

Annual Drinking Water Quality Report 1999
Lavalette Public Service District

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PWS # 3305006

We're very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a dependable supply of drinking water. Our water is purchased from West Virginia American Water Company, which is treated surface water pumped from the Ohio River, and the Guyandotte River at Huntington.

In order to ensure quality tap water 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.

I'm pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Darrell Wellman, Lavalette PSD General Manager, at 525-3771. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the **third Tuesday of each month at 2:00 P.M.** at the District Office located at 4500 5th St. Rd. (*next door to Lavalette Vol. Fire Dept.*) at Lavalette, WV.

Lavalette Public Service District routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 1999. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory 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.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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 treatment technique is a required process intended to reduce the level of a contaminant in drinking water

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 - The “Goal”(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria	N	0		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Turbidity	N	.47	NTU	0	TT	Soil runoff
Radioactive Contaminants						
Alpha emitters	N	0.4	pCi/l	0	15	Erosion of natural deposits
Inorganic Contaminants						
Antimony	N	<0.4	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	N	<1	ppb	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	.03	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	N	<0.3	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium	N	<1	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium	N	<10	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	N	0.204	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide	N	<20	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	N	0.11-1.23	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury	N	<0.5	ppb	2	2	Erosion of natural deposits; discharge from

(inorganic)						refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen)	N	1	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
Thallium	N	<0.3	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Synthetic Organic Contaminants including Pesticides and Herbicides						
2,4-D	N	<0.1	ppb	70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex)	N	<0.2	ppb	50	50	Residue of banned herbicide
Alachlor	N	<0.2	ppb	0	2	Runoff from herbicide used on row crops
Atrazine	N	<0.1	ppb	3	3	Runoff from herbicide used on row crops
Benzo(a)pyrene (PAH)	N	<20	nanograms /l	0	200	Leaching from linings of water storage tanks and distribution lines
Carbofuran	N	<0.8	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane	N	<0.1	ppb	0	2	Residue of banned termiticide
Dalapon	N	<1	ppb	200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) adipate	N	<0.6	ppb	400	400	Discharge from chemical factories
Di(2-ethylhexyl) phthalate	N	<0.6	ppb	0	6	Discharge from rubber and chemical factories
Dibromochloro- propane	N	<10	nanograms /l	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb	N	<0.2	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
Diquat	N	<0.4	ppb	20	20	Runoff from herbicide use
Endothall	N	<9	ppb	100	100	Runoff from herbicide use
Endrin	N	<0.01	ppb	2	2	Residue of banned insecticide
Ethylene dibromide	N	<10	nanograms /l	0	50	Discharge from petroleum refineries
Glyphosate	N	<6	ppb	700	700	Runoff from herbicide use
Heptachlor	N	<10	nanograms /l	0	400	Residue of banned termiticide
Heptachlor epoxide	N	<10	nanograms /l	0	200	Breakdown of heptachlor

Hexachlorobenzene	N	<0.1	ppb	0	1	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene	N	<0.1	ppb	50	50	Discharge from chemical factories
Lindane	N	<20	nanograms /l	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor	N	<0.1	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate]	N	<2	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
PCBs [Polychlorinated biphenyls]	N	<100	nanograms /l	0	500	Runoff from landfills; discharge of waste chemicals
Pentachlorophenol	N	<0.04	ppb	0	1	Discharge from wood preserving factories
Picloram	N	<0.1	ppb	500	500	Herbicide runoff
Simazine	N	<0.07	ppb	4	4	Herbicide runoff
Toxaphene	N	<1	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
Volatile Organic Contaminants						
Benzene	N	<0.5	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride	N	<0.5	ppb	0	5	Discharge from chemical plants and other industrial activities
Chlorobenzene	N	<0.5	ppb	100	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene	N	<0.5	ppb	600	600	Discharge from industrial chemical factories
p-Dichlorobenzene	N	<0.5	ppb	75	75	Discharge from industrial chemical factories
1,2-Dichloroethane	N	<0.5	ppb	0	5	Discharge from industrial chemical factories
1,1 - Dichloroethylene	N	<0.5	ppb	7	7	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene	N	<0.5	ppb	70	70	Discharge from industrial chemical factories
trans - 1,2 - Dichloroethylene	N	<0.5	ppb	100	100	Discharge from industrial chemical factories
Dichloromethane	N	<0.5	ppb	0	5	Discharge from pharmaceutical and chemical factories
1,2-	N	<0.5	ppb	0	5	Discharge from industrial chemical

Dichloropropane						factories
Ethylbenzene	N	<0.5	ppb	700	700	Discharge from petroleum refineries
Styrene	N	<0.5	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene	N	<0.5	ppb	0	5	Leaching from PVC pipes; discharge from factories and dry cleaners
1,2,4-Trichlorobenzene	N	<0.5	ppb	70	70	Discharge from textile-finishing factories
1,1,1 - Trichloroethane	N	<0.5	ppb	200	200	Discharge from metal degreasing sites and other factories
1,1,2 - Trichloroethane	N	<0.5	ppb	3	5	Discharge from industrial chemical factories
Trichloroethylene	N	<0.5	ppb	0	5	Discharge from metal degreasing sites and other factories
TTHM [Total trihalomethanes]	N	73	ppb	0	100	By-product of drinking water chlorination
Toluene	N	<0.0005	ppm	1	1	Discharge from petroleum factories
Vinyl Chloride	N	<0.5	ppb	0	2	Leaching from PVC piping; discharge from plastics factories
Xylenes	N	<0.0005	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements.

All 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 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.

MCL's are set at very stringent levels. To understand the possible health effects described

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Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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:

A.) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

B.) 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.

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

D.) 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.

E.) Radioactive contaminants, which 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).

We at Lavalette Public Service District work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.