

## 2011 Regulated Contaminants of the Lightfoot Distribution System

Contaminant, units	MCLG	MCL	MAX CONC	RANGE	YR TESTED	COMMENTS
Total Coliform	0	Presence of coliform bacteria in >1 of monthly samples	1	0-1	2011	1 positive sample in 8/2011. 101 samples analyzed in 2011
E.Coli	0	A routine sample & a repeat sample are total coliform positive, and one is also fecal coliform or E.coli positive	0%	0%	2011	
Total Trihalomethane THM, ppb	0	80	15	14-16	2011	
HAA(5)	0	60	3	2-3	2011	
Free Chlorine	4	MRDL=4.0	1.14	0.17-1.72	2010-2011	Max Conc- mn compliance avg, includes 2010 data Range- individual samples collected in 2011
Lead, ppb		AL=15 (>10% samples exceed AL)	0.0 90% percentile	<1.0 - 6.4	2010	No sample exceeded the AL
Copper, ppm		AL=1.3 (>10% samples exceed AL)	0.047 90% percentile	0.002 - 0.300	2010	No sample exceeded the AL

## 2011 Regulated Health Risk Contaminants

### Metals- Regulated at the Wells

Substance	Unit	MCLG	MCL	MAX CONC	RANGE	Likely Source	Meets EPA Standards	Violations	YR Tested
Arsenic	ppb	none	50	<2	<2		YES	NO	2011
Barium	ppm	2	2	0.002	<0.001-.002	Erosion of natural deposits	YES	NO	2011
Cadmium	ppb	5	5	<2	<2		YES	NO	2011
Chromium	ppb	100	100	<10	<10		YES	NO	2011
Lead	ppb	n/a	15-AL	<2	<2		YES	NO	2011
Mercury	ppb	2	2	<0.2	<0.2		YES	NO	2011
Selenium	ppb	50	50	<10	<10		YES	NO	2011
Thallium	ppb	0.5	2	<2	<2		YES	NO	2011
Antimony	ppb	6	6	<2	<2		YES	NO	2011
Beryllium	ppb	4	4	<2	<2		YES	NO	2011

### Inorganics- Regulated at the Wells

Substance	Unit	MCLG	MCL	MAX CONC	RANGE	Likely Source	Meets EPA Standards	Violations	YR Tested
Fluoride	ppm	4	4	1.04	0.64-1.04		YES	NO	2011
Nitrate	N, ppm	10	10	0.195	<0.020-.195	Erosion of natural deposits	YES	NO	2011
Nitrite	N, ppm	1	1	<0.001	<0.001	Erosion of natural deposits	YES	NO	2010

### Radiological- Regulated at the Wells

Substance	Unit	MCLG	MCL	MAX CONC	RANGE	Likely Source	Meets EPA Standards	Violations	YR Tested
Alpha emitters	pCi/L	0	15	0.5	0.4-0.5	Erosion of natural deposits	YES	NO	2006 & 2009
Beta emitters	pCi/L	0	50	7.0	6.0-7.0	Decay of natural & man-made deposits	YES	NO	2006 & 2009
Radium-228	pCi/L	0	5	1.0	0.6-1.0		YES	NO	2006 & 2009

## 2011 Regulated Nonhealth Risk Contaminants

Contaminant, units	MCLG	MCL	AVERAGE	RANGE	YR Tested
pH	n/a	6.5-8.5	7.8	7.6-7.9	2011
Chloride, ppm	n/a	250	6.54	3.17-9.91	2011
Color, color units	n/a	15	0	0	2011
Copper,ppb	n/a	1300	<1	<1	2011
Iron, ppb	n/a	300	11.2	1.14-21.3	2011
Manganese, ppb	n/a	50	<1	<1	2011
Sulfate, ppm	n/a	500 (proposed)	5.9	5.8-6.0	2011
Total Dissolved Solids, ppm	n/a	500	226	206-246	2011
Zinc, ppm	n/a	5	<0.001	<0.001-0.001	2011

## 2011 Regulated Health Risk Contaminants

### Organics- Regulated at the Treatment Plant

Substance	Units	MCLG	MCL	AVERAGE	RANGE	Likely Source	Meets EPA Standards	Violation	YR Tested
Regulated VOC	ppb								
Benzene	ppb	0	5	ND	ND		YES	NO	2011
Carbon Tetrachloride	ppb	0	5	ND	ND		YES	NO	2011
Chlorobenzene	ppb	100	100	ND	ND		YES	NO	2011
o-Dichlorobenzene	ppb	600	600	ND	ND		YES	NO	2011
p-Dichlorobenzene	ppb	75	75	ND	ND		YES	NO	2011
1,2-Dichloroethane	ppb	0	5	ND	ND		YES	NO	2011
1,1-Dichloroethylene	ppb	7	7	ND	ND		YES	NO	2011
cis-1,2-Dichloroethylene	ppb	70	70	ND	ND		YES	NO	2011
trans-1,2-Dichloroethylene	ppb	100	100	ND	ND		YES	NO	2011
Dichloromethane	ppb	0	5	ND	ND		YES	NO	2011
1,2-Dichloropropane	ppb	0	5	ND	ND		YES	NO	2011
Ethylbenzene	ppb	700	700	ND	ND		YES	NO	2011
Styrene	ppb	100	100	ND	ND		YES	NO	2011
Tetrachloroethylene	ppb	0	5	ND	ND		YES	NO	2011
1,2,4-Trichlorobenzene	ppb	70	70	ND	ND		YES	NO	2011
1,1,1-Trichloroethane	ppb	200	200	ND	ND		YES	NO	2011
1,1,2-Trichloroethane	ppb	3	5	ND	ND		YES	NO	2011
Trichloroethylene	ppb	0	5	ND	ND		YES	NO	2011
Toluene	ppb	1	1	ND	ND		YES	NO	2011
Vinyl Chloride	ppb	0	2	ND	ND		YES	NO	2011
Xylene	ppb	10	10	ND	ND		YES	NO	2011
38 Unregulated VOC	ppb	n/a	n/a	ND	ND		n/a	n/a	2011
Chloroform	ppb	n/a	n/a	1.9	1.6-2.2	By-product of drinking water chlorination	n/a	n/a	2011
Dichlorobromomethane	ppb	n/a	n/a	2.2	2.1-2.4	By-product of drinking water chlorination	n/a	n/a	2011
Dibromochloromethane	ppb	n/a	n/a	2.6	2.5-2.7	By-product of drinking water chlorination	n/a	n/a	2011
Bromoform	ppb	n/a	n/a	ND	ND	By-product of drinking water chlorination	n/a	n/a	2011

**2008 Regulated Nonhealth Risk Contaminants  
2011 Miscellaneous Analyses**

<b>Contaminant, units</b>		<b>MCLG</b>	<b>MCL</b>	<b>AVERAGE</b>	<b>RANGE</b>	<b>YR Tested</b>
Alkalinity	CaCO3 ppm	n/a	n/a	142	123-161	2011
Aluminum	ppb	n/a	50-200	<50	<50	2011
Ammonia	ppm	n/a	n/a	<0.020	<0.020	2011
Calcium Hardness	CaCO3 ppm	n/a	n/a	30	17-42	2011
Hardness	CaCO3 ppm	n/a	n/a	40	24-55	2011
Lead	ppm	n/a	n/a	<0.002	<0.002	2011
Nickel	ppb	n/a	n/a	<1	<1	2011
Sodium	ppm	n/a	n/a	57	41-73	2011
Specific Conductance	uhmo/cm	n/a	n/a	352	305-398	2011

**Glossary of Terms**

<b>Term</b>	<b>Definition</b>
MCLG	Maximum Contaminant Level Goal
MCL	Maximum Contaminant Level
Ppb	parts per billion or micrograms per liter (ug/L)
Ppm	parts per million or milligrams per liter (mg/L)
NTU	Nephelometric Turbidity Units
pCi/L	picocuries per liter ( a measure of radioactivity)
VOC	Volatile Organic Compound
AL	Action Level
ICR	Information Collection Rule
Finished Water	Treated water, drinking water
Source Water	Water prior entering the treatment plant, reservoir water
TT	Treatment Technique
MRDL	Maximum Residual Disinfection Level