

*Annual Drinking Water Quality Report 2011*

*Lavalette Public Service District*

5308 Rt. 152  
LAVALETTE, WV 25535  
(304)525-3771  
PWSID # 3305006  
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### **Why am I receiving this Report?**

In compliance with the Safe Drinking Water Act Amendments, the **Lavalette PSD** is providing its customers with this annual water quality report. This report explains where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The information in this report shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2011 or earlier if not on a yearly schedule.

If you have any questions concerning this report, you may contact **Richard Smith, General Manager, (Monday thru Friday 8:00 AM - 4:00 PM) at 304-525-3771**. If you have any further questions, comments or suggestions, please attend any of our regularly scheduled water board meetings held on the **3<sup>rd</sup> Tuesday** of every month at **8:30 AM** in the **District Office, 5308 Rt.152, Dickson, WV**.

### **Where does my water come from?**

Your water is **purchased** from WV American Water Company which uses a **surface** water source from the Ohio River.

### **Source Water Assessment**

The Source Water Assessment was conducted by the West Virginia Bureau for Public Health (WVBPH). The intake that supplies water to **WV American Water Company** has a higher susceptibility to contamination, due to sensitive nature of surface water supplies and the potential contaminant sources identified within the area. This does not mean that this intake will become contaminated; only that conditions are such that the surface water could be impacted by a potential contaminant source. Future contamination may be avoided by implementing protective measures. The source water assessment report which contains more information is available for review or a copy will be provided to you at our office during business hours or from WQVBPH 304-558-2981.

### **Why must water be treated?**

All drinking water contains various amounts and kinds of contaminants. Federal and State regulations establish limits, controls, and treatment practices to minimize these contaminants and to reduce any subsequent health effects.

### **Contaminants in Water**

In order to ensure quality tap water to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits of 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 these contaminants does not necessarily indicate that the 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 at 1-800-426-4791.

The source of drinking water (both tap and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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:

**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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, farming.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also, come from gas stations, urban storm water runoff, and septic systems.

**Radioactive contaminants**, can be naturally-occurring or the result of oil and gas production and mining activities.

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).

## Water Quality Data Table

Definitions of terms and abbreviations used in the table or report:

**MCLG - Maximum Contaminant Level Goal**, or 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.

**MCL - Maximum Contaminant Level**, 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 techniques.

**MRDLG – Maximum Residual Disinfectant Level Goal**, or the level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect benefits of use of disinfectants to control microbial contaminants.

**MRDL – Maximum Residual Disinfectant Level**, or the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary to control microbial contaminants.

**AL - Action Level**, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**TT - Treatment Technique**, or a required process intended to reduce the level of a contaminant in drinking water.

Abbreviations that may be found in the table:

**ppm** - parts per million or milligrams per liter

**ppb** - parts per billion or micrograms per liter

**NTU** - Nephelometric Turbidity Unit, used to measure cloudiness in water

**pCi/l** - picocuries per liter

**NE** - not established

**NA** - not applicable

The **WV American Water Company and Lavalette PSD** routinely monitor for contaminants in your drinking water according to federal and state laws. The table below shows the results of our monitoring for contaminants.

**TABLE OF TEST RESULTS - REGULATED CONTAMINANTS - WV AMERICAN WATER COMPANY**

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Turbidity	N	0.15 Range .06 - .081	NTU	0	TT	Soil runoff
<b>Inorganic Contaminants</b>						
Antimony	N	<0.4	ppb	6	6	Discharge from petroleum factories; fire retardants; ceramic; electronics; solder
Barium	N	0.041	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	N	0.81- 1.04	ppm	4p/2s	4p/2s	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate	N	0.72	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	N	<2	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
<b>Volatile Organic Contaminants</b>						
Haloacetic acids (HAAC5)	N	Running average 23.00	ppb	0	60	By-product Of Drinking Water Chlorination.
Total trihalomethanes (TTHMs)	N	61	ppb	NA	100/80	By-product of drinking water chlorination
Chlorine	N	2.1 Range 0.2 – 3.0	ppm	4	4	Water additive to control microbes

**TABLES OF TEST RESULTS - UNREGULATED CONTAMINANTS - WV AMERICAN WATER COMPANY**

Sodium*	N	30.4	ppm	NA	20	Erosion of natural deposits
Strontium	N	0.188	ppm	NA	NA	Erosion of natural deposits
Sulfate	N	58.9	ppm	NA	250/s	Erosion of natural deposits
Zinc	N	0.371 Range 0.32 – 0.43	ppm	NE	5	Erosion of natural deposits; Constituent Of Corrosion Control Chemicals.

\*Sodium is an unregulated contaminant. Our sodium level exceeds the guidance MCL. Anyone having a concern over sodium should contact their primary health care provider.

**TABLES OF TEST RESULTS - REGULATED CONTAMINANTS - LAVALETTE PSD**

Contaminant	Violation Y/N	Highest Level Detected	Unit Of Measure	MCLG	MCL	Likely Source of Contamination
Copper*	N	0.255	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead*	N	1.0	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
<b>Volatile Organic Contaminants</b>						
<b>Chlorine</b>	N	1.56 Range 0.5 – 3.0	ppm	4	4	Water additive to control microbes

\*Copper and Lead samples were collected from Lavalette area residences in 2010. Only the 90<sup>th</sup> percentile is reported. None of the samples exceeded the MCL. Copper and Lead samples are to be collected in 2013 per a WVBPH sampling schedule.

**WE ARE PLEASED TO REPORT THAT LAVALETTE PSD MET ALL FEDERAL AND STATE WATER STANDARDS FOR THE REPORTING YEAR 2011.**

**Additional information**

All other water test results for the reporting year 2011 were all non-detects.

Turbidity is a measure of the cloudiness of drinking water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.

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 **Lavalette PSD** 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 drinking 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>.

This report will not be mailed. However, a copy will be made available upon request at our office during regular business hours.