Oklahoma City Utilities - Water Quality Summary 2007

Detected Contaminants	Units	MCLG	MCL	Hefner WTP PWS ID 1020902	Draper WTP PWS ID 1020802	Overholser WTP PWS ID 1020502	Compliance	Notes/Comments
Inorganic Compounds				range detected				
Fluoride	ppm	4	4	0.19 - 1.28	0.03 - 1.30	0.24 - 1.19	YES	Added during treatment for dental health or dissolved from natural deposits
Lead	ppb	0	AL = 15	most recent systemwide distribution testing			All Sites < AL	Corrosion of household plumbing; erosion of natural deposits
				Sep 2006 - 90th Percentile < 1			YES	
Barium	ppm	2	2	highest level			YES	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
				0.011	0.012	0.030		
Copper	ppm	0	AL = 1.3	most recent systemwide distribution testing			All Sites < AL	Corrosion of household plumbing; erosion of natural deposits
				Sep 2006 - 90th Percentile = 0.079			YES	
Arsenic	ppb	0	10	highest level			YES	Erosion of natural deposits; runoff from orchards; runoff from electronics and glass production wastes
				1.06	< 1.00	< 1.00		
Nitrite-Nitrate *	ppm	10	10	highest level			YES	Runoff from fertilizer; leaching from septic tanks, sewage or erosion of natural deposits
				0.21	< 0.10	< 0.10		
Radiological				range detected in most recent testing - 2006				
Gross Alpha	pCi/L	15	15	0.356 +/- 0.247	0.836 +/- 0.713	0 +/- 0.930	YES	Decay of natural and manmade deposits
Gross Beta	pCi/L	50	50	6.31 +/- 0.832	10.80 +/- 1.23	6.02 +/- 1.39		
Radium 226	pCi/L	5	5	0.045 +/- 0.165	0 +/- 0.176	0.346 +/- 0.276		
Disinfection By-Products				highest quarterly average (RAA)				
			80	11.1	53	63.9	YES	Byproduct of drinking water chlorination
Total Trihalomethanes	ppb	0	(RAA)	range detected				
				<4.00 - 8.00	34.5 - 70.1	31.4 - 85.7		
				highest quarterly average (RAA)				
Haloacetic Acids	ppb	0	60 (RAA)	10.1	26.4	37.3	YES	Byproduct of drinking water disinfection
				range detected				
				< 6.00 - 10.0	22.0 - 56.0	< 6.00 - 91.0		
Bromate	ppb	0	(RAA) 10	highest quarterly average		<5	YES	Byproduct of disinfection by ozone **Only Hefner Plant uses ozone**
				range detected		< 5.00 - 9.51**		
Precursor Removal			TT = Ratio must be greater than or equal to 1.00 for compliance	average of monthly ratios			YES	Naturally occurring
Total Organic Carbon (TOC)				1.59	1.00 ***	1.53		
				Monthly Ratio = (% TOC removed) divided by (% TOC removal required)				
Disinfection Residual			MRDL	average readings			YES	Water additive used to control microbes
			4.0	3.30	3.60	3.70		
Chloramines	ppm	-	Range detected	2.30 - 4.00	2.20 - 4.50	2.40 - 4.40		
Microbiological			presence of Coliform bacteria in <5% of samples	2007 System-wide distribution testing			YES	Naturally present in the environment. **No Fecal Coliforms or E. Coli in 2875 tests in 2007**
				month having the highest % positive				
Coliform Bacteria	CFUs % positive	0		October - 1.2% (3 of 256)				
Clarity				monthly lowest % < 0.3 NTU			YES	Lime and/or calcium carbonate particles from softening efforts; Soil runoff
	NTU		TT = > 0.3 NTU in not more than 5% of samples	100.0%	100.0%	100.0%		
Turbidity	% > 0.3	NA		highest single reading				
				0.16	0.17	0.28		
LT2 Source Water Monitoring				Cryptosporidium : all source waters tested at less than 0.075 cysts/L (lowest risk category)			YES	EPA Required Source Water Monitoring (Lakes & Rivers) to test for presence of cryptosporidium
Stage 2 Disinfection Byproducts Rule Monitoring****				Trihalomethanes (ppb)			YES	
				Range Detected: 5 - 114 / Systemwide Avg: 32.1				
				Haloacetic Acids (ppb)				
				Range Detected: 6 - 99 / Systemwide Avg: 18.9				

MCL	Maximum Contaminant Level - 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.
MCLG	Maximum Contaminant Level Goal - 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.
MRDL	Maximum Residual Disinfectant Level - 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. Compliance with the MRDL is calculated as a Running Annual Average (RAA).
MRDLG	Maximum Residual Disinfectant Level Goal - 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 contamination.
RAA	Running Annual Average - Average of last 12 months or last 4 quarters that the facility is in operation.
AL	Action Level
TT	Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water
NTU	Nephelometric Turbidity Units (a measure of clarity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter (ug/L)
CFU	Colony Forming Units
<	less than
>	greater than

* ***Nitrite-Nitrate Note:*** Measured as the sum of Nitrate-N and Nitrite-N

** ***Bromate Health Note:*** Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.

*** ***Total Organic Carbon Note:*** **Total organic carbon (TOC) has no health effects.** However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL (Maximum Contaminant Level) may lead to adverse health effects. TOC compliance is based on the percent TOC removed, not the total amount present. The starting TOC at the Draper Treatment facility is low, therefore, the potential for formation of THMs and HAAs is low. The THM and HAA values for the Draper Treatment facility are below the MCL, which is currently considered a safe level for these disinfection byproducts.

**** ***Stage 2 Disinfection Byproducts Rule Monitoring:*** U.S. water utilities are required to continuously improve the quality of water delivered to customers. The federal Environmental Protection Agency and the Oklahoma Department of Environmental Quality enforce drinking water laws and develop long-range improvement activities. In 2007, Oklahoma City collected information on how THMs and HAAs change the water system and will work with the EPA and ODEQ to decrease the numbers.

Monitoring Frequency Note: The State allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of our data, though representative, are more than one year old.

No Fecal Coliforms or E. Coli in 2875 tests in 2007.