



**Public Works Department**  
**301 West 2<sup>nd</sup> Avenue**  
**P.O. Box 180**  
**Owasso, OK 74055**



## 2012 ANNUAL WATER QUALITY REPORT

The City of Owasso is pleased to submit to you the 2012 Annual Water Quality Report. We take great pride in providing you, our customer, with reliable and safe drinking water that meets all Federal and State regulations. Again this year, contaminant levels in our water are well below the maximum allowable levels.

### **Why are there contaminants in my drinking water?**

Drinking water, including bottled water, may be expected to contain at least small amounts of contaminants. The presence of these contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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 human activity. Contaminants that may be present in water prior to treatment include: Microbial contaminants which come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Inorganic contaminants are naturally-occurring or a result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production and mining or farming. Pesticides and herbicides come from a variety of sources such as agricultural urban storm water runoff and residential uses. Chemical contaminants include synthetic chemicals which are byproducts of industrial processes and petroleum production that can come from gas stations, urban storm water runoff and septic systems. Radioactive contaminants are naturally occurring substances or the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, the 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 provide protection for public health.

### **Is Owasso's water safe to drink?**

YES! The City of Owasso and the City of Tulsa routinely monitor for contaminants in your drinking water according to Federal and State laws. In 2011, the City of Tulsa analyzed more than 3,000 samples looking for pollutants that might be dangerous to your health and substances that can make the water taste or smell unpleasant. In addition, the City of Owasso collected 300 samples from many different locations throughout the distribution area. The data tabulation table shows the results of our monitoring for the period of January through December 2011.

### **What does the data mean?**

This report is being provided to show that our drinking water IS SAFE and meets Federal and State requirements. As you review the data table, you will see that we had a presence of Total Coliform in October 2011. Although the contaminants were at safe levels, federal law required us to make public notification to our customers. Since October 2011, fifty water samples have been analyzed and all fifty samples were free of any contaminants. The Oklahoma Department of Environmental Quality has verified and closed out this violation.

### **Where does Owasso's water come from?**

Our water is purchased from the City of Tulsa. The water is treated surface water transported from three sources in northeastern Oklahoma (Lake Oologah on the Verdigris River, Lake Spavinaw and Lake Eucha on Spavinaw Creek, and Lake Hudson on the Neosho River). After the water reaches the lakes it travels to the Mohawk and A.B. Jewell water treatment plants where it is treated to remove any substances that might threaten public health.

### **To Learn More about our Water Utility:**

Please attend any of the regular scheduled meetings of the Owasso City Council and the Owasso Public Works Authority. Meetings are held on the first and third Tuesday of each month at Old Central (109 N. Birch) beginning at 6:30 p.m.

### **How to Contact Us:**

For questions concerning your water utility, please contact the Owasso Public Works Department at 918-272-4959. Inquires about this report may be directed to Roger Stevens (Public Works Director). For questions about your water bill, please contact the City of Owasso Utility Billing Office at 918-376-1500.

**For Additional Information:** Visit our website at: [www.cityofowasso.com](http://www.cityofowasso.com).

## WATER QUALITY DATA TABULATION

Tulsa's Water Quality Data: Collected During 2011						
Regulated Contaminants	Avg.	Min.	Max.	MCL	MCLG	Likely Sources of Contaminants
Turbidity level found			0.08			
Lowest monthly % meeting regulations	100%			TT*=less than 0.3 NTU 95% of the time	N/A	Soil runoff
Total Coliform Bacteria within distribution system	0.46% ( monthly)			Presence of coliform bacteria in more than 5% of monthly samples	0	Naturally present in the environment
Barium	0.047	0.034	0.063	2 parts per million	2	Naturally present in the environment, drilling waste, metal refineries
Beta Particles	2.42	2.17	2.66	pCi/Liter : MCL = 4 mrem/yr	0	Decay of natural and man made mineral deposits
Chlorine	1.8	0.76	3.2	MRDL* - 4.0 parts per million annual average	MDRLG* 4.0	Water additive used to control microbes
Chlorite	0.094	0	0.21	1 part per million	0.8	By-product of drinking water disinfection
Copper	0.17 ppm at 90th percentile			AL*=1.3 part per million at 90th percentile	1.3	Corrosion of household plumbing systems
Fluoride	0.68	0.07	1.3	4 parts per million	2	Water additive promoting strong teeth
Halo Acetic Acids	0.016	0	0.055	0.060 part per million running annual average	N/A	By-product of drinking water disinfection
Lead	<0.002ppm at the 90th percentile			AL*=0.015 part per million at 90th percentile	0	Corrosion of household plumbing systems
Nitrate - Nitrite	0.1	0	0.34	Nitrate =10 parts per million / Nitrite = 1 part per million	10;1	Runoff from fertilizer use
Total Organic Carbon	2.1	1.2	3.4	Results are part per million. MCL is 11* percent removal	N/A	Naturally found in the environment
Trihalomethane	0.052	0.013	0.092	0.080 parts per million running annual average	N/A	By-product of drinking water disinfection
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 system, and may have an increased risk of getting cancer. The risk assessment developed for trihalomethanes showed that those consuming 2 liters of water with 100 ppb trihalomethanes for 70 years increased the likelihood of developing cancer by 1 in one million.						
Maximum Contaminant Level						
Unregulated Contaminants	Avg.	Min.	Max.	*(MCL)	*MCLG	Likely Sources of Contaminants
Aluminum	0	0	0	Unregulated-aesthetic level 0.2 parts per million		Coagulant treatment product, natural deposits
Chloride	14	9.8	18	Unregulated-aesthetic level 250 parts per million		Naturally present and brine from oilfield operations
Iron	0.004	0	0.016	Unregulated-aesthetic level 0.3 parts per million		Naturally present in the environment
Sodium	11.2	7.24	15.9	Standards have not been established		Naturally occurring of urban stormwater runoff
Sulfate	22	4.5	60	Unregulated- aesthetic level 250 parts per million		Naturally present in the environment
Owasso's Water Quality Data: Collected During 2011						
Microbial Contaminants	Detected	MCL		MCLG	Likely Sources of Contaminants	
Total Coliform	5	>1 positive		0 positive	Naturally present in the environment	
<b>*Definitions of Terms Found in the Table:</b>						
<b>MCL (Maximum Contaminant Level):</b> The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.						
<b>MCLG (Maximum Contaminant Level Goal):</b> 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 and are non-enforceable public health goals.						
<b>MRDL (Maximum Residual Disinfectant Level):</b> 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.						
<b>MRDLG ( Maximum Residual Disinfectant Level Goal):</b> 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.						
<b>TT (Treatment Technique):</b> A required process intended to reduce the level of a contaminant in drinking water.						
<b>AL (Action Level):</b> The concentration of a contaminant, which if exceeded, triggers a treatment or other requirement which a water system must follow.						
<b>NTU (Nephelometric Turbidity Unit):</b> A measurement of the turbidity, or cloudiness, of the water. Turbidity has no health effects. However, turbidity can interfere with disinfection and provides 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, diarrhea, and associated headaches.						
<b>mrem/yr (millirems per year):</b> A measure of radiation absorbed by the body.						
<b>ppm (parts per million):</b> Comparable to 1 minute in two years.						
<b>ppb (parts per billion):</b> Comparable to 1 minute in 2,000 years.						
<b>N/A ( Not Applicable)</b>						
** Data collected August 2010. Frequency of monitoring requirements is within compliance regulations.						
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