with clean, fresh drinking water. We are committed to ensuring the quality of your water and providing you with this information. **If you have questions about this report or questions concerning your water, please contact our City Administration at (828) 459-7009. We want our valued customers to be informed about their water utility. If you want to learn more, please feel welcomed to attend any of our regularly scheduled meetings. They are held at 7:00pm in the City Hall Council Chambers the 1st Monday of each month.**

Where Our Water Comes From!

We purchase water from the City of Hickory. Our water source is surface water from the Catawba River, drawn from Lake Hickory and treated at the City of Hickory's Water Treatment Plant located on Old Lenoir Road. Due to the proximity of Lake Hickory/Catawba River to major roads such as US Hwy 321 and NC Hwy 127 and the potential for contamination due to vehicles, road run-off and development, Lake Hickory/Catawba River has a susceptibility rating of "higher". This does not mean Lake Hickory/Catawba River has poor water quality, it simply means that the potential for contamination is higher than other water bodies that do not have these influences.

Tap Water and Bottled Water

All drinking water, including bottled drinking water, may be reasonably 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 Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791.

Violations for Your Water System for the Report Year

As you can see by the tables on the following pages, our system received **no** violations. We are proud that your drinking water meets all federal and state requirements. We have learned through our monitoring and testing that some constituents have been detected as reflected in the following tables. The EPA has determined that your water IS SAFE at these levels.

Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The data tables list results of those tests. The presence of contamination does not necessarily indicate that water poses a health risk. Tables on the following pages of this report are from testing done January 1, 2011 through December 31, 2011. 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.

City of Claremont

Public Water Supply ID: 01-18-035

TEST RESULTS

Microbiological Contaminants—2011

| Contaminant | Violation Y/N | Level Detected | Unit of Measure | MCLG | MCL | Likely Source of Contamination |
|----------------------------|---------------|----------------|---------------------|------|---|--------------------------------------|
| Total Coliform Bacteria | N | Absent | Presence or Absence | 0 | 5% of monthly samples are positive | Naturally present in the environment |
| Fecal Coliform And E. Coli | N | Absent | Presence or Absence | 0 | The MCL is exceeded if 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 2011 - Systems with population > 10,000*

| Contaminant (Units) | MCL/TT VIOLATION Y/N | Your Water | MCL | Likely Source of Contamination |
|---------------------|----------------------|------------|--------------------------------------|--------------------------------|
| Turbidity (NTU) | N | 0.071 | TT = 1.0 NTU | Soil Runoff |
| | | 95% | TT = percentage of samples < 0.3 NTU | |

*Turbidity is the measure of clarity of water. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU. We monitor it, because it is a good indicator of the effectiveness of our filtration system.

Radioactive Contaminants—2011

| Contaminant | MCL/TT VIOLATION Y/N | Your Water | Unit of Measure | MCLG | MCL | Likely Source of Contamination |
|---|----------------------|------------|-----------------|------|-----|--|
| Alpha Emitters Last sample 08/08 | N | N/D | pCi/L | 0 | 15 | Erosion of natural deposits |
| Beta/Photon Emitters Last sample 08/08 | N | N/D | pCi/L | 0 | 50* | Decay of natural and man-made deposits |
| Combined Radium Last sample 08/08 | N | N/D | pCi/L | 0 | 5 | Erosion of natural deposits |
| Uranium Last sample 08/08 | N | N/D | pCi/L | 0 | 50* | Erosion of natural deposits |

*Note: The MCL for Beta Particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for Beta Particles.

Inorganic Contaminants—2011

| Contaminant | Violation Y/N | Your Water | Unit of Measure | MCLG | MCL | Likely Source of Contamination |
|--------------------------------|---------------|------------|-----------------|------|-----|--|
| Barium Date Sampled 01/11 | N | < .400 | ppm | 2 | 2 | Discharge of drilling wastes, discharge from metal refineries and erosion of natural deposits |
| Fluoride Date Sampled 01/11 | N | 0.159 | ppm | 4 | 4 | Erosion of natural deposits, water additives which promote strong teeth and discharge from fertilizer and aluminum factories |

Lead and Copper Contaminants—2011

| Contaminant (units) | Sample Date | Your Water | Number of Sites Above the AL | MCLG | MCL | Likely Source of Contamination |
|-----------------------------------|----------------|------------|------------------------------|------|-----|---|
| Copper (ppm) (90th percentile) | June-July 2010 | < 0.050 | 0 | 1.3 | 1.3 | Corrosion of household plumbing systems, erosion of natural deposits and leaching from wood preservatives |
| Lead (ppb) (90th percentile) | June-July 2010 | < 3.0 | 0 | 0 | 15 | Corrosion of household plumbing systems and erosion of natural deposits |

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TEST RESULTS

Disinfectants and Disinfection Byproducts Contaminants—2011

| Contaminant (Units) | MCL Violation Y/N | Your Water | Range Low—High | MCLG | MCL | Likely Source of Contamination |
|---------------------|-------------------|------------|----------------|---------|---------|---|
| TTHM (ppb) | N | 48.0 | 24.0 - 62.0 | N/A | 80 | By-product of drinking water chlorination |
| HAA5 (ppb) | N | 33.0 | 19 - 44 | N/A | 60 | By-product of drinking water disinfection |
| Chlorine (ppm) | N | 1.59 | .70 - 2.0 | MRDLG=4 | MRDLG=4 | Water additive used to control microbes |

Disinfection Byproducts Precursors Contaminants—2011

| Contaminant (Units) | TT Violation Y/N | Hickory Water | Removal % Low—High | MCLG | MCL | Likely source of Contamination | Compliance Method |
|--|------------------|---------------|--------------------|------|-----|---|-------------------|
| Total Organic Carbon (Removal Ratio) (TOC) - Treated | N | .99 | 21% - 57% | N/A | TT | Naturally present in the environment and high bio-mass concentrations | ACC2 |

Note: Depending on the TOC in our source water, the system MUST have a certain % removal of TOC or must achieve alternate compliance criteria. If we do not achieve the % removal, there is an alternative % removal. If we fail to meet the alternative %, we are in violation of a Treatment Technique.

Shamrock Park
Public Water Supply ID: 01-18-151

TEST RESULTS

Microbiological Contaminants—2011

| Contaminant | Violation Y/N | Level Detected | Unit of Measure | MCLG | MCL | Likely Source of Contamination |
|----------------------------|---------------|----------------|---------------------|------|---|--------------------------------------|
| Total Coliform Bacteria | N | Absent | Presence or Absence | 0 | 5% of monthly samples are positive | Naturally present in the environment |
| Fecal Coliform And E. Coli | N | Absent | Presence or Absence | 0 | The MCL is exceeded if 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 |

Lead and Copper Contaminants—2011

| Contaminant (units) | Sample Date | Your Water | Number of Sites Above the AL | MCLG | MCL | Likely Source of Contamination |
|--------------------------------|----------------|------------|------------------------------|------|-----|---|
| Copper (ppm) (90th percentile) | June-July 2010 | < 0.050 | 0 | 1.3 | 1.3 | Corrosion of household plumbing systems, erosion of natural deposits and leaching from wood preservatives |
| Lead (ppb) (90th percentile) | June-July 2010 | < 3.0 | 0 | 0 | 15 | Corrosion of household plumbing systems and erosion of natural deposits |

Disinfection Byproducts Contaminants—2011

| Contaminant (Units) | MCL Violation Y/N | Hickory Water | Range Low—High | MCLG | MCL | Likely Source of Contamination |
|---------------------|-------------------|---------------|----------------|------|-----|---|
| TTHM (ppb) | N | 42.3 | 22 - 60 | N/A | 80 | By-product of drinking water chlorination |
| HAA5 (ppb) | N | 28.3 | 20 - 37 | N/A | 60 | By-product of drinking water disinfection |

In this report you may find terms and abbreviations you might not be familiar with. To help you understand these terms, we have provided the following definitions:

- **Non-Detects (ND)** - Laboratory analysis indicated 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 Nanograms per Liter (micrograms/L)** - One part per billion corresponds to one minute in 2,000 years or one penny in \$10,000,000.
- **Picocuries per Liter (pCi/L)** - Picocuries per liter is a measure of the radioactivity in water.
- **Millirems per Year (mrem/yr)** - Measure of radiation absorbed by the body.
- **Million Fibers per Liter (MFL)** - Million fibers per Liter is a measure of the presence of asbestos in water fibers that are longer than 10 micrometers.
- **Nephelometric Turbidity Units (NTU)** - Nephelometric turbidity units is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Variations and Exemptions (V&E)** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- **Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **< (Data)** - Mathematical *Less Than* symbol. The contaminant tested was found to be at such a low level that the method in which it was tested determined the contaminant was below the detection level.
- **Total Trihalomethanes (TTHM)** - A group of four chemicals that are formed along with other disinfection by-products when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water.
- **Haloacetic Acids (HAA5)** - a group of chemicals that are formed along with other disinfection byproducts when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water.
- **Treatment Technique (TT)** - (mandatory language) A treatment technique is a required process intended to reduce the level of a contamination in drinking water.
- **Maximum Contaminant Level (MCL)** - (mandatory language) 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 (MCLG)** - (mandatory language) 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.
- **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 health effect.**

What EPA Wants You to Know

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 microbiological contaminants are available from the