

## METRO UTILITY DEPARTMENT #2 2006 WATER QUALITY DATA

### QUALITY ASSURANCE

In order to ensure that tap water is safe, the U.S. Environmental Protection Agency prescribes regulations that require utilities to monitor regularly for numerous substances in the water it produces. An independent laboratory certified by the EPA and the State of Tennessee performs this testing. All testing is conducted in compliance with current regulations. **The water provided to the Metro Utility Department by the DRUC through the TUB has never exceeded the limits for any regulated compound or substance as established by the State of Tennessee or U. S. EPA.**

### TEST RESULTS – NONE DETECTED

Analysis has been routinely performed for the following list of regulated substances and **NONE** were detected in the drinking water.

<i>PRIMARY ORGANICS</i>	<i>VOLATILE ORGANICS</i>	<i>VOLATILE ORGANICS</i>	<i>INORGANICS</i>	<i>SYNTHETIC ORGANICS</i>	<i>SYNTHETIC ORGANICS</i>
Alachlor	Bromobenzene	Dichloropropane	Arsenic	Carbofuran	Metolachlor
Aldicarb	Bromochloromethane	Dichloropropene	Antimony	Chlordane	Metribuzin
Benzene	Bromodichloromethane	Ethylbenzene	Beryllium	Dalapon	Oxamyl
CarbonTetrachloride	Bromomethane	Fluorotrichloromethane	Cadmium	Dicamba	PCB 1016
Dichloroethane	Butylbenzene	Hexachloro-1,3-butadiene	Chromium	Dieldrin	PCB 1221
Dichloroethylene	Chlorobenzene	Isopropylbenzene	Cyanide	Dinoseb	PCB 1232
Endrin	Chlorodibromomethane	p-Isopropyltoluene	Mercury	Di(2-ethylhexyl)adipate	PCB 1242
Lindane	Chloroethane	Naphthalene	Nickel	Di(2-ethylhexyl)phthalate	PCB 1248
Methoxychlor	Chloromethane	n-Propylbenzene	Selenium	2,3,7,8-TCDD (Dioxin)	PCB 1254
Paradichlorobenzene	o-Chlorotoluene	Styrene	Thallium	Endothall	PCB 1260
Toxaphene	p-Chlorotoluene	Tetrachloroethane	<i>SYNTHETIC ORGANICS</i>	Ethylene dibromide	Pentachlorophenol
Trichloroethane	Dibromomethane	Tetrachloroethylene		Glyphosate	Picloram
Trichloroethylene	m-Dichlorobenzene	Toluene	Aldicarb Sulfone	Heptachlor	Propachlor
VinylChloride	o-Dichlorobenzene	Trichlorobenzene	Aldicarb Sulfoxide	Heptachlorepoxide	Simazine
2,4-D	Dichlorodifluoromethane	Trichloroethane	Aldrin	Hexachlorobenzene	<i>RADIONUCLIDES</i>
2,4,5-TP (Silvex)	Dichloroethane	Trichloropropane	Butachlor	Hexachlorocyclopentadiene	
<i>ASBESTOS</i>	Dichloroethylene	Trimethylbenzene	Benzo(a)pyrene	3-Hydroxycarbofuran	Radium 226
	Asbestos Fibers	Dichloromethane	Xylene	Methomyl	Radium 228

### TEST RESULTS – REQUIRED REPORTING AND DETECTED COMPOUNDS

The following water quality analysis and testing information is required reporting or are substances that were detected in the drinking water. All of the substances that were detected are present at levels well below the U. S. EPA limits and do not pose a health risk to the general public.

Substance (units)	EPA Limit (MCL)	MUD Maximum	MUD Range	EPA Goal (MCLG)	Possible Source of the Contaminant
<b>Microbial Contaminants</b>					<b>Very small organisms such as bacteria</b>
Total Coliform (# Positive)	< 2	0	0	0	Naturally present in the environment
Fecal Coliform & E. Coli (# Positive)	0	0	0	0	Human and animal fecal waste
Total Organic Carbon (ppm)	TT*	1.7	1.2 - 1.7	N/A	Naturally present in the environment
Turbidity (NTU)	TT*	0.23	0.02 - 0.23	N/A	Turbidity does not present any risk to your health and is measured to assess the effectiveness of the filtration system.
<b>Inorganic Compounds</b>					<b>Substances of mineral origin</b>
Barium (ppm)	2	0.024	0.024	2	Natural Erosion, drilling wastes, metal refinery waste
Chlorine (ppm)	MRDL = 4	2.17	1.53 - 2.17	MRDLG = 4	Water additive used to control microbes
Chlorine Dioxide (ppb)	800	340	0 - 340	800	Water additive used to control microbes
Chlorite (ppm)	1	0.19	0.04 - 0.19	0.80	Byproduct of drinking water chlorination
Fluoride (ppm)	4	0.94	0.78 - 0.94	4	Added to prevent tooth decay, natural erosion
Nitrate (ppm)	10	0.25	0.25	10	Agricultural runoff, natural erosion, sewage discharge
Sodium (ppm)	N/A	3.3	3.3	N/A	Natural erosion, component of water additives
Copper (ppm)	None of 30 samples exceeded action limit AL = 1.3	0.56	0.03 - 0.56	1.3	Corrosion of household plumbing, - 2005 Data
Lead (ppb)	One of 30 samples exceeded action limit AL = 15	4.5	0.5 - 28.0	0	Corrosion of household plumbing, - 2005 Data
<b>Organic Compounds</b>					<b>Natural or synthetic carbon based compounds</b>
Atrazine (ppb)	3	0.09	0.05 - 0.09	3	Runoff from herbicide used on row crops
Haloacetic Acids Total (ppb)	60	34	20 - 48	0	Byproduct of drinking water chlorination
Trihalomethanes Total (ppb)	80	37	14 - 51	0	Byproduct of drinking water chlorination

**DEFINITIONS:** **MCL:** Maximum Contaminant Level, or 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, or 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, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants. **MRDLG:** Maximum Residual Disinfectant Level Goal, or 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 the disinfectants to control microbial contaminants. **NTU:** Nephelometric Turbidity Unit; a measure of particles in the water. **ppb:** Parts per billion or micrograms per liter. **ppm:** parts per million or milligrams per liter. **AL:** Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow. **TT:** Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water. \* The Treatment Technique requirements for both Turbidity and Total Organic Carbon were met throughout the year.