2011 Annual Drinking Water Quality Report - Platteville Water & Sewer Utility

We're pleased to present to you the 2011 Annual Drinking Water Quality 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.

The sources of drinking water, both tap 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. Our water source is supplied by groundwater pumped from 3 wells out of the Sandstone Aquifer. All wells are between 900 and 1000 feet below ground. One item that comes up regularly is what the Hardness of the water in Platteville is. It is generally 325 mg/l (ppm) or 19 Grains/gallon. This latter figure is generally used to determine the settings for a water softener.

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 stormwater 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 stormwater runoff and residential uses.
- 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 stormwater runoff and septic systems.
- Radioactive contaminants, 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. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

If you have any questions about this report or concerning your water utility, please contact **Irv Lupee at 348-9741 ext. 2248.** I'm proud to report that our drinking water is safe and meets federal and state requirements. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Water & Sewer Commission meetings. They are held on the second Monday of every month at 4:00 PM in the Common Council Chambers of City Hall.

The Platteville Water and Sewer Utility routinely monitors for contaminants in your drinking water according to Federal and State laws. In the past year we have sampled for 2 Disinfection Byproducts, 16 Inorganic Contaminants, 3 Microbiological Contaminants, 4 Radioactive Contaminants, 25 Synthetic Organic Contaminants including Pesticides and Herbicides, 34 Unregulated Contaminants and 20 Volatile Organic Contaminants. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2011. A date in parenthesis in the table indicates the date of testing, if done prior to 2011.

In this table there are terms and abbreviations you might not be familiar with. To better understand these terms we've provided the following definitions:

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

Not Applicable (N/A) – there are no standards for this contaminant.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years.

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

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) 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 - The "Goal" (MCLG) 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.

| TEST RESULTS | | | | | | | | | | |
|---------------------------------------|------------------|----------------|--------------|------|--|---|--|--|--|--|
| Contaminant (units) | Violation Y/N | Level Found | Range | MCLG | MCL | Typical Source of Contamination | | | | |
| Disinfection Byproducts | | | | | | | | | | |
| 1. TTHM (ppb) Total Trihalomethanes | No | 3.3 (max) | 0.4 – 3.3 | 0 | 80 | By-product of drinking water chlorination | | | | |
| Microbiological Contaminants | | | | | | | | | | |
| 2. Coliform (TCR) | No | 1 positive | NA | 0 | Presence of coliform bacteria in <= 5% of monthly samples | Naturally present in the environment | | | | |
| Radioactive Contaminants | | | | | | | | | | |
| 3. Combined Uranium (ppb) (2/28/2008) | No | 0.4(max) | 0.1 – 0.4 | 0 | 30 | Erosion of natural deposits | | | | |
| 4. Gross Alpha, Excl R & U (pCi/L) | No | 8.1 (max) | 8.1 | 0 | 15 | Erosion of natural deposits | | | | |
| 5. Gross Alpha, Incl R & U (pCi/L) | No | 8.1 (max) | 8.1 | N/A | N/A | Erosion of natural deposits | | | | |

| 6. Gross Beta Particle Activity (pCi/L) (2/28/2008) | No | 4.8 (max) | 1.9 – 4.8 | N/A | N/A | Decay of natural and man-made deposits. MCL units are in millirem/year. Calculation for compliance with MCL is not possible unless level found is greater than 50 pCi/L. |
|--|----------|----------------|------------------|---------|-------------|--|
| 7. Radium (226 + 228) (pCi/L) | No | 4.5 (max) | 4.5 | 0 | 5 | Erosion of natural deposits |
| Inorganic Contaminants | | | | | | |
| 8. Arsenic (ppb) | No | 4.0 (max) | ND -4 | N/A | 10 | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| 9. Barium (ppm) | No | 0.069 (max) | .047 – .069 | 2 | 2 | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| 10. Copper (ppm) 0 of 30 results were above the action level | No | 0.109 | .0441 - .3280 | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| 11. Fluoride (ppm) | No | 5.3 * | 0.1 – 10.4 | 4 | 4 | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| 12. Lead (ppb) 3 of 30 results were above the action level | * | 8.11 | | 0 | AL=15 | Corrosion of household plumbing systems; Erosion of natural deposits |
| 13. Mercury (ppb) | No | .2 (max) | ND2 | 2 | 2 | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; runoff from cropland |
| 14. Nitrate (NO3 – N) (ppm) | No | 0.26 (max) | ND – 0.26 | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits |
| 15. Sodium (ppm) | No | 32.30 (max) | 1.46 – 32.30 | N/A | N/A | N/A |
| 16. Thallium (ppb) | No | .3 (max) | ND3 | 0.5 | 2 | Leaching from ore-processing sites; Discharge from electronics, glass and drug factories |
| No detectable amounts we | | | | | Contamin | ants: |
| Antimony, Beryllium, Cadmir Synthetic Organic Contar | | | | | nicides – N | None Detected |
| Volatile Organic Contam | | | | anu men | iciucs - I | TORC Detected |
| Unregulated Contaminan | | Tione Det | ceicu | | | |
| 16. Bromodichloromethane (ppb) | No | 0.94 (max) | ND – 0.94 | N/A | N/A | N/A |
| 17. Chloroform (ppb) | No | 1.64 (max) | .08 – 1.64 | N/A | N/A | N/A |
| 18. Dibromochloromethane (ppb) | No | .68 (max) | .3168 | N/A | N/A | N/A |
| 10 C 1C () | . | 20.40 | 12.00 | 37/4 | 37/4 | 37/4 |

^{*}Systems exceeding a lead or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. Three lead samples above action level were re-sampled and came back under the MCL.

N/A

What does this mean?

19. Sulfate (ppm)

No

28.40

(max)

13.90 -

28.40

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. 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 contaminants have been detected. The Environmental Protection Agency (EPA) has determined that your water IS SAFE at these levels. This is the fifth year we were required to test for HAA5, TTHM and the four Unregulated Contaminants. As you can see they are at extremely low levels, below EPA standards.

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 EPA's Safe Drinking Water Hotline at 1-800-426-4791, or on the Internet at www.epa.gov/safewater/.

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 (1-800-426-4791), or on the Internet at www.epa.gov/safewater/.

We at the Platteville Water & Sewer Utility work diligently 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. Please call our office if you have questions, 348-9741 ext. 2248, or e-mail at pwwtp248@centurytel.net.

^{*} A high fluoride sample at Well # 4 (10.4 mg/l) was caused by inadequate mixing before sampling point. Resample results were 0.11Mg/L. Level found of 5.3Mg/L is the average between 10.4 and .11Mg/L. Average monthly testing is 0.815 Mg/L.