Inorganic contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	
2009	Arsenic	1	1	1	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
	* The aresenic value was effective January 23, 2006. In the event of a violation, you will be notified.							
2009	Barium	0.069	0.069	0.069	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries: erosion of natural deposits.
2009	Chromium	0.5	0.5	0.5	100	100	ppb	Discharge from steel and pulp mills: erosion of natural deposits.
2009	Flouride	0.17	0.17	0.17	4	4	ppm	Erosion of natural deposits; wateradditive which promotes strong teeth; discharge from fertilizer & aluminum factories.
2009	Nitrate	0.22	0.22	0.22	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2009	Antimony	0.1	0.1	0.1	6	6	ppb	Discharge from petroleum refineries: fire retardants; ceramics; electronics; solder.
2006	Gross Beta Emitters	3.7	3.7	3.7	50	0	pCi/L	Decay of natural and man-made deposits.

Organic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2009	Di(2-ethylhexyl)phthalate	1.02	1.02	1.02	6	0	ppb	Discharge from rubber and chemical factories.
2009	Atrazine	0.23	0.23	0.23	3	3	ppb	Runoff from herbicide used on row crops

Maximum Residual Disinfectant Level

Systems must complete and submit disinfectant data on the Surface Water Monthly Operations Report (SWMOR).
On the CCR report, the system must provide disinfectant type, minimum, maximum and average levels.

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2009	Disinfectant Used	of CCR year's quarterly	Single Sample Result	Single Sample Result	4	<4.0	ppm	Disinfectant used to control microbes

Disinfection Byproducts

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Chemical
2008	Total Haloacetic Acids	32.1	12.9	53.6	60	ppb	Byproduct of drinking water disinfection.
2008	Total Trihalomethanes	33.2	11.5	64.5	80	ppb	Byproduct of drinking water disinfection.

Unregulated Initial Distribution System Evaluation for Disinfection of Byproducts

This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acid in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA also requires the data to be reported here.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Chemical
2009	Total Haloacetic Acids	47	42	57.3	NA	ppb	Byproduct of drinking water disinfection.
2009	Total Trihalomethanes	44.4	23.6	58.7	NA	ppb	Byproduct of drinking water disinfection.

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Chemical
2009	Chloroform	37.34	37.34	37.34	ppb	Byproduct of drinking water disinfection.
2009	Bromodichloromethane	12.69	12.69	12.69	ppb	Byproduct of drinking water disinfection.
2009	Dibromochloromethane	2.28	2.28	2.28	ppb	Byproduct of drinking water disinfection.

Lead and copper

Year	Contaminant	The 90th Percentile	# of Sites exceeding action level	Action Level	Unit of Measure	Source of Contaminant
2008	Lead	2	0	15	ppb	Corrosion of household plumbing systems: Erosions of natural deposits
2008	Copper	0.25	0	1.3	ppm	Corrosion of household plumbing systems: Erosions of natural deposits; leaching from wood preservatives

Recommended Additional Health Information for 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. This water supply 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 tak to minimize exposure is available from the Safe Drinking Water Hotline or

at http://www.epa.gov/safewater/lead".

Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may increase the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptons such as nasea, cramps, diarrhea and associated headaches.

Year	Contaminant	Highest Single Measure	Lowest Mthly % of Samples Meeting Limits	Turbidity Limits	Units of Measure	Source of Contaminant
2009	Turbidity	0.8	93	0.3	NTU	Soil runoff.

Total Organic Carbon

Total Organic Carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure tha water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2009	Source Water	6.26	5.18	10.5	ppm	Naturally present in the environment
2009	Drinking Water	3.05	2.71	3.31	ppm	Naturally present in the environment
2009	Removal Ratio	3.198	2.25	7.46	49.748 % removal	N/A

*Removal ration is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removec

Total Coliform - REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA
Fecal Coliform - REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA

VIOLATIONS

Violation Type	Health Effects	Duration	Explanation	Steps to Correct
Facility: City of Emory SWTP E Coli - Failure to Monitor, Source (LT2) Major	We are required to monitor the source water for either Cryptosporidium or E Coli. Results of this monitoring can indicate that additional treatment is needed. During this compliance period, we did not correctly monitor as required.	10/1/2009 to 10/31/2009	Schedule was changed.	Complied with Schedule.
Facility: SWTP-Lake Tawakoni 1.7 mi SW on FM 35 / Filtration - more than 5% of monthly com-bined filter effluent samples exceed 0.3 NTU	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate a presence of disease-causing organisms. These organism include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.	9/1/2009 to 9/30/2009	Explanation: Filters were 1 NTU due to polymer change in process.	Steps to Correct: Plant was offline and no raw water pumps were running.

Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2009	Aluminum	0.024	0.024	0.024	0.5	ppm	Abundant naturally occuring element.
2009	Bicarbonate	66	66	66	n/a	ppm	Corrosion of carbonate rocks such as limestone.
2009	Calcium	26.8	26.8	26.8	na	ppm	Abundant naturally occuring element.
2009	Chloride	11	11	11	300	ppm	Abundant naturally occuring element; used in water purification; byproduct of oil field activity.
2009	Cooper	0.032	0.032	0.032	1	ppm	Corrosion of household plumbing systems; erosion of naturaldeposits; leaching from wood preservatives.
2009	Hardness as Ca/Mg	78	78	78	n/a	ppm	Naturally occurring calcium and magnesium.
2009	Iron	0.003	0.003	0.003	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2009	Magnesium	2.8	2.8	2.8	n/a	ppm	Abundant naturally occuring element.
2009	Manganese	0.0016	0.0016	0.0016	0.05	ppm	Abundant naturally occuring element.
2009	Nickel	0.001	0.001	0.001	n/a	ppm	Erosion of natural deposits.
2009	pH	7.7	7.7	7.7	>7.0	units	Measure of corrosivity of water.
2009	Sodium	26	26	26	n/a	ppm	Erosion of natural deposits; byproduct of oil field activity. equipment or facilities.
2009	Sulfate	56	56	56	300	ppm	Naturally occurring; common industrial byproduct;byproduct of oil field activity.
2009	Total Alkalinity as CaCO3	66	66	66	N/A	ppm	Naturally occurring soluble mineral salts.
2009	Total Dissolved Solids	173	173	173	1000	ppm	Total dissolved mineral constituents in water.
2009	Zinc	0.009	0.009	0.009	5	ppm	Moderately abundant naturally occuring element; used in the metal industry.