

Annual Drinking Water Quality Report 2012  
**LAVALETTE PUBLIC SERVICE DISTRICT**  
**5308 Rt. 152**  
**Lavalette, WV 25535**  
**PWS# WV3305006**  
**PWS# WV33005012 - Eastern District**  
**March 25, 2013**

### **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 1st to December 31st, 2012 or earlier if not on a yearly schedule.

If you have any questions concerning this report, you may contact **Richard Smith, General Manager, (Monday through Friday 8:00AM-4:00PM), 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 **8:30AM** in the **District Office, 5308 Rt. 152 Dickson, WV**.

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

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

### **Source Water Assessment**

A Source Water Assessment was conducted by the West Virginia Bureau for Public Health (WVBPH). The intake that supplies drinking water to the **WV American Water Company** has a higher susceptibility to contamination, due to the 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 the WVBPH 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 that tap water is safe to drink, 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 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).

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, 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 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 microbial 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**, or 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 technique.
- **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
- **NA** – not applicable
- **NE** - not established
- **NTU** –Nephelometric Turbidity Unit, used to measure cloudiness in water

The **WV American Water Company and Lavalette PSD** routinely monitor for contaminants in your drinking water according to federal and state laws. The tables below show 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=% of Samples <0.3 NTU	Soil runoff
Total organic carbon	N	1.35 Range 1.11 – 1.58	ppm	NA	TT	Naturally present in the environment
<b>Inorganic Contaminants</b>						
Barium	N	0.041	ppm	2	2	Discharge from drilling waste; erosion of natural deposits
Copper*	N	0.185	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion of natural deposits
Fluoride	N	0.80 Range 0.81 – 1.04	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer plants
Lead*	N	0.002	ppb	0	AL=15	Corrosion of household plumbing; erosion of natural deposits
Nitrate	N	0.72	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits

<b>Volatile Organic Contaminants</b>						
Chlorine	N	2.0 Annual avg. Range 0.2-3.0	ppm	4 MRDL G	4 MRDL	Water additive used to control microbes
Haloacetic acids (HAAC5)	N	29 Annual avg. Range 13 - 40	ppb	NA	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)	N	55 Annual avg. Range 19 - 117	ppb	NA	80	By-product of drinking water chlorination

**Table of Test Results - Unregulated Contaminants**

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Nickel	N	<2	ppm	NE	100	Erosion of natural deposits
Sodium	Y	19.3	ppm	NE	20	Erosion of natural deposits
Sulfate	N	47.1	ppm	250	250/s	Erosion of natural deposits

**Table of Test Results - Regulated Contaminants – Lavalette PSD**

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>						
Copper* (2010)	N	0.248	ppm	3	AL=3	Corrosion of household plumbing
Lead* (2010)	N	2.0	ppb	15	AL=15	Corrosion of household plumbing
<b>Volatile Organic Contaminants</b>						
Chlorine	N	1.30 Annual avg. Range 0.2-2.8	ppm	4 MRDL G	4 MRDL	Water additive used to control microbes

Haloacetic acids** (HAAC5)	N/A	37.95 Annual avg. Range 33.7 – 42.2	ppb	NA	60	By-product of drinking water disinfection
Total Trihalomethanes** (TTHMs)	N/A	83.2 Annual avg. Range 72.9 – 93.5	ppb	NA	80	By-product of drinking water disinfection

\*Copper and lead samples were collected from 10 area residences on 7-14-10. 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.

\*\*Stage 2 collected on 11-07-2012.

### Table of Test Results - Regulated Contaminants – Lavalette PSD – Eastern District

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>						
Copper*	N	0.158	ppm	3	AL=3	Corrosion of household plumbing
Lead*	N	0.011	ppb	15	AL=15	Corrosion of household plumbing
<b>Volatile Organic Contaminants</b>						
Chlorine	N	1.10 Annual avg. Range 0.2-2.7	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes

\*Copper and lead samples were collected from 20 area residences on 06-19-2012. Only the 90<sup>th</sup> percentile is reported. None of the samples exceeded the MCL.

**WE ARE PLEASED TO REPORT THAT THE LAVALETTE PSD MET ALL FEDERAL AND STATE WATER STANDARDS FOR THE REPORTING YEAR 2012.**

### Additional Information

All other water test results for the reporting year 2012 were all non-detects.

Turbidity is a measure of the cloudiness in water. We monitor it because it is a good indicator of the effectiveness of our filters.

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. A copy will be provided to you upon request at our office during regular business hours.