

Versailles Water Works

PWSID #IN5269006

Town Of Versailles

2014 Annual Drinking Water Quality Report

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.

Our water source was surface water from Versailles Lake located on the northeast edge of town from January through June 2014 and then from July to December the Whitewater River Valley Aquifer treated well water purchased from Elrod Water Company, Inc. doing business as Hoosier Hills Regional Water District. Potential sources of contamination include agriculture run-off, fertilizers, pesticide, herbicides, fuel and chemical spills.

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Mr. David Hiatt at (812) 689-5130 or Fax (812) 689-7397. We want our valued customers to be informed about their water utility in order to make educated decisions regarding any potential health risks pertaining to the quality, treatment and management of your drinking water supply. Feel free to contact our office with any questions or concerns about your drinking water.

Versailles Water Works & Hoosier Hills Water 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 June 30th, 2014 for Versailles Water from surface water and the results of Hoosier Hills Water for the period of January 1st to December 31st 2014.

All substances that are required to be tested for by IDEM, FDA and EPA were performed. Only the substances that were detected for the year of 2014 are listed in the table below unless noted otherwise. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

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 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, stormwater runoff, and residential uses.
- Organic chemicals, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive materials, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that 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 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 (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.

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.

Please call our office if you have questions. If you wish to participate in decisions that may affect water quality, the regularly Scheduled Town board meetings are held the 1st Thursday of the month at 7:00 p.m. at 118 West Water Street, Versailles, Indiana 47042

We at Versailles 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.

Important Terms:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

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) - one part per billion corresponds to one minute in twenty years or a single penny in \$10,000,000.

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

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (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 (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 Disinfection Level (MRDL) - the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfection Level Goal (MRDLG) - the level of drinking water disinfection below which there is no known or expected risk to health. MRDLGs do not reflect benefits of use of disinfectants to control microbial contamination.

Health Effects:

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (TTHMs) and haloacetic acids (HAAs).

Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer

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

Lead:

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 line and home plumbing. Versailles Water 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 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 Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>

**TOWN OF VERSAILLES TEST RESULTS OF REGULATED & UNREGULATED
CONTAMINANTS FOR JANUARY-JUNE 2014 UNLESS NOTED OTHERWISE**

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
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Microbiological Contaminants - no Detects

1. Turbidity (lowest Percentage)**	N	100	%	n/a	TT	Soil runoff
2. Turbidity (maximum level)**	N	0.21	NTU	n/a	TT	Soil runoff

Radioactive Contaminants

3. Alpha Emitters (2002)	N	0.06	pCi/L	0	15	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
4. Beta/Photon Emitters (2002)	N	6.7	pCi/L	0	50	Decay of natural and manmade deposits of certain minerals that are radioactive and may emit a form of radiation known as Beta radiation
5. Radium (2004)	N	0.3	pCi/L	0	5	Erosion of natural deposits of certain minerals that are

Inorganic Contaminants

6. Copper (2002)	N	0.184	ppm	<u>AL</u> 1.3	<u>AL</u> 1.3	Corrosion of household plumbing systems; erosion of natural deposits
7. Fluoride	N	0.78	ppm	4	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
8. Lead (2012)	N	1.73	ppb	<u>AL</u> 0	<u>AL</u> 15	Corrosion of household plumbing systems; erosion of natural deposits; discharge from fertilizer and
9. Nitrate	N	1.654	ppm	10	10	Runoff from fertilizer use, leaching from septic tanks; Erosion of natural deposits.
10. Barium (2013)	N	0.22	ppm	2	2	Discharge from petroleum refineries, fire retardants; ceramics, electronics, solder
11. Mercury (2013)	N	0.17	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories, runoff from landscape and crops landscape and crops

Disinfection By-Products & Precursors

12. TTHM's Total Trihalomethanes	N	*RAA 26.8 Range 15.2-21.4	ppb	n/a	80	By-products of drinking water
13. HAA5's Halocetic Acids	N	*RAA 60.1 Range 46.7-65.5	ppb	n/a	60	By-products of drinking water
14. TOC Total Organic Carbon	N	2.96 avg. Range 2.18-3.74	ppm	n/a 0	n/a 15	Normally present in the environment

Unregulated Contaminants

15. Sodium	N	17.16	ppm	n/a	n/a	
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Town of Versailles Water Quality Report Notes:

We continually test for chlorine levels throughout the year. These levels ranged from 0.3 ppm to 2.0 ppm for the year 2014 with 1.84 ppm daily average. All dates shown on report are for 2014 unless indicated otherwise.

*RAA – Running Annual Average was calculated from data from 2013 and through June 2014. Not a violation because the Town of Versailles hadn't completed a full year of monitoring which affects the RAA calculation. Full year testing not completed due to changing water supply source to Hoosier Hills Regional Water.

**Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

The Town of Versailles, Indiana Waterworks switched from a surface water treatment facility to treated ground water supply (wells) with the purchase of water from Elrod Water Company, Inc. doing business as Hoosier Hills Regional Water District in July 2014. Below are test results (2014 Water Quality Report) supplied to The Town of Versailles by Hoosier Hills Regional District for water delivered to the Town of Versailles, Indiana

**HOOSIER HILLS REGIONAL WATER DISTRICT TEST RESULTS OF REGULATED
& UNREGULATED CONTAMINANTS FOR 2014 UNLESS NOTED OTHERWISE**

Microbiological Contaminants								
	Collection Date	MCLG	MCL T. coliform	Highest # of positives	Fecal or E. Coli MCL	Total # of Positive E. Coli or Fecals	Violation	Likely Source of Contamination
Total Coliform	2014	0	1 positive sample / mo.	0	0	0	N	Naturally present in the environment.

Radioactive Contaminants								
	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/positron emitters	6-17-08	4.1pCi/L	4.1-4.1	0	50	pCi/l	N	Decay of natural and man-made deposits
Uranium	5-18-10	0.7	0.7-0.7	0	30	ug/l	N	Erosion of natural deposits

Inorganic Contaminants								
	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely source of Contamination
Barium	8 - 14 -12	0.268	0.268 – 0.268	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	8 - 3 – 06	36.7	36.7 – 36.7	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2014	1.42	0.37-1.42	4	4.0	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	2014	1.546	1.546-1.546	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	2012	9.8	9.8	unregulated	unregulated	ppm	N	Naturally present in the environment.

Lead and Copper								
	Date Sampled	MCLG	Action Level	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2014	1.3	1.3	0.113	0	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2014	0	15	1.5	0	ppb	N	Corrosion of household plumbing systems, erosion of natural deposits

Disinfection By-Products								
	Collection Date	Highest Level Detected	Range of levels detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
TTHM Total Trihalomethane	2014	14.4	5.9-14.4	No goal for the total	80	ppb	N	By product of drinking water chlorination.
Haloacetic Acid HAA5	2014	14.1	7.0-14.1	No goal for the total	60	ppb	N	By product of drinking water chlorination.

<i>Chlorine-total HHRWD</i>	<i>2014</i>	<i>1.72</i>	<i>0.41-1.72</i>	<i>4</i>	<i>4</i>	<i>ppm</i>	<i>N</i>	<i>Water additive to control microbes.</i>
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