

ANNUAL DRINKING WATER QUALITY REPORT



MT VERNON WATER WORKS

We're pleased to present to you this year's Annual Quality water report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is Lake Linville and it is located at Renfro Valley.

Mayor Karen K King is pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Dennis McClure or Torsia Lear at 606-256-2879 between the hours of 8:00AM to 4:00PM Monday through Friday. Jack Edwards at 606-256-4441 between the hours of 4:00PM through 12:00PM. Also if you have any questions, there is a monthly council meeting at City Hall the first Monday of each month at 7:00PM. You may also pick up a copy of the Annual Drinking Water Quality Report at City Hall located at 125 Richmond St in Mt Vernon.

Mt Vernon Water Works routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 01, 1999 to December 31, 1999. The sources of drinking water (both tap water 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, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. All drinking water, including bottled drinking water, may be reasonably 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.

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:

Water systems in Kentucky must test for the contaminants listed below. Only those contaminants that were detected are included in the test results table. All of the analysis results are on file with the water system and are available for review.

Turbidity	Synthetic Organic Contaminants:	Volatile Organic Contaminants:	Unregulated Contaminants:
Microbiological	2,4-D	Benzene	Aldrin
Contaminants:	2,4,5-TP (Silvex)	Carbon tetrachloride	Bromobenzene
Total Coliform	Acrylamide	Chlorobenzene	Bromodichloromethane
Fecal Coliform	Alachlor	o-Dichlorobenzene	Bromoform
Radioactive	Atrazine	p-Dichlorobenzene	Bromomethane
	Benzo(A)pyrene(PAH)	1,2-Dichloroethane	Butachlor (Machete)
Contaminants:	Carbofuran	1,1-Dichloroethylene	Carbaryl
Beta/photom emitters	Chlordane	cis-1,2-Dichloroethylene	Chloroethane
Alpha emitters	Dalapon	trans-1,2-Dichloroethylene	Chloroform
Combined radium	Di(2-ethylhexyl)adipate	Dichloromethane	Dibromochloromethane
	Di(2-ethylhexyl)phthalate	1,2-Dichloropropane	Dibromomethane
Inorganic Contaminants:	Dibromochloropropane	Ethylbenzene	Dicamba
Boron	Dinoseb	Styrene	Dieldrin
Antimony	Diquat	Tetrachloroethylene	m-Dichlorobenzene(1,3-)
Arsenic	Dioxin	1,2,4-Trichlorobenzene	Methomyl
Asbestos	Endothal	1,1,1-Trichloroethane	Methylchloride (Chloroethane)
Barium	Endrin	1,1,2-Trichloroethane	Metolachlor
Beryllium	Epichlorohydrin	Trichloroethylene	Metribuzin (Sencor)
Cadmium	Ethylene dibromide	THM (total trihalomethanes)	o-Chlorotoluene
Chromium	Glyphosate	Toluene	p-Chlorotoluene (1,4-)
Copper	Heptachlor	Vinyl Chloride	Propachlor (Ramrod)
Cyanide	Heptachlor epoxide	Xylenes	1,1-Dichloroethane
Fluoride	Hexachlorobenzene		1,1-Dichloropropene
Lead	Hexachlorocyclopentadiene		1,1,1,2-Tetrachloroethane
Mercury	Lindane		1,1,2,2-Tetrachloroethane
Nitrate	Methoxychlor		1,2,3-Trichloropropane
Nitrite	Oxamyl (Vydate)		1,3-Dichloropropane
Selenium	PCP's		1,3-Dichloropropene
Thallium	Pentachlorophenol		2,2-Dichloropropane
	Picloram		3-Hydroxy-carbofuran
	Simazine		
	Toxaphene		

Non-Detect (ND)-laboratory analysis indicated that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l)-one part per million corresponds to 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.

Million Fibers per Liter (MFL)-million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Units (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 AL-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 high level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

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.

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 for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. At the present time our water plant is being upgraded from 1.7 million gallons per day to 4 million gallons a day.

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).

Please call our office if you have any questions.

We at Mt Vernon Water Works 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.

Due to samples taken too early in the month of Nov. 1999, We had a state violation, when samples came back they were ok.

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation Y/N	Likely Source
*1. Turbidity TT (NTU)	Never more than 5 NTU Less than 0.5 NTU 95% of samples each month	3.0	89.5%	Y	Soil runoff

REGULATED CONTAMINANT TEST RESULTS

Contaminant [code]	MCL	MCLG	Highest Detection	Range	Date of Sample	Violation	Likely Source of Contamination
Microbiological Contaminants							
2. Total Coliform Bacteria [1100] (% positive samples)	5%	0	0.0001	N/A	2/3/99	N	Naturally present in the environment
Radioactive Contaminants							
3. Alpha emitters [6000] (pCi/l)	15	0	1.3	ND-1.3	9/11/99	N	Erosion of natural deposits
Inorganic Contaminants							
4. Aeston (MFL)	7	7	0.195	ND-0.195	7/31/95	N	Decay of asbestos cement water main, erosion of natural deposits
5. Copper (1002)(ppm)	AL=1.3	1.3	0.08 (0.08 exceeds the AL)	ND-0.12	6/25/98	N	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives
6. Fluoride (1025)(ppm)	4	4	1.22	0.62-1.22	2/02/99	N	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
7. Nitrate (as Nitrogen) (1040)(ppm)	10	10	1.1	ND-1.1	3/24/99	N	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
8. Nitrite (as Nitrogen) (1041)(ppm)	1	1	0.13	ND-0.13	5/26/99	N	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides							
9. D(2-ethylhexyl) phthalate [2039] (ppb)	6	0	0.9	ND-0.9	2/24/99	N	Discharge from rubber and chemical factories

Volatile Organic Contaminants							
10. Carbon tetrachloride [2982] (ppb)	5	0	0.6	ND-0.6	12/2/99	N	Discharge from chemical plants and other industrial activities
**11. TTHM [total trihalomethanes] (ppb)	100 (80)*	0	87	18-140	2 nd Quarter 1999	N	By-product of drinking water chlorination
UNREGULATED CONTAMINANTS TEST RESULTS							
Contaminant [code]	Unit	Average	Range				
12. Bromodichloromethane [2943]	ppb	6.7	5.2-8				
13. Chloroform [2941]	ppb	54	21-86				
14. Dibromochloromethane (Chlorodibromo) [2944]	ppb	0.6	ND-0.6				

*11) Turbidity: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Turbidity violation due to start up of new filters.

**11) The current MCL for total trihalomethanes (TTHM) is 100 ppb but will change to 80 ppb in the year 2001. Although the TTHM level in our water is below the current MCL, it has been detected above the future MCL and we are including health effects language.

Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their liver, kidneys, or central nervous systems, and may have increased risk of getting cancer.

Drinking Water Quality Report