

# Consumer Confidence Report, South Bend Water Works Water Quality Report 2014

## **Is my drinking water safe?**

The South Bend Water Works has met all of the Environmental Protection Agency's (E.P.A.) standards and regulations. In 2014, thousands of tests were performed to ensure safe drinking water.

## **Where does my drinking water come from?**

The South Bend Water Works utilizes groundwater from the Hilltop and the Saint Joseph aquifers as its drinking water source. In 2014, 30 wells, 5 filtration plants, 4 pumping facilities, and 6 booster stations were used to supply drinking water to our customers. The 30 wells range from 103 to 237 feet below the ground surface. A wellhead protection program has been implemented by the South Bend Water Works to ensure the quality of the drinking water source. Wellhead protection focuses on groundwater protection and pollution prevention.

## **Why are there any contaminants detected in my drinking water?**

Drinking water, including bottled water, may reasonably be expected to contain trace amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Contaminants that may be present in source water before we treat it 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 and residential uses.

**Radioactive contaminants**, which are naturally occurring.

**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. 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. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline (1-800-426-4791) or contacting their web site at <http://www.epa.gov/safewater>  
SDWIS #: IN5271014

## **Educational Language**

Some people may be more vulnerable to trace amounts of contaminants in drinking water than the general population. Immuno-compromised persons such as people undergoing chemotherapy for cancer, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some elderly or infants can be particularly at risk from infections. These people should seek drinking water advice from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Nitrate in drinking water at levels above 10 parts per million (ppm) is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agriculture activity. If you are caring for an infant, you should ask for advice from your health care provider.

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 are responsible for providing high quality drinking water, but we cannot control the variety of material 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>.

## **How can I get involved?**

The City of South Bend Board of Public Works meets on the second and fourth Tuesday of each month at 9:30 a.m. These meetings are open to the public and held on the thirteenth floor of the County-City Building located at 227 West Jefferson Boulevard.

**Este informe contiene informacion muy importante. Tradúzcalo o hable con algien que lo entienda bien.**

**For more information regarding South Bend Water Works and their drinking water, please call the water quality department at 235-9670 or find it at the City of South Bend homepage at**

[http://www.southbendin.gov/city/departments/water\\_works/water\\_quality.asp](http://www.southbendin.gov/city/departments/water_works/water_quality.asp)

## **2014 Water Quality Data**

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water.

**Maximum Contaminant Level Goal (MCLG)** - The level of a contaminant in drinking water below which there is no known or expected risk to health.

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

**ppm (parts per million)** - The equivalent of one minute in 2 years, or one penny in \$10,000.

**ppb (parts per billion)** - The equivalent of one minute in 2,000 years, or one penny in \$10 million.

**pCi/L (picocuries per liter)**

**n.d.** not detected

**n/a** - Not applicable

<b>Contaminant</b>	<b>MCLG</b>	<b>MCL</b>	<b>Range</b>	<b>Source of Contaminant</b>
<b>Microbial</b>				
Total Coliform	0%	5%	n.d. – 1.3%	Naturally present in the environment
<b>Regulated Organics</b>				
Total Trihalomethanes (TTHM) (ppb)	0	80	n.d. – 30.2	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	0	60	n.d. – 6.2	By-product of drinking water disinfection
Cis-1,2 –Dichloroethylene (ppb)	70	70	n.d. – 4.5	Discharge from industrial chemical factories
Tetrachloroethylene (ppb)	0	5	n.d. – 0.8	Discharge from factories and dry cleaners.
<b>Unregulated Organics</b>				
Bromodichloromethane (2012) (ppb)	n/a	n/a	n.d. – 2.0	Disinfection by-product
Bromoform (2012) (ppb)	n/a	n/a	n.d. – 1.0	Disinfection by-product
Chloroform (2012) (ppb)	n/a	n/a	n.d. – 1.0	Disinfection by-product
Chlorodibromomethane (2012) (ppb)	n/a	n/a	n.d. – 2.4	Disinfection by-product
1,1 Dichloroethane (2012) (ppb)	n/a	n/a	n.d. – 0.6	Solvent, degreaser, and fumigant
<b>Regulated Inorganics</b>				
Arsenic (ppb)	0	10	n.d. – 3.8	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm)	2	2	.035 – .25	Erosion of natural deposits, discharge from metal refineries, Discharge of drilling wastes.
Chromium (ppb)	100	100	n.d. – 3.4	Erosion of natural deposits; discharge from steel and pulp mills.
Fluoride (ppm)	4	4	0.1 – 2.5*	Water additive which promotes strong teeth; Erosion of natural deposits
Nitrate (ppm)	10	10	n.d. – 7.0	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium (ppb)	50	50	n.d.- 2.5	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
<b>Regulated Radioactive 2010</b>				
Gross alpha excluding radon and uranium (pCi/L)(2010)	0	15	n.d.- 1.9	Erosion of natural deposits
Beta/photon emitters (pCi/L)(2010)	0	50	n.d. – 4.9	Decay of natural & man-made deposits
Uranium (2010) (ppb)	0	30	n.d. - 1.6	Erosion of natural deposits

2013 Lead and Copper Sampling Event					
Contaminant	MCLG	AL	Range of detections	90 <sup>th</sup> percentile	Source
Copper (ppb)	1300	1300	n.d. - 1200	450	Corrosion of household plumbing
Lead (ppb)	0	15	n.d. - 20	2.5	Corrosion of household plumbing

Total Coliform is expressed as a percentage of the total number of samples taken for a month that indicated the presence of Total Coliform.

Lead and Copper compliance is measured in the 90<sup>th</sup> percentile.

\*"This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine (9) years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than two (2) milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by The City of South Bend Water Works had a fluoride concentration of 2.5 mg/l on October 27<sup>th</sup>, 2014. The City of South Bend Water Works monitors fluoride routinely at several locations. A concentration greater than 2.0 mg/l was observed at one filtration plant for a short period of time on the 27<sup>th</sup> of October. The annual average for that filtration plant was 0.7 mg/l based on 247 samples collected in 2014. Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine (9) should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water. Drinking water containing more than four (4) mg/L of fluoride (the U.S. Environmental Protection Agency's and Indiana Department of Environmental Management's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than four (4) mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed two (2) mg/l because of this cosmetic dental problem. The City of South Bend Water Works maintains a target fluoride concentration of 0.7 mg/l, and any concentration change is promptly corrected. The City of South Bend Water Works has implemented more frequent monitoring procedures to avoid any opportunity for elevated fluoride concentration. For more information, please call Rocco Sergio of The City of South Bend Water Works at 574-235-9670. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-867-3435."