



## Water Department 2011 Water Quality Report

### 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.

### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as people with cancer undergoing chemotherapy, people who have undergone an organ transplant, people with HIV/AIDS or other kind of 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 has set guidelines with appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants which are available from the Safe Drinking Water Hotline at (800) 426-4791.

### 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 these contaminants does not necessarily indicate that the water poses a health risk or that it is not suitable for drinking. More information about contaminants and their potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

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, or can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in the raw, untreated water may 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 that result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, and mining or farming operations.
- Pesticides and Herbicides, which may come from a variety of sources, such as agriculture, stormwater runoff, and residential uses.
- Organic Chemical Contaminants, including synthetic and volatile organic chemical, which are by-products of industrial processes and petroleum production operations, and can also result from gas stations, urban stormwater runoff, and septic systems.
- Radioactive Contaminants, which can be naturally-occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants that may be present in the water provided by public drinking water systems. We are required to treat our water according to EPA's regulations. Moreover, FDA regulations establish limits for contaminants that may be present in bottled water, which must provide the same level of health protection for public health.

### WATER QUALITY DATA

#### For Public Water System IN5217003

The table below lists all the contaminants that we detected during the 2011 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise indicated, the data presented in this table is from testing done between January 1 and December 31, 2011. The Indiana Department of Environmental Management (IDEM) requires us to monitor for certain contaminants at a frequency less than once per year because the concentrations of these contaminants are not expected to vary significantly from one year to another. Some of the data, though representative of the water quality, may however be more than one year old.

<i>Inorganic Contaminants</i>										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	AboveAL # Repeats	Violates	Likely Sources
6/21/2006	Barium	2	2	mg/l	0.528	0.518	0.538		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Valid until 12/31/2008	Copper (90th Percentile)	1.3 (AL)	1.3	mg/l	0.147				No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
6/21/2006	Fluoride	4	4	mg/l	0.94	0.93	0.95		No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Valid until 12/31/2008	Lead (90th Percentile)	15 (AL)	0	ug/l	5				No	Corrosion of household plumbing systems; Erosion of natural deposits
11/2011	Nitrate (as N)	10	10	mg/l	<.50	<.50	<.50		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
11/2011	Nitrate+nitrite (as N)	10	10	mg/l	<.50	<.50	<.50		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<i>Disinfection Byproducts &amp; Precursors</i>										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	AboveAL # Repeats	Violates	Likely Sources
8/18/2011	Total Haloacetic Acids (haa5)	60		ug/l	13.5	13.5	13.5		No	By-product of drinking water chlorination
8/18/2011	Total Trihalomethanes (tthm)	80		ug/l	48	48	48		No	By-product of drinking water chlorination
<i>Synthetic Organic Contaminants</i>										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	AboveAL # Repeats	Violates	Likely Sources
7/2008	Di(2-ethylhexyl)-Phthalate	6	0	ug/l	<0.06				No	Discharge from rubber and chemical factories
<i>Radiological Contaminants</i>										
Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	AboveAL # Repeats	Violates	Likely Sources
6/21/2006	Gross Alpha, Inclndg Ra, Exclcd	15	0	pci/l	4.85	4.7	5		No	Erosion of natural deposits.
6/21/2006	Gross Beta Particle Activity	50	0	pci/l	5.55	4.9	6.2		No	Decay of natural and man-made deposits.
6/21/2006	Radium, Combined (226, 228)	5	0	pci/l	1.46	1.2	1.72		No	Erosion of natural deposits.
6/21/2006	Radium-226	5	0	pci/l	1.01	0.82	1.2		No	Erosion of natural deposits.
6/21/2006	Radium-228	5	0	pci/l	0.805	0.71	0.9		No	Erosion of natural deposits.

**Unregulated Contaminants**

Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	AboveAL # Repeats	Violates	Likely Sources
6/21/2006	Sodium	n/a		mg/l	14.15	13.6	17.7		No	Erosion of natural deposits; Leaching
2/11/2003	Sulfate	n/a		mg/l	32				No	

**Residual Disinfectant**

Date	Contaminant	MCL	MCLG	Units	Result	Min	Max	AboveAL # Repeats	Violates	Likely Sources
2011	Chlorine Residual	4 MRDL		mg/l	.90	.20	1.31		No	Water additive (disinfectant) used to control microbiological organisms.

**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. Our system 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 <http://www.epa.gov/safewater/lead>.*

**Special Note on Gross Beta:**

*The MCL for Gross Beta is 4mrem/year; however, EPA considers 50 pCi/l to be the level of concern for Beta particles.*

Some of the terms and abbreviations used in this report are:

- MCL: Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water.
- MCLG: Maximum Contaminant Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health.
- MRDL: Maximum Residual Disinfectant Level, the highest level of disinfectant allowed in drinking water.
- MRDLG: Maximum Residual Disinfectant Level Goal, the level of drinking water disinfectant below which there is no known or expected risk to health.
- AL: Action Level, the concentration of a contaminant which, when exceeded, triggers treatment or other requirements or action which a system must follow.
- n/a: either not available or not applicable.
- ND: No detection.
- ppm / mg/l: Parts per Million / Milligrams Per Liter, corresponds to one minute in 2 years or 1¢ in \$10,000.
- ppb / ug/l: Part per Billion / Micrograms per Liter, corresponds to one minute in 2000 years or 1¢ in \$10,000,000.
- pCi/l: picocuries per liter, a measure for radiation
- TT: Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. 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.

**Wellhead Protection**

Wellhead Protection is a program designed to protect our drinking water from contamination by managing land-use activities and potential contaminant sources in areas that overlie our local aquifer. To protect this groundwater resource, the City of Butler has developed a wellhead protection plan. This community-based plan will help protect our source of drinking water through a program of pollution prevention.

The source of Butler's drinking water is groundwater supplied by 2 wells. We ask that our customers help us protect this groundwater resource, which is the heart of our community, our way of life and our children's future. **If you live or work in the corporate limits of Butler in areas west of Broadway Street, then you are likely within the boundaries of the City's wellhead protection area.** Included in this year's report is information on what you and your family can do to preserve this resource and where you can find additional information.

**Protecting our groundwater resource**

When common household products that contain hazardous or toxic substances are dumped down the drain, flushed down the toilet, and spilled or poured on the ground, these substances can contaminate the underlying groundwater aquifer, your drinking water supply.

Potential pollutants can come from pesticide and fertilizer use, a variety of household chemicals including cleaners, glues, detergents, paint and paint thinners, waste oil, gasoline, antifreeze and prescription drugs.

**What you can do...**

As a citizen, you can help protect our drinking water supply by doing the following:

- Read labels and follow all directions on household chemicals and any other hazardous products used around your home or business. Report petroleum and chemical spills by calling 911.
- Clean up your property. Properly dispose of any outdated or unused household chemicals stored in your basement, garage or barn. Household hazardous wastes can be properly disposed of at the Northeast Indiana Solid Waste Management District's Ashley facility located at 2320 West 800 South (located on State Road 4, one mile east of I-69). For more information on this recycling program, log onto [www.niswmd.org](http://www.niswmd.org) or call (800) 777-5462.
- Learn more about groundwater protection and your drinking water source by contacting the Indiana Department of Environmental Management at (317) 308 -3388 or visit their website at <http://www.in.gov/idem/>.

**Need More Information?**

Thank you for your cooperation in helping protect our groundwater resource for future generations. If you have any questions about anything in this report or protecting our groundwater, please contact Mr. Ted Miller at (260) 868-5881. A copy of the Wellhead Protection Plan is available for review during normal business hours at the Water Superintendents Office, 695 E Green St, or the City Utility Office at 215 S Broadway in Butler. You may also attend the regularly scheduled meetings on the first and third Monday of each month at 7PM at the Butler City Hall, 215 S Broadway, Butler, IN 46721.