2004 Annual Drinking Water Quality Report - Tontitown Water Department

We're pleased to present to you this year's 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 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, can pick up substances resulting from the presence of animals or from human activity. We purchase water from Springdale Water Utilities. Springdale Water Utilities purchases treated surface water from Beaver Water District whose source is Beaver Lake.

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.

The Arkansas Department of Health completed a Source Water Vulnerability Assessment for Beaver Water District. This assessment summarizes the potential for contamination of our source of drinking water and can be used as a basis for developing a source water protection plan. Based on the various criteria of the assessment, our water source has been determined to have a low susceptibility to contamination. You may request a summary of the Source Water Vulnerability Assessment from the Beaver Water District Office.

All 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 1-800-426-4791.

In order to assure 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 (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact David Sbanotto, Water Superintendent at 479-361-2700. 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 meetings. They are held on the first Tuesday of each month at 7:30 PM at Tontitown City Hall.

Tontitown Water Department and Beaver Water District routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2004. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

TWD – Tontitown Water Department
BWD – Beaver Water District
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) or Micrograms per liter (μg/L) - 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. 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.
Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
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.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
NA – Not applicable

TEST RESULTS

MICROBIOLOGICAL CONTAMINANTS

Contaminant	Violation Y/N	Level Detected	Unit of Measurement	MCLG	MCL	Major Sources in Drinking Water
Turbidity (BWD)	N	Highest yearly sample result: 0.25 Lowest monthly % of samples meeting the turbidity limit: 100%	NTU	NA	> 0.3NTU in > 5% of samples or any 1 sample > 1 NTU	Soil runoff

- Turbidity is a measurement of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system

INORGANIC CONTAMINANTS

Contaminant	Violation Y/N	Level Detected	Unit of Measurement	MCLG	MCL	Major Sources in Drinking Water
Fluoride (BWD)	N	Average: 0.53 Range: 0 – 0.99	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) (BWD)	N	Average: 0.69 Range: 0.67 – 0.71	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

LEAD AND COPPER TAP MONITORING

Contaminant	Number of Sites over Action Level	90th Percentile Result	Unit of Measurement	Action Level	Major Sources in Drinking Water
Lead (TWD)	0	0.007	mg/L	0.015	Corrosion from household plumbing systems; erosion of natural deposits.
Copper (TWD)	0	0.09	mg/L	1.3	

- Tontitown Water Department is on a reduced monitoring schedule and required to sample once every three years for lead and copper at the customers' taps. Our last monitoring period was in 2003. Our next required monitoring period is the year 2006.

DISINFECTION BY-PRODUCT PRECURSORS – *Beaver Water District*

- The percentage of Total Organic Carbon (TOC) removal was routinely monitored in 2004, and our water system met all TOC removal requirements set by USEPA. Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by-products. These by-products include trihalomethanes (THMs) and haloacetic acids (HAAs).

REGULATED DISINFECTANTS

Disinfectant	Violation Y/N	Level Detected	Unit of Measurement	MRDLG	MRDL	Major Sources in Drinking Water
Chlorine (TWD)	N	Average: 0.5 Range: 0.2 – 0.8	ppm	4	4	Water additive used to control microbes

VOLATILE ORGANIC CONTAMINANTS

Contaminant	Violation Y/N	Level Detected	Unit of Measurement	MCLG	MCL	Major Sources in Drinking Water
HAA5 [Haloacetic Acids] (BWD-Distribution System)	N	Highest running annual average: 46.0 Range: 17.3 – **79.7**	ppb	0	**60**	By-products of drinking water disinfection
TTHM [Total Trihalomethanes] (BWD-Distribution System)	N	Highest running annual average: 43.3 Range: 15.4 – 76.7	ppb	NA	80	

- **Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.**

UNREGULATED CONTAMINANTS

Contaminant	Level Detected	Unit of Measurement	MCLG	Major Sources in Drinking Water
Chloroform (BWD)	12.4	ppb	NA	By-products of drinking water disinfection
Bromodichloromethane (BWD)	3.83	ppb	0	
Dibromochloromethane (BWD)	0.9	ppb	60	

- Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. MCLs (Maximum Contaminant Levels) and MCLGs (Maximum Contaminant Level Goals) have not been established for all unregulated contaminants.