

# Annual Drinking Water Quality Report for 2016

## TOWN OF PAMPLIN CITY

### INTRODUCTION

This Annual Drinking Water Quality Report for calendar year 2016 is 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 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:

William R. Horton, Mayor @ 434-248-6514

The times and location of regularly scheduled board meetings are as follows:

First Thursday of each month at 6:00pm at the Pamplin City Town Office, 115 Main St., Pamplin, VA 23958

### GENERAL INFORMATION

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 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 stormwater 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 stormwater runoff, and residential uses.
- **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.
- **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 and 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.

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).

### VULNERABLE POPULATIONS

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).

### SOURCE(S) AND TREATMENT OF YOUR DRINKING WATER

The source of your drinking water is groundwater from three drilled wells, identified as Wells No. 2, 6, and 7. Water from Well No. 2 & 6 is treated with soda ash for corrosion control.

A source water assessment of our system was conducted in [2002] by the Virginia Department of Health. The wells were determined to be of high susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program.

The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of any known contamination within the last 5 years. The report is available by contacting [William R. Horton, Mayor] at [P.O. Box 1338, Pamplin, VA 23958 or 434-248-6514].

## 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:

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or one 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 one penny in \$10,000,000.

*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.

*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 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.

*Secondary Maximum Contaminant Level (SMCL)* – the highest level recommended for a contaminant in drinking water, based on aesthetic considerations.

## WATER QUALITY RESULTS

We routinely 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; because 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 results, though representative, are more than one year old

The U.S. Environmental Protection Agency sets MCLs at very stringent levels. 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-one-million chance of having the described health effect for other contaminants.

## VIOLATION INFORMATION

|                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Violation occurred in Jan. 2016 operator took 4 of 5 Coliform bacterial samples, 5 <sup>th</sup> sample taken within 14 days                                       |
| all were satisfactory; by not collecting the proper number of samples, the bacteriological quality of the water was unknown notice sent to customers on 7/12/2016. |

## IMPORTANT INFORMATION ABOUT LEAD IN DRINKING WATER

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 Town of Pamplin City 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 or until it becomes cold or reaches a steady temperature 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>.

## ADDITIONAL HEALTH INFORMATION

Certain contaminants (such as Cryptosporidium, radon, arsenic, nitrate, and lead), if present in your drinking water, may be of special concern to consumers. If any of those contaminants are present, health information is provided below to inform you about them.

|                                        |
|----------------------------------------|
| None of these contaminants are present |
|----------------------------------------|

**5011400 TOWN OF PAMPLIN CITY – 2016**

| Inorganic Contaminants            |      |                           |                                                                                                                   |            |                |                                                                                                      |
|-----------------------------------|------|---------------------------|-------------------------------------------------------------------------------------------------------------------|------------|----------------|------------------------------------------------------------------------------------------------------|
| Contaminant / Unit of Measurement | MCLG | MCL                       | Level Found                                                                                                       | Violation  | Date of Sample | Typical Source of Contamination                                                                      |
| Nitrate ppm                       | 10   | 10                        | Highest: 1.98<br>Range: 0.4 to 1.98                                                                               | No         | July 2016      | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits          |
| Barium ppm                        | 2    | 2                         | Highest: 0.02<br>Range: 0.02 to 0.02                                                                              | No         | July 2016      | Erosion of natural deposits.                                                                         |
| Chromium ppb                      | 100  | 100                       | Highest: 3.8<br>Range: 1.6                                                                                        | No         | July 2016      | Corrosion of galvanized pipes, Erosion of natural deposits, Run off from waste batteries and paints. |
| Radiological Contaminants         |      |                           |                                                                                                                   |            |                |                                                                                                      |
| Contaminant / Unit of Measurement | MCLG | MCL                       | Level Found                                                                                                       | Violation  | Date of Sample | Typical Source of Contamination                                                                      |
| Alpha Emitters pCi/L              | 0    | 15                        | Highest: 3.0<br>Range: 0.14 to 3.0                                                                                | No         | January 2015   | Erosion of natural deposits                                                                          |
| Combined Radium pCi/L             | 0    | 5                         | Highest: 1.4<br>Range: ND to 1.4                                                                                  | No         |                |                                                                                                      |
| Lead and Copper                   |      |                           |                                                                                                                   |            |                |                                                                                                      |
| Contaminant / Unit of Measurement | MCLG | MCL                       | Level Found / Range                                                                                               | Exceedance | Date of Sample | Typical Source of Contamination                                                                      |
| Lead ppb                          | 0    | AL=15                     | 8 (90 <sup>th</sup> percentile)<br>Range: 1 to 14<br>Of the five samples collected none exceeded the AL.          | No         | July 2016      | Corrosion of household plumbing systems; Erosion of natural deposits                                 |
| Copper ppm                        | 1.3  | AL=1.3                    | 0.2 (90 <sup>th</sup> percentile)<br>Range: 0.04.0 to 0.45<br>Of the five samples collected none exceeded the AL. | No         | July 2016      | Corrosion of household plumbing systems; Erosion of natural deposits                                 |
| Microbiological Contaminants      |      |                           |                                                                                                                   |            |                |                                                                                                      |
| Contaminant / Unit of Measurement | MCLG | MCL                       | Level Found                                                                                                       | Violation  | Date of Sample | Typical Source of Contamination                                                                      |
| Ecoli                             | 0    | 2 positive monthly sample | One                                                                                                               | No         | August 2016    | Human or Animal Waste                                                                                |