

Annual Drinking Water Quality Report

The Pulaski County Public Service Authority

LAKWOOD ESTATES

YEAR: 2005

PWSID#1155446

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year 2005 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, please contact:

Eddie Fisher, Water Treatment Plant Superintendent, at (540) 980-7749

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:

Eddie Fisher, Water Treatment Plant Superintendent, at (540) 980-7749

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

The 2nd Monday of every month, at 09:00 am, in The Pulaski County Administration Building, at 143 3rd Street NW, Pulaski, Va. 24301

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 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 storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining, or farming. (3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. (4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial process and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems. (5) Radio active 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.

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. 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(s) of your drinking water is () surface water (X)groundwater ()groundwater under the direct influence of surface water as described below:

The Water Source for the Lakewood Estates Subdivision is a drilled well located in Pulaski County.

Is there any treatment of your drinking water supply? () Yes (x) No If yes, it is described below:

The Virginia Department of Health conducted a source water assessment of our system during 2002. The Lakewood Estates Well was 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 consist of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of any known contamination with-in the last 5 years. The report is available by contacting Eddie Fisher at the phone number or address given elsewhere in this drinking water report.

DEFINITIONS

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The table on the next page shows the results of our monitoring for the period of January 1st to December 31st, 2005. 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:

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.

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.

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.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity, or cloudiness, of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system.

WATER QUALITY RESULTS

I. Regulated Contaminants

Contaminant (units)	MCLG	MCL	Level Detected	Violation (Y/N)	Range	Date of Sample	Typical Source of Contamination
COMBINED RADIUM (PCI/L)	5	5	0.6	N	N/A	11/11/2001	Erosion of Natural deposits
Nitrate plus Nitrite Nitrogen (PPM)	10	10	0.99	N	N/A	01/26/2005	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
ALPHA EMITTERS (pCi/ l)	0	15	0.9	N	-	11/14/2001	Erosion of natural deposits

VIOLATION INFORMATION Did any MCL or TT violations occur during the year? () Yes (X) No

The water quality results in table I, are from testing done in 2005. 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.

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.

VIOLATION INFORMATION

Your water system did not have any violations during the year.

Did any monitoring, reporting, or other violations occur during the year? () Yes (X) No

ADDITIONAL HEALTH INFORMATION

Certain contaminants (such as, arsenic, nitrate, and lead), if present in your drinking water, may be of special concern to consumers. Are any of those contaminants present at levels of concern that must be reported? () Yes (X) No If yes, health information is provided below.

ADDITIONAL INFORMATION ABOUT YOUR WATERWORKS

The Lakewood Estates Water systems consist of a well drilled to the depth of 485 feet, cased and grouted with 6" casing to a depth of 226 feet. Water is pumped from the well to a 5300 gallon hydroneumatic tank with a submersible 20 gallon per minute, 5 horse power pump. The well house is heated and ventilated. A totalizing flow meter records the volume of water used in the system. The 48 hour yield and drawdown test on the well is 20 gallon per minute. Equipment to provide hypochlorination is also provided, if needed

Delivering a safe and abundant supply of drinking water to your tap requires team work from the employees of the Pulaski County Public Service Authority Water Plant, who perform numerous complex analysis on the well water, and Public works employees working to keep the well and distribution system properly maintained.