



# Anderson Water Utility

THOMAS A. BREWER, SUPERINTENDENT

PSWID 5248002 - 550 Baxter Road • Anderson, Indiana 46011 • Phone 765.648.6420 • Fax 765.648.6435

## 2011 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. We are committed to ensuring the quality of your water. Our water source is supplied by deep ground water supply wells: Our wells draw from the aquifer in the Indian Creek in Lafayette Township, and the White River and Killbuck Creek area.

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. Tom Brewer, Superintendent at (765) 648-6420. We want our valued customers to be informed about their water utility. Feel free to contact our office with any questions or concerns about your drinking water.

The Indiana Department of Environmental Management has performed a Source Water Assessment (SWA) for the ground water wells serving our public water supply system. The SWA rated Anderson Water Utility water as being highly susceptible to potential contaminant sources within the Well Head Protection Area. If you have any questions regarding the SWA, please contact Mr. Tom Brewer, Superintendent at (765) 648-6420.

Anderson Water Utility routinely monitors for contaminants in your drinking water according to Federal and State laws. The table provided in this report shows results from our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2011. The year of testing is noted for constituents detected prior to 2011 as part of the Standardized Monitoring Framework established by the Indiana Department of Environmental Management (I.D.E.M.).

As you can see by the table, our system had no violations. All testing required by IDEM and EPA was performed. 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.

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 or 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 board meetings are held every Tuesday at 3:00 p.m. at Anderson City Hall, 120 East 8<sup>th</sup> Street, Anderson, IN 46016.

We at Anderson Water Utility 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.

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.

Picocuries 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 a water system must follow.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" is 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 "Goal" is 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) - highest level of disinfection allowed in drinking water

Maximum Residual Disinfection Level Goal (MRDLG) - level of drinking water disinfection below which there is no known or expected risk to health

**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 (HAA5s). Some people who drink water containing these byproducts 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.

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. Anderson Water Utility 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 thirty (30) seconds to two (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>.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
<b>Total Coliform Bacteria</b>	N	1.41% highest month; Avg. 0.23%	%	n/a	n/a	Naturally present in the environment.
<b>Radioactive Contaminants</b>						
<b>Gross Alpha (2009)</b>	N	High: 0.30 Range: 0.0-0.30	PCi/L	0	15	Decay of natural and man-made deposits
<b>Gross Beta (2009)</b>	N	High: 3.6 Range: 2.1-3.6	PCi/L	0	50	Erosion of natural deposits.
<b>Radium-228 (2009)</b>	N	High: 0.4 Range: 0.0-0.4	PCi/L	0	5	Erosion of natural deposits.
<b>Combined Uranium (2009)</b>	N	High: 0.7 Range: 0.0-0.7	ppb	0	30	Erosion of natural deposits.
<b>Inorganic Contaminants</b>						
<b>Barium</b>	N	High: 0.22 Range: 0.12 – 0.22	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Copper (2010)</b>	N	90 <sup>th</sup> Percentile: 0.137	ppm	<u>AL</u> 0	<u>AL</u> 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Fluoride</b>	N	Average: 0.91 Range: 0.82-1.01	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
<b>Lead (2010)</b>	N	90 <sup>th</sup> Percentile: 0.50	ppb	<u>AL</u> 0	<u>AL</u> 15	Corrosion of household plumbing systems; erosion of natural deposits
<b>Arsenic</b>	N	High: 0.001 Range: ND – 0.001	ppb	0	10	Erosion of natural deposits; discharge from refineries and factories; runoff from cropland
<b>Nitrate</b>	N	Average: 0.72 Range: 0.53 - 0.90	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Nitrite as Nitrogen (2006)</b>	N	Average: 0.01 Range: ND-0.02	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Synthetic Organic Contaminants including Pesticides and Herbicides(No Detects)</b>						
<b>Volatile Organic Contaminants</b>						
<b>1,2 Dichloroethylene, cis</b>	N	High: 0.7 Range ND - 0.7	ppb	n/a	80	Discharge from Industrial Sources
<b>Trichloroethylene</b>	N	High 2.0 Range ND – 2.0	ppb	n/a	n/a	Discharge from Industrial Sources
<b>Disinfection By-Products &amp; Precursors</b>						
<b>TTHM's (Total Trihalomethanes)</b>	N	*RAA: 35.6 Range: BDL-45.8	ppb	n/a	80	Disinfection by-products
<b>HAA5's (Total Haloacetic Acids)</b>	N	*RAA: 10.4 Range: 3.6-13.9	ppb	n/a	60	Disinfection by-products
<b>Treated Water TOC</b>	N	Average: 1.07 Range: 0.96-1.23	ppm	n/a	n/a	Naturally present in the environment
<b>Unregulated Contaminants</b>						
<b>Sodium</b>	N	Average: 16.02 Range: 7.99-24.06	ppm	n/a	n/a	Naturally present in the environment

We continually test for chlorine levels throughout the year. The average chlorine level was 0.32 ppm, and ranged from 0.28 to 0.38 ppm for the year 2011.

\*RAA – Running Annual Average was calculated from data from the second quarter of 2010 through the end of 2011.