

Annual Drinking Water Quality Report Hollins Mobile Home Park

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year 2016 is designed to provide you with valuable information about your drinking water quality. We are committed to providing you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water meets all state and federal requirements administered by the Virginia Department of Health (VDH).

If you have questions about this report, want additional information about any aspect of your drinking water, or want to know how to participate in decisions that may affect the quality of your drinking water, please contact:

Ms. Allison Ware at (757) 814-2343

GENERAL INFORMATION

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Substances (referred to as contaminants) in source water may come from septic systems, discharges from domestic or industrial wastewater treatment facilities, agricultural and farming activities, urban stormwater runoff, residential uses, and many other types of activities. Water from surface sources is treated to make it drinkable while groundwater may or may not have any treatment.

All drinking water, including bottled drinking 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 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. Immune-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).

SOURCES AND TREATMENT OF YOUR DRINKING WATER

In 2016, your drinking water was purchased from the Western Virginia Water Authority. The Authority's Carvins Cove Water Treatment Plant is the primary source of your water.

SOURCE WATER ASSESSMENTS

A source water assessment for the Western Virginia Water Authority Treatment Plant determined that the Authority's water source may be susceptible to contaminants at varying concentrations and changing hydrologic, hydraulic, and atmospheric conditions that promote migration of contaminants from land use activities of concern within the assessment area. More specific information may be obtained by contacting the water system representative listed above.

QUALITY OF YOUR DRINKING WATER

Your drinking water is routinely monitored according to Federal and State Regulations for a variety of contaminants. The following tables include results of monitoring for the period of January 1st through December 31st, 2016.

Most of the results in the table are from testing done in 2016. However, the state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. State Regulations require that we test for bacteriological, lead, and copper contaminants within the park distribution system; thus the data in the “Microbiological”, “Lead and Copper”, “Disinfection Byproduct Contaminants” and the “Disinfection Residual” tables that follow comes from sampling by the park management. Data in the other tables comes from monitoring by the Western Virginia Water Authority.

DEFINITIONS

In the table and elsewhere in this report you will find many terms and abbreviations you might not be familiar with. The following definitions are provided to help you better understand these terms:

Non-detects (ND) – lab analysis indicates that the contaminant 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.

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

Nephelometric Turbidity Unit (NTU) – nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level – the concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) – a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level, or 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.

Maximum Contaminant Level Goal, or 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.

Variations and exemptions – conditional state or EPA permission not to meet an MCL or a treatment technique.

Level 1 Assessment – A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

WATER QUALITY RESULTS

Hollins Mobile Home Park

Microbiological

| Contaminant | Unit of Measurement | MCLG | MCL | Level Found | Violations | Sampling Date(s) | Typical Source of Contamination |
|-------------------------|---------------------|------|--|-------------|------------|------------------|--------------------------------------|
| total coliform bacteria | presence or absence | 0 | presence of coliform bacteria in >1 sample per month | 0 | none | monthly | naturally present in the environment |

Total coliform bacteria are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present; coliform bacteria are analyzed every month.

Lead and Copper – Latest monitoring period was 2016*

| Contaminant | Unit of Measurement | MCLG | MCL | 90% Level | AL Exceeded | Samples > AL | Typical Source of Contamination |
|-------------|---------------------|------|----------|-----------|-------------|--------------|--|
| lead | ppb | 0 | AL = 15 | < 2 | no | 0 | corrosion of household plumbing systems; erosion of natural deposits |
| copper | ppm | 1.3 | AL = 1.3 | < 0.02 | no | 0 | |

*Lead and copper are currently analyzed every three years.

Disinfection Byproduct Contaminants

| Contaminant | Unit of Measurement | MCLG | MCL | Level Found | Violation | Date of Sample(s)* | Typical Source of Contamination |
|------------------------|---------------------|------|-----|-------------|-----------|--------------------|---|
| total trihalomethanes | ppb | 0 | 80 | 57 | no | 7/18/16 | by-product of drinking water chlorination |
| total haloacetic acids | ppb | 0 | 60 | 40 | no | 7/18/16 | by-product of drinking water chlorination |

*Sampled annually.

Disinfection Residual

| Contaminant | MRDLG | MRDL | Level Found Average & Range | Unit Measurement | Violation | Date of Sample | Typical Source of Contamination |
|-------------|-------|------|-----------------------------|------------------|-----------|----------------|---|
| chlorine | 4 | 4 | 0.67 Range 0.50 – 1.4 | mg/l | no | daily | water additive used to control microbes |

Western Virginia, Water Authority Water

Synthetic Organic Contaminants

| Contaminant | Unit of Measurement | MCLG | MCL | Level Found | Violation | Date of Sample(s) | Typical Source of Contamination |
|---------------------------------|---------------------|------|-----|-------------|-----------|--------------------|---------------------------------|
| synthetic organic contaminants* | ppb | 0 | | ND | | 9/21/15 6/16/15 | |

Analyses frequency is every three years.

Western Virginia, Water Authority Water
Inorganic & Metal Contaminants

| Contaminant | Unit of Measurement | MCLG | MCL | Level Found | Violation | Date of Sample(s) | Typical Source of Contamination |
|---|---------------------|------|-----|--------------------|-----------|-------------------|---|
| turbidity | | | | | | | |
| a) highest single measurement | TU | NA | TT | 0.30 | no | daily | soil runoff |
| b) lowest monthly percentage meeting 0.3 NTU limits | percent | NA | TT | 100% | no | monthly | |
| nitrate | ppm | 10 | 10 | < 0.02 | no | 5/17/16 | runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| fluoride | ppm | 4 | 4 | range 0.06 to 0.70 | no | daily | water additive which promotes strong teeth |
| barium | ppm | 2 | 2 | 0.05 | no | 5/26/16 | erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries |

¹Turbidity - turbidity is a measure of the cloudiness of the water, a good indicator of the effectiveness of our filtration system.

Western Virginia, Water Authority Water
Total Organic Carbon (TOC)

| Contaminant | Unit of Measurement | MCLG | MCL | Level Found | Violation | Date of Sample(s) | Typical Source of Contamination |
|----------------------|---------------------|------|---|---|-----------|-------------------|---------------------------------|
| total organic carbon | NA - ratio | NA | TT 1.00 annual average removal ratio | all sampled removal ratios 1.00 or above | no | monthly | naturally occurring |

Western Virginia, Water Authority Water
Radiological Contaminants

| Contaminant | Unit of Measurement | MCLG | MCL | Level Found | Violation | Date of Sample(s)* | Typical Source of Contamination |
|-----------------------|---------------------|------|-----|-------------|-----------|--------------------|---------------------------------|
| gross alpha radiation | pCi/l | 0 | 15 | 0.78 | no | 4/26/11 | erosion of natural deposits |
| gross beta radiation | pCi/l | 0 | 50 | 1.5 | no | 4/26/11 | erosion of natural deposits |
| radium - 228 | pCi/l | 0 | 5 | 0.79 | no | 4/26/11 | erosion of natural deposits |

*Analyses frequency is every six years.

Western Virginia, Water Authority Water

Volatile Organic Contaminants

| Contaminant | Unit of Measurement | MCLG | MCL | Level Found | Violation | Date of Sample(s)* | Typical Source of Contamination |
|--|---------------------|------|-----|-------------|-----------|--------------------|---------------------------------|
| volatile organic contaminants detected | | | | ND | | 5/17/16 | |

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The table lists only those contaminants that had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment.

Maximum Contaminant Levels (MCLs) are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards, EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

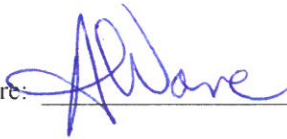
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Hollins Mobile Home Park Water System is responsible for providing 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 of at <http://www.epa.gov/safewater/lead>.

VIOLATION INFORMATION

Water Quality Violations – None

Monitoring and Reporting Violations – Bacteriological Notice of Violation for failure to sample in August 2016. Samples collected in September 2016 were good.

This Drinking Water Quality Report was prepared by the management with the assistance and approval of the Virginia Department of Health. Please call if you have questions.

Signature:  Alison Ware
Office Manager

Date: 4/11/17