

Waynoka Water Supply

Consumer Confidence Report for
2010

What is a Consumer Confidence report?

In 1996, Congress amended the Safe Drinking Water Act. It added a provision requiring that all community water systems deliver to their customers a brief annual water quality report. Consumer Confidence Reports (CCR's) summarize information that the water system already collects to comply with regulations. Every community water system that has at least 15 service connections serving year round residents must prepare and distribute a report. These systems typically include cities, towns, homeowners associations, and trailer parks. Each water system must deliver its annual report to consumers by July of the following year. Although Waynoka Regional Water & Sewer District analyzes for many contaminants, only those contaminants that were detected are listed within the table. This report is based on data collected in the 2010 calendar-year unless otherwise noted. Not all contaminants are required to be analyzed each year. The table lists those contaminants detected most recently within the past five years. For additional information, please call the Waynoka Water Treatment Plant at 937-446-3256 or attend a Board of Trustees meeting which are held on the fourth Monday of every month at 7:00 p.m. & The second Saturday of every month at 9:30 a.m. in the Waynoka Lodge.



THE SOURCE OF YOUR WATER:

The Lake Waynoka water system is owned and operated by the Waynoka Regional Water & Sewer District. The "Surface" water treatment plant described on the previous page is theoretically capable of producing approximately 425,000 gallons of potable water per 24 hour period. The water is then pumped into the distribution system for customer use, but the responsibilities do not end there. The District is also required to maintain its water system, including reservoirs, water mains and valves, water meters and fire hydrants, and most importantly, the water quality delivered to its customers. Water produced by the treatment plant is safe potable water prior to being pumped into the distribution system. It is District's responsibility to keep it that way. Flushing of lines and periodic cleaning of the water tower are just two of the many ways which the District maintains its water quality. The District analyzes its treated water for many different parameters in its own Ohio EPA certified laboratory. For those parameters that are beyond the scope of testing within our lab, outside certified laboratories are utilized. One very important analysis is the testing for chlorine residual. Chlorine ensures that the water will be free of microbial contaminants before reaching the consumer. In the case of a water main break, chlorine present in the water will help ensure the destruction of microbial contamination that may enter the broken main.

* *Why are there contaminants in my water?*

In order to ensure that tap water is safe to drink, USEPA 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 shall 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 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.

* *Is our water meeting other rules that govern our operation?*

The Ohio EPA requires us to test our water for various parameters on a regular basis to ensure its safety. Waynoka water supply had no reporting, monitoring, nor water quality violations in 2009.

* *Do I need to take special precautions?*

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 microbial contaminants are available from the Safe Drinking Water Hotline.

* *What are sources of contamination to drinking 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, 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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

* *A Word about Lead:*

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. Waynoka Regional Water 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 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>.

* *A Word about Turbidity:*

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported in the table, Waynoka Water Supply's highest recorded turbidity result for 2009 was 0.23 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100.

* *IDSE TTHM & HAA5:*

Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2012. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfection byproducts in drinking water, including both THMs and HAAs.

* *TOC Values:*

The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between percent of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.

Contaminant	Violation Y/N	Level Found	Units	MCLG	MCL	Range	Possible source of contamination
Inorganic Contaminants							
Fluoride	No	1.33	ppm	4	4	0.22 - 1.33 (0.88 - 1.13)	Water additive which promotes strong teeth
	No	(1.01)					
Nitrate	No	0.40	ppm	10	10	<0.10 - 0.40 (BDL - 0.788)	Runoff from fertilizer use; Leaching from septic tanks
	No	(0.788)					
Lead** (90th percentile)	No	<5.0	ppb	0	15	na	Corrosion of household plumbing systems
Copper** (90th percentile)	No	128	ppb	1300	1300	<50 - 143	Corrosion of household plumbing systems
Barium	No	0.51	ppm	2	2	0.51	Erosion of natural deposits
Microbiological Contaminants							
Turbidity - NTU Standard Met	No	0.26	NTU	NA	TT	0.04 - 0.26 100	Soil runoff
	No	100	%	NA	TT		
Total Organic Carbon	No	1.5	Removal Ratio	NA	TT	1.0 - 1.9	Naturally present in the environment
Residual Disinfectants							
Total Chlorine	No	2.2	mg/l	MRDLG = 4	MRDL = 4	1.1 - 2.8	Additive to control microbes
Volatile Organic Contaminants							
Total Trihalomethanes	No	48.3	ppb	NA	80	19.6 - 68.1 (BDL - 25.8)	By-product of drinking water chlorination
	No	(25.8)					
Haloacetic Acids	No	19.1	ppb	NA	60	8.5 - 29.6 (<6.00)	By-product of drinking water chlorination
	No	(<6.00)					
IDSE TTHM's *	No	NA	ppb	NA	NA	25.4 - 39.0	By-product of drinking water chlorination
IDSE HAA5 *	No	NA	ppb	NA	NA	6.6 - 14.1	By-product of drinking water chlorination
Unregulated Contaminants							
Bromodichloromethane	No	3.8	ppb	NA	NA	1.3 - 7.0 (BDL - 5.82)	By-product of drinking water chlorination
	No	(5.82)					
Bromoform	No	<0.50	ppb	NA	NA	BDL (BDL - 7.63)	By-product of drinking water chlorination
	No	(7.63)					
Chloroform	No	23.2	ppb	NA	NA	4.5 - 47.7 (1.72)	By-product of drinking water chlorination
	No	(1.72)					
Dibromochloromethane	No	0.80	ppb	NA	NA	BDL - 1.6 (BDL - 10.6)	By-product of drinking water chlorination
	No	(10.6)					
Monochloroacetic Acid	No	2.0	ppb	NA	NA	BDL - 2.0	By-product of drinking water chlorination
Dichloroacetic Acid	No	7.53	ppb	NA	NA	3.1 - 14.4	By-product of drinking water chlorination
Trichloroacetic Acid	No	4.75	ppb	NA	NA	2.5 - 8.7	By-product of drinking water chlorination

Waynoka Regional Water & Sewer District has a current, unconditioned license to operate its water system.

Note: Water is purchased occasionally from Brown County Rural Water Association. Their results in the above table are in parentheses.

“***” Analysis performed in monitoring schedule for 2008.

Contaminant Monitoring Definitions:

- **Maximum Contaminant Level Goal (MCLG):** The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of 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.
- **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.
- **Parts per Million (ppm):** Units of measure for concentration of a contaminant. A part per million corresponds to 1 second in just over 11.5 days.
- **Parts per Billion (ppb):** Units of measure for concentration of a contaminant. A part per billion corresponds to 1 second in 31.7 years.
- **The “<” Symbol:** A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected. **The “>” Symbol:** A symbol which means greater than. **The “=” Symbol:** A symbol which means equal to.
- **The “NA” Symbol:** An abbreviation which means not applicable.
- **Action Level (A.L.):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **BDL:** Below Detectable Limit.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.