

Consumer Confidence Report

Annual Drinking Water Quality Report of the City of Vienna for year 2017
The annual CCR report **WILL NOT BE MAILED** to each customer. Please call the waterplant at 618-658-3821 or City Hall at 618-658-5161 to request a copy to be mailed to you.

VIENNA

IL0870350

Annual Water Quality Report for the period of January 1 to December 31, 2017

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by VIENNA is Surface Water

For more information regarding this report contact:

Name Herb Hosfeldt or Dale Leggett

Phone 618-658-3821

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Source of Drinking Water
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 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, or 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 be the result of oil and gas production and mining activities.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

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 for contaminants in bottled water which must provide the same protection for public health.

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. We 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 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>.

Source Water Information

Source Water Name	Type of Water	Report Status	Location
CC10-MASTER METER FROM MILLSTONE WDFP IL1515050 TP04	GW	<u>A</u>	<u>Within the city limits on the east side</u>
IN70810 - BLOOMFIELD LAKE 3.5MI NE VIENNA	SW	<u>A</u>	<u>3.5 north East of the City of Vienna</u>
IN70811 - SIDE CHANNEL RESERVOIR	SW	<u>A</u>	<u>NE EDGE OF VIENNA</u>

Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The City Council meets on the 1st and 3rd Wednesday's of the month at 6:30 Pm. at City Hall, which is located at 205 North 4th Street, Vienna, IL. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at 618-658-3821. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>. If you would like a copy of the source water assessment please contact either the Waterplant at 618-658-3821 or City Hall at 618-658-5161 to request a copy to be mailed to you.

Source of Water: VIENNA Illinois. EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. Hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Causes of pollution to the lake include nutrients, siltation, suspended solids, and organic enrichment. Primary sources of pollution include agricultural runoff, land disposal (septic systems), and shoreline erosion. The city of vienna has (2) RAW water sources. Drinking water for the City of Vienna, Illinois (Facility No. 0870350) is supplied by the Vienna community water supply (CWS). Bloomfield Lake and the Vienna Reservoir act as the source of this drinking water.

2017 Regulated Contaminants Detected City of Vienna

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. coli Maximum Contaminant Level	E. coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1	0	N	N	Naturally present in the environment.

Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level or MCL: 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 or 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.

Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

na: not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

Water Quality Test Results

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MRDLG = 4	MRDL = 4	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2017	1.8	1 - 2	MRDLG = 4	MRDL = 4	ppm	N	N	Water additive used to control microbes.
Chlorite	2017	0.77	0.61 - 0.77	0.8	1	ppm	N	N	By-product of drinking water disinfection.
Halooacetic Acids (HAA5)	2017	13	6.4 - 17.7	No goal for the total	60	ppb	N	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	4	2.1 - 5.2	No goal for the total	80	ppb	N	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Arsenic	2017	1	0.896 - 0.896	0	10	ppb	N	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2017	0.0222	0.0222 - 0.0222	2	2	ppm	N	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2017	0.5	0.473 - 0.473	4	4.0	ppm	N	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Sodium	2017	12.6	12.6 - 12.6			ppm	N	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	

Combined Radium 01/06/2015 0.915 0.915 - 0.915 0 5 pCi/L N Erosion of natural deposits.
226/228

Gross alpha excluding 01/06/2015 0.287 0.287 - 0.287 0 15 pCi/L N Erosion of natural deposits.
radon and uranium

Turbidity

Limit (Treatment Technique) Violation Likely Source of Contamination

Highest single measurement 1 NTU 0.28 NTU N Soil runoff.

Lowest monthly % meeting limit 0.3 NTU 100% N Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Violations Table City of Vienna

Consumer Confidence Rule

The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of

Violation Type Violation Begin Violation End Violation Explanation

CCR ADEQUACY/AVAILABILITY/CONTENT	07/01/2017	2017	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water. this should not impact your health risk. For 2018 we will strive to include all of the required elements in the CCR report.
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The City of Vienna also has an Emergency connection to Millstone Water District, Facility # IL1515050. This connection is kept active to insure the pressure reducer and master meter works when needed. The city of Vienna uses Millstone Water on a limited basis, but does occasionally feed some of Vienna customers Millstone water. Because of that use we have included Millstone Water District's regulated contaminants table at the end of this CCR report, so customers can be aware of Millstones water quality. This section is Label Millstone.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	E. Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
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0	1 positive monthly sample.	1	0	0	N	Naturally present in the environment.
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Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
 Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
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Copper	2017	1.3	1.3	0.083	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
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Water Quality Test Results

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Level 1 Assessment:

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Maximum Contaminant Level or MCL:

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.

Water Quality Test Results Millstone PWD

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Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

na: not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2017	1.6	1 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2017	23	9.7 - 27.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	64	40.7 - 71.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	07/22/2015	3.46	3.46 - 3.46	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	07/22/2015	0.0262	0.0262 - 0.0262	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	07/22/2015	0.825	0.825 - 0.825	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Sodium	07/22/2015	9.25	9.25 - 9.25			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Gross alpha excluding radon and uranium	04/01/2015	3.8	3.8 - 3.8	0	15	pCi/L	N	Erosion of natural deposits.