this is your 2001 annual report on water quality of the Shawnee public water system

Our Mission...

TO PROVIDE HIGH-QUALITY, COST EFFECTIVE AND SAFE SERVICES THAT ENSURE THE COMMUNITY'S HEALTH, SAFETY, AND WELFARE

Our Goals...

CONSTANT IMPROVEMENT IN OUR ORGANIZATION AND OUR SERVICES

We Are...

PROUD TO CARE
PROUD TO PROVIDE HIGH-QUALITY SERVICE TO OUR COMMUNITY

Dear Customer,

The following Water Quality Report is a mandate of the Environmental Protection Agency. The Safe Drinking Water Act was amended in 1996 to require all community water systems to deliver a brief annual water quality report to their customers. The purpose of this report is to inform you about the quality of 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 take great care in our efforts to continually improve the water treatment process and protect our water sources.

Shawnee Twin Lakes and Wes Watkins Reservoir provide all our water. The lakes supply surface water to the twelve million gallon per day Shawnee Water Treatment Plant. In addition to the residents, businesses, and industries in Shawnee, the Shawnee Public Water System supplies potable water to Pottawatomie County Development Authority and the City of Meeker.

Water System Improvements

Phase 1 of the Water Treatment Plant Project was completed in February 2002. Those improvements included an additional clarifier, covers for it and the existing clarifier and filters, renovation of the filters, including valves and operators, and individual turbidimeters for each filter and a MIOX® disinfectant system.

Additional improvements are planned for the treatment facility and distribution system that will benefit all of our customers. Phase 2 of the Water Treatment Plant Improvements will include new technology to deal with the high level of organics found in the water from the three lakes that supply all of our water. System improvements are sometimes reflected as rate structure adjustments. There has been no increase in the rates since July 1, 1994.

This report is provided each year as a means of communicating with our customers and informing them of the status of our water system. If you need additional information, or, if you would like something clarified please contact James B. Cole, Public Works Director, at 878-1662.

This report shows our water quality for 2001 and explains what it means. We want to inform our valued customers about their water utility. The Shawnee City Commission/Shawnee Municipal Authority meets on the first and third Mondays of each month at 7:30 p.m. in the Commission Chambers at City Hall. You are welcome to attend any of the regularly scheduled meetings.

Contaminants in Drinking Water

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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.

The Shawnee Public Water System routinely monitors for contaminants in your drinking water according to federal and state laws. The table shows the results of our monitoring for the period of January 1 to December 31, 2001. (Some of the data may be more than one year old because the state allows us to monitor for some contaminants less often than once per year.)

Maximum Contaminant Levels (MCLs) 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.

Thank you for the opportunity to provide your family with clean, quality water this year.

Respectfully,

James B. Cole

James B. Cole, Director of Public Works

Contact

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Where can I get more information?

For more information on your drinking water, contact your water supplier. You can also contact the Oklahoma Department of Environmental Quality, or call EPA's Safe Drinking Water Hotline at 1-800-426-4791, explore the rest of the Office of Ground Water and Drinking Water's web site, or order publications from EPA on various topics from source water protection to home well use. EPA has also prepared a citizen's guide to drinking water called "Water on Tap: A Consumer's Guide to the Nation's Drinking Water."

TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Range Detected	MCL	MCLG	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria	N	0	n/a	0	0	Naturally present in the environment
3. Turbidity (NTU)(maximum single measurement) (maximum monthly level)	Y	0.95 NTU 76.7% in July 2001 & 85.7 in August 2001	n/a	TT=5 NTU TT≤0.5 NTU in 95% of monthly samples	n/a	Soil runoff
Radioactive Contaminants						
4. Beta/photon emitters (pCi/l)	N	3.943 10/18/99	4.0-5.0	50	0	Decay of natural and manmade deposits
5. Alpha emitters (pCi/1)	N	-0.438 10/18/99	-1.0-0.0	15	0	Erosion of natural deposits
Inorganic Contaminants						
10. Barium (ppb)	N	96.00 8/29/95	n/a	2000	2000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
14. Copper (ppm)	N	0.240 8/6/1998	0# of samples exceeded AL	*AL=1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride (ppm)	N	1.18 11/5/01	n/a	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead (ppb)	N	0.058 8/6/1998	0# of sites exceeded AL	*AL=15	0	Corrosion of household plumbing systems, erosion of natural deposits
19. Nitrate (ppm) (as Nitrogen)	N	0.22 1/19/01	n/a	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
73. TTHM [Total trihalomethanes] (ppb)	Y	178	121 - 273	100	0	By-product of drinking water chlorination

(3) Turbidity: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. In July turbidity exceeded .05 NTU in 23.3 percent of samples and in August turbidity exceeded 0.05 NTU in 14.3 percent of samples.

(73) TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

* Action Level - 90% of samples must be below this level.

What does this mean?

The table shows that our system exceeded the MCL for total trihalomethanes in 2001. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

TTHMs are by-products of the disinfection process. The MCL limit is 100 parts per billion calculated on a running quarterly average. The highest quarterly average for 2001 was 273 parts per billion. The running quarterly average was 178 parts per billion.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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. 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)**.

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 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 stormwater runoff, and septic systems.

In order to ensure that 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 regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.