# **Greenville** Water Utility

### ANNUAL WATER QUALITY REPORT 2016



#### Why are there contaminants in my drinking water?

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

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 (1-800-426-4791).

#### **Definitions:**

- · Non-Detects (ND) Laboratory analysis indicates that the contaminant is not present.
- pCi/I picocuries per liter (a measure of Radioactivity)
- Parts per million (ppm) or Milligrams per liter 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.
- Maximum Contaminant Level The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set close to the MCLG's 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.
- Maximum Residual Disinfectant Level (MRDL)- The highest level of a disinfectant allowed in drinking water.
- Maximum Residual Disinfectant Level Goal (MRDLG)- The level of a drinking water disinfectant below which there is no known or expected risk to health.
- Treatment Technique (TT)- A required process intended to reduce the level of a contaminant in drinking water.
- ALG (Action Level Goal)- The level on a contaminant in drinking water below which there is no known or expected risk to health. ALGs allows for a
  margin of safety.
- Action Level (AL)- The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- · Variances & Exemptions- State or EPA permission not to meet an MCL or treatment technique under certain conditions.

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

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 chemical, 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.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

#### **Special Note On 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 lines and home plumbing. Greenville 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 the Safe Drinking Water Hotline or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

#### Summary:

Greenville Water Utility meets or surpasses all Federal and State drinking water standards. We did not have any violations during the calendar year of 2016. This report was prepared by Steven Schmitt, Water Supt., with technical assistance provided by IDEM and other Water Associations. If you have any questions concerning this report please call the Greenville Water Office at 812-923-9821. We encourage you to participate and give us your feedback. Office hours are Monday through Friday between the hours of 8:00 A.M. to 4:30 P.M. at the Greenville Town Hall located at 9706 Clark Street located in Greenville, Indiana. Our regularly scheduled board meetings are held on the 2nd Monday of every month at 7:00 P.M. at the Greenville Town Hall.

#### Sources of Water:

Edwardsville Water Co. - ground water wells located in the Ohio River Basin in Southwest Harrison County.

Indiana American Water uses ground water wells which are located in the Ohio River Basin in Southwest Clark County, IN.

Floyds Knobs Water purchases from Indiana American.

#### Is Our Water Safe?

This brochure is a snapshot of the quality of the drinking water that we provided last year. Included as part of this report are details about where the water that you drink comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and Indiana standards. We are committed to provide you with all the information that you need to know about the quality of the water you drink.

#### Please Share This Information:

Large water volume customers (like apartment complexes, hospitals, schools, and/or industries) are encouraged to post extra copies of this report in conspicuous locations or to distribute them to your tenants, residents, patients, students, and/or employees. This "good faith" effort will allow non-billed customers to learn more about the quality of the water they consume.

#### **Our Watershed Protection Efforts:**

Our water system is working with the community to increase awareness of better waste disposal practices to further protect the sources of our drinking water. We are also working with other agencies and with local watershed groups to educate the community on ways to keep our water safe. (Edwardsville Water Co.)

Greenville Water Company Test Results - IN5222004												
Regulated Contaminants												
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Level Detected	els MCLG or MR (Chlorine		RDLG 9)	MCL or (Chlor	MRDL ine)	Units	Violatio Y/N	ons? I	Likely Source of Contamination
Haloacetic Acids (HAA5)	2016	2.2	2.2 - 2.2		No goal for the total		60	60		N		By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	14	14 - 14		No goal for the total		80		ppb	N		By-product of drinking water disinfection.
Chlorine	2016	1	1-1	1-1 MRDLG		MRDLG = 4		= 4	ppm	N		Water additive used to control microbes.
Lead and Copper*	Collection Date	MCLG	Action Level (AL)	90th F	h Percentile # Sit		es over AL	Units	Vio	lations? Y/N	Likely	Source of Contamination
Copper	2015	1.3	1.3		0.65		0	ppm		N	Erosic of hou	n of natural deposits; Leaching from wood preservatives; Corrosion sehold plumbing systems.
Lead	2015	0	15		5		0	ppb		N	Corros	sion of household plumbing systems; Erosion of natural deposits.

Edwardsville Water Company Test Results - IN5222001													
Regulated Contaminants													
Inorganic Contaminants		Collec Dat	ction te	on Highest Level Detected		Range of Levels Detected	MCLG	MCL		Units	Violations? Y/N	Likely Source of Contamination	
Chromium		201	4		1.0	1-1	100	100 ppb M		N	Discharge from steel and pulp mills; Erosion of natural deposits.		
Fluoride		201	14		0.796	0.796-0.796	4	4 4		ppm	Ν	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.	
Nitrate (measured as Nitrogen	n)	201	16		1.25	1.18 - 1.25	10	10		ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
Sodium		201	4		19.37	NA	NA	NA	NA ppm		N	Naturally occurring.	
Volatile Organic Contaminants	Coll D	ection Date	Hig Le Dete	hest evel ected	Range of Levels Detected	MCLG	ICLG MCL		S Violations? Like		Likely Source of Cor	ikely Source of Contamination	
Cis-1,2- Dichloroethylene	2	014	0	).7	0.7-0.7	70	70	ppb		Ν	Discharge from industrial chemical factories.		
Radioactive Contaminants		Collec Dat	ction te	Hig D	hest Level letected	Range of Levels Detected	MCLG	MCL		Units	Violations? Y/N	Likely Source of Contamination	
Beta/photon emitters*		200	)8		3.1	3.1-3.1	0	4		mrem/yr	N	Decay of natural and man-made deposits.	
Gross Alpha (excluding Rado Uranium)	on and	200	)8		2.1	2.1-2.1	0	15	15		N	Erosion of natural deposits.	
Uranium		200	)8		0.8	0.8-0.8	0	30		ug/l	N	Erosion of natural deposits.	

\*The MCL for Beta/photon emitters is written as 4 mrem/year. EPA considers 50 pCi/L as the level of concern for beta emitters.

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

Indiana-American Water Company Test Results - IN5210005											
							Regulated	Conta	minants		
Inorganic Contaminants	Collection Date	High	est Level	Level Range of Level Detected		MCLG	MCL	Units	Violations? Y/N	Likely Sources of Contamination	
Fluoride	2015		0.7	0.7-0	).7	4	4	ppm	N	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.	
Nitrate (measured as Nitrogen)	2016		0.23	0.23 -	0.23	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
Radioactive Contaminants	Collection Date	High De	hest Level Range of Levels M Detected Detected		MCLG	MCL	Units	Violations? Y/N	Likely Sources of Contamination		
Beta/photon emitters*	2008		2.6	2.6-2	2.6	0	4	mrem/yr	N	Decay of natural and man-made deposits.	
Uranium	2008		0.5	0.5-0	).5	0	30	ug/l	Ν	Erosion of natural deposits.	
*The MCL for Beta/photon emitter	s is written as 4	mrem/ye	ear. EPA cons	iders 50 pCi/l	as the leve	I of concern fo	r beta emitters.				
Coliform Bacteria											
Maximum Contaminant Level Goal	Total coli Maximu Contaminan	num Highest No. Positive		t No. of itive	Fecal Coliform or E. Coli Maximum Contaminant Level		Total No. of Positive E. Coli or Fecal Coliform Samples		Violations? Y/N	Likely Source of Contamination	
0	5% of monthly are posit	samples ive	1.1	9%			0		Ν	Naturally present in the environment.	
							Unregulat	ed Sub	stances		
Unregulated Contaminant	nants Year Sampled Level Found				(	Range Low-High)		Typical Source			
Hardness (ppm)		2016		179			156 - 274		Naturally occurring.		
Molybdenum (ppb) <sup>1</sup>		2014		2.4			2.4 - 2.4		Naturally-occurring e trioxide used as a cl	element found in ores and present in plants, animals and bacteria; commonly used form molybdenum hemical reagent.	
Sodium		2015	2015 24.2 NA			Naturally occurring.					
Strontium (ppb) <sup>1</sup>		2014		225.1	225.1 215.7 - 225.1 Naturally occurring element; historically, commercial use of strontium has be televisions to block x-ray emissions.		element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube x-ray emissions.				
Sulfate (ppm)		2015		53.1			NA		Erosion of natural de	eposits.	
1, 4-Dioxane (ppb) <sup>1</sup>		2014 0.28 0.7		0.19 - 0.28		Cyclic aliphatic ether; used as solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos.					

Unregulated Substances											
Unregulated Contaminants	Year Sampled	Level Found	Range (Low-High)	Typical Source							
Molybdenum (ppb)1	2014	2.2	NA	Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide used as a chemical reagent.							
Strontium (ppb) <sup>1</sup>	2014	219.0	204.0 - 219.0	Naturally occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.							

<sup>1</sup>Monitored under UCMR3, the EPA has not set drinking water standards for these contaminants.



Greenville Water Utility P.O. Box 188 Greenville, IN 47124

### **EXCITING NEWS:** Coming July 1, 2017

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#### Introduction:

Greenville Water Utility is pleased to present a summary of the quality of our drinking water provided to you during the last year (2016). The Safe Drinking Water Act (SDWA) requires that water companies (regardless of size) issue an annual Consumer Confidence Report to their customers, in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks the water testing and treatment are designed to prevent. Greenville Water Utility is committed to providing you with a safe and reliable water supply.

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