

City of Vienna Utility Board

ANNUAL DRINKING WATER QUALITY REPORT 2015

210 60th Street

Vienna, WV 26105

(304) 295-4543

PWS # 3305411

3/3/2016

Mayor: Randall C. Rapp

Public Works Director: Craig Metz

Recorder: Cathy Smith

City Council: Roger Bibbee, Jim Miracle, Bruce Rogers, Steve Stephens, Tom Azinger

Why am I receiving this report?

In compliance with the Safe Drinking Water Act Amendments, City of Vienna 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, 2015, or other test results if test period is not on a yearly cycle.

If you have any questions concerning this report, you may contact Craig Metz at The Public Works Dept. at (304) 295-4543. If you have any further questions, comments or suggestions, please attend any of our regularly scheduled Council meetings held on the 2nd and 4th Thursday of each month at City Hall, 609 29th St, Vienna, WV.

Where does my water come from?

Your water source is ground water from the Ohio River Valley Alluvium.

Source water assessment.

The eight wells that supply drinking water to the City of Vienna water system have a higher susceptibility to contamination, as indicated by past and present detections of manmade chemicals. This high susceptibility is due to the sensitive nature of the aquifer in which the drinking water well is located and the existing potential contaminate sources identified. Future contamination may be avoided by implementing protective measures. The report, which includes more detailed information, is available by calling our office during regular business hours or the WV Bureau for Public Health (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, and can also come from gas stations, urban storm water runoff, and septic systems.
- 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 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 contaminant.

- **MRL** - Minimum Reporting Level, or the level of a contaminant in drinking water before it has to be reported

Abbreviations that may be found in the table:

- **ppm** - parts per million or milligrams per liter - This corresponds to one second in 11.5 days.

- **ppb** - parts per billion or micrograms per liter - This corresponds to one second in 31.7 Years

- **N/A** - not applicable

City of Vienna routinely monitors for contaminants in your drinking water according to Federal and State laws. The tables that Follow show the results of our monitoring for contaminants.

Table of Test Results - Regulated Contaminants – City of Vienna						
Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants						
Copper*	N	.407	ppm	1.3	AL=1.3	Corrosion of household plumbing
Fluoride	N	.98 Annual Avg. Range 0.8 - 1.3	ppb	4	4	Erosion of natural deposits; water additive which promotes strong teeth;
Lead*	N	4.6	ppb	0	AL=15	Corrosion of household plumbing
Nitrate (as Nitrogen)	N	5.29 Annual Avg. Range 4.74 - 6.42	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
Chlorine	N	.99 Annual Avg. Range 0.7 - 1.6	ppm	4	4	Water additive used to control microbes
				MRDLG	MRDL	
Haloacetic Acids (HAAC5)	N	10.7	ppb	NA	60	By-product of drinking water disinfection

Total Trihalomethanes (TTHMs)	N	16.7	ppb	NA	80	By-product of drinking water disinfection.
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* Copper and lead samples were collected from area residences. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

During the reporting year for 2015 we conducted additional drinking water sampling under the Unregulated Contaminant Monitoring Rule (UCMR 3), A US EPA requirement. Our test results are listed below under “Unregulated Contaminants”. These results are available for your review at our office during regular business hours.

Unregulated Contaminants					
Contaminant	Violation Y/N	Level Detected	Unit of Measure	MRL	Likely Source of Contamination
Dichlorobenzene	N/A	109.28 Annual Avg. Range 98.7 -119	ppb	0.6	Discharge from industrial chemical factories
Bromofluorobenzene	N/A	94.27 Annual Avg. Range 90.7 - 96.9	ppb	0.1	Discharge from industrial chemical factories
Methyl-t-butyl Ether	N/A	108 Annual Avg. Range 101-115	ppb	-	It is used as an octane booster in gasoline, in the manufacture of isobutene and as an extraction solvent.
Dioxane	N/A	82.68 Annual Avg. Range 80.5 - 85.1	ppb	0.07	It is used as a solvent or solvent stabilizer in the manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos.
Chlorate	N/A	153.68 Annual Avg. Range 20.3 -227	ppb	20	Chlorate compounds are used in agriculture as defoliants or desiccants and may occur in drinking water related to use of disinfectants such as chlorine dioxide.
Chromium - 6	N/A	.077 Annual Avg. Range .031 - .180	ppb	0.03	Naturally-occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation

Chromium	N/A	.381 Annual Avg. Range .22 -1.2	ppb	0.2	See chromium-6 for use or source information
Strontium	N/A	181.54 Annual Avg. Range 96.9 -240	ppb	0.3	Naturally-occurring element; historic commercial use of strontium has been faceplate glass of cathode-ray tube televisions to block x-ray emissions
Vanadium	N/A	.205 Annual Avg. Range .20 - .21	ppb	0.2	Naturally-occurring elemental as vanadium pentoxide which intermediate and a catalyst
Molybdenum	N/A	1.2 Only One Sample Detected	ppb	1	It is a naturally-occurring element and is commonly used as molybdenum trioxide as a chemical reagent.
Perfluorooctylsulfonic acid - PFOS	N/A	.045 Annual Avg. Range .028 - .068	ppb	0.02	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluorooctanoic acid - PFOA	N/A	.076 Annual Avg. Range .020 - .129	ppb	0.02	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluorononanoic acid - PFNA	N/A	.023 Annual Avg. Range .014 - .029	ppb	0.02	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluorohexanesulfonic acid - PFHxS	N/A	.070 Annual Avg. Range .060 - .096	ppb	0.03	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluorooheptanoic acid - PFHpA	N/A	.013 Annual Avg. Range .009 - .015	ppb	0.01	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluorobutanesulfonic acid - PFBS	N/A	.134 Annual Avg. (Two Samples taken, both showed same results	ppb	0.09	Manmade chemical; used in products to make them stain, grease, heat and water resistant

WE ARE PLEASED TO REPORT THAT THE CITY OF VIENNA MET ALL FEDERAL AND STATE WATER STANDARDS FOR 2015. WE HAD NO VIOLATIONS DURING THIS TIME PERIOD.

Additional Information - All other water test results for the reporting year 2015 were all non-detects.

* 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 City of Vienna 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>.

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