

Annual Drinking Water Quality Reports For Calendar Year 2016 New Kent County Department of Public Utilities



In addition to this direct mailing, New Kent County's **2016** Consumer Confidence Reports (CCRs) are available on the County's website at www.co.new-kent.va.us, or a copy may be obtained by contacting the Department of Public Utilities directly at (804) 966-9678, or dpu.info@newkent-va.us.

INTRODUCTION

The Annual Drinking Water Quality Reports for calendar year **2016** are designed to inform you about your drinking water quality. Our goal is to provide 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 must meet state and federal requirements administered by the Virginia Department of Health (VDH).

If you have questions about the water quality reports, or if you 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: Lawrence A. Dame, Director of Public Utilities @ (804) 966-9678

The regularly scheduled meetings of the New Kent County Board of Supervisors are on the second Monday of every month at the County Administration Building, 12007 Courthouse Circle, New Kent, Virginia.

GENERAL INFORMATION

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: (1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (2) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; (4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; (5) 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. 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 cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

DEFINITIONS

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The tables presented for each water system show the results of our monitoring for calendar year **2016**. In the tables 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 (N.D.) - 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 (µg/l) - 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.

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 required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (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 (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.

Maximum Residual Disinfectant Level (MRDL) - the maximum allowable level of the residual of a disinfectant in the distribution system.

Maximum Residual Disinfectant Level Goal (MRDLG) - the goal maximum level of the residual of a disinfectant in the distribution system.

DRINKING WATER QUALITY NOTES

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The tables list only some of the regulated contaminants that had some level of detection. Many other contaminants have been analyzed but were not present, were below the detection limits of the lab equipment, or were present in concentrations that do not pose a significant health concern according to EPA.

The water quality results presented are generally from **2016**. Some of the data presented, though accurate, are more than one year old. The data presented represents the most recent water quality sampling data.

MCL's 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.

LEAD: 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. New Kent County 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>

SODIUM: Most water systems operated by New Kent County contain sodium concentrations in excess of 20 mg/l. Persons on a restricted sodium intake diet should not drink water containing a sodium concentration in excess of 20 mg/l. Sodium concentrations for each water system are provided.

FLUORIDE: New Kent County does not add fluoride to drinking water. Natural fluoride concentrations in the groundwater provided at three New Kent water systems exceed the Secondary Maximum Contaminant Limit (SMCL) of 2.0 mg/l, for which fluoride public notification is required. Fluoride concentrations above the Primary Maximum Contaminant Limit (PMCL) of 4.0 mg/l have not been reported at any sampling locations. Exposure to drinking water levels above 4.0 mg/l for many years may result in some cases of crippling skeletal fluorosis, which is a serious bone disorder. Official fluoride notification is provided with the water quality reports for the Colonial Downs, New Kent Courthouse and Parham Landing Water Systems.

The Drinking Water Quality Reports were prepared by: New Kent County - Department of Public Utilities
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