

2011 WATER QUALITY TABLE  
MEMPHIS LIGHT, GAS, AND WATER

ANALYTES	MAXIMUM CONTAMINANT LEVEL	SHEAHAN STATION	ALLEN STATION	MCCORD STATION	MALLORY STATION	LICHTERMAN STATION	DAVIS STATION	MORTON STATION	PALMER STATION	LNG PLANT	SHAW STATION	AVERAGE FOR ALL TREATMENT PLANTS
<b>PRIMARY STANDARDS - MANDATORY HEALTH-RELATED STANDARDS</b>												
<b>CLARITY</b>												
TURBIDITY (NTU)	2.0	0.20	0.22	0.26	0.58	0.19	0.27	0.25	0.15	0.14	0.35	0.26
<b>MICROBIOLOGICAL</b>												
TOTAL COLIFORM (Colonies/100 mL)	(a)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
FECAL COLIFORM (Colonies/100 mL)	(a)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
<b>ORGANIC CHEMICALS (mg/L)</b>												
<b>PESTICIDES**</b>												
ALACHLOR	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ATRAZINE	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHLORDANE	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR	0.0004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEPTACHLOR EPOXIDE	0.0002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
LINDANE	0.0002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METHOXYCHLOR	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
POLYCHLORINATED BIPHENYLS (PCB'S)	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SIMAZINE	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOXAPHENE	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>SEMI-VOLATILE ORGANIC COMPOUNDS**</b>												
BENZO(a)-PYRENE	0.0002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI(2-ETHYLHEXYL) ADIPATE	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DI(2-ETHYLHEXYL) PHTHALATE	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROBENZENE	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>VOLATILE ORGANIC COMPOUNDS**</b>												
BENZENE	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE	0.075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROETHANE	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHYLENE	0.007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CIS-1,2-DICHLOROETHYLENE	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRANS-1,2-DICHLOROETHYLENE	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DICHLOROMETHANE	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MONOCHLOROBENZENE	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-TRICHLOROETHANE	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROETHYLENE	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENES	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL TRIHALOMETHANES	0.080	0.005	0.012	0.003	0.004	0.006	ND	0.012	0.011	0.012	0.001	0.007
<b>INORGANIC CHEMICALS (mg/L)**</b>												
ALUMINUM	0.2	0.005	ND	ND	ND	ND	0.003	ND	ND	ND	0.003	0.004
ANTIMONY	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ARSENIC	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BARIUM	2.0	0.037	0.052	0.028	0.032	0.010	0.070	0.048	0.025	0.048	0.004	0.036
BERYLLIUM	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CADMIUM	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHROMIUM	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
COPPER ***	1.3*	0.05	0.06	ND	ND	ND	ND	ND	ND	0.07	ND	ND
LEAD	0.015*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MANGANESE	0.05	0.012	ND	0.004	ND	ND	ND	0.003	ND	0.012	0.001	0.006
MERCURY	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MOLYBDENUM	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NICKEL	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
POTASSIUM	NS	0.51	0.57	0.63	0.53	0.30	0.78	0.78	0.82	0.78	0.44	0.63
SILVER	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SELENIUM	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
THALLIUM	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZINC	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>CHEMICAL PARAMETERS</b>												
CHLORIDE (mg/L)	250	4.2	5.0	6.5	3.0	6.1	4.6	3.2	5.6	3.0	2.0	4.5
COLOR** (units - PCS)	15	3.0	1.0	4.0	2.0	3.0	1.0	3.0	1.0	2.0	2.0	2.2
CYANIDE**	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DETERGENTS ** - MBAS (mg/L)	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORIDE (mg/l)	4.0	0.9	1.0	1.0	1.1	1.0	1.1	1.0	1.0	1.1	1.0	1.0
IRON (mg/L)	0.3	0.04	0.04	0.06	0.06	0.03	0.08	0.04	0.03	0.03	0.05	0.04
NITRATE (as Nitrogen)	10.0	0.10	ND	0.05	ND	0.55	0.28	ND	0.07	0.03	0.08	0.16
NITRITE (as Nitrogen)	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ODOR** (TON)	3.0	1.3	1.7	1.3	1.1	1.3	1.4	1.3	2.0	1.5	1.8	1.5
pH (units)	6.5 - 8.5	7.2	7.3	7.2	7.3	7.1	7.5	7.4	7.1	7.1	7.0	7.2
SODIUM	NS	0.8	9.0	8.7	7.6	7.3	7.6	5.8	8.9	6.5	5.6	6.1
SPECIFIC CONDUCTANCE (umho/cm @ 25°C)	X900	135	169	172	144	114	237	142	104	86	81	136
SULFATE (mg/L)	250	12.4	13.2	16.7	9.8	13.6	11.7	10.1	11.1	9.1	11.9	12.0
TOTAL DISSOLVED SOLIDS** (mg/L)	500	56.4	69.7	68.3	72.9	61.7	126.5	65.2	62.0	43.6	33.8	66.2
<b>ADDITIONAL PARAMETERS</b>												
ALKALINITY as CaCO3(mg/L)	NS	46	68	46	64	37	118	62	41	35	24	54
CALCIUM (mg/L)	NS	6.8	10.7	7.0	9.5	5.6	21.0	11.3	5.1	5.3	2.2	6.5
HARDNESS as CaCO3 (mg/L)	NS	40	60	43	53	31	110	53	31	30	17	47
HARDNESS (grains/gal)	NS	2.3	3.5	2.5	3.1	1.6	6.4	3.1	1.8	1.8	1.0	2.7
MAGNESIUM	NS	5.6	8.1	6.2	7.1	4.1	14	6.0	4.4	4.1	2.8	6.2
PHENOLS** (mg/L)	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHOSPHATE (mg/L)	NS	1.3	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.2	1.1	1.2
SILICA** (mg/L)	NS	13.0	10.2	11.5	11.0	13.1	13.5	11.8	11.2	9.8	10.5	11.6
TEMPERATURE (* F)	NS	64.9	65.5	64.9	65.4	65.7	64.6	65.4	64.4	62.5	65.1	65.0
TOTAL ORGANIC CARBON** (mg/L)	NS	0.363	0.465	0.398	0.476	0.339	0.636	0.421	0.280	0.280	0.205	0.303

**KEY TO ABBREVIATIONS**

NTU = Nephelometric Turbidity Units, a measure of the suspended material in water.

(a) = No more than 5.0% of the monthly samples may be total-coli-form positive.

< = Less Than

mg/L = Milligrams Per Liter (parts per million)

ND = Below Method Detection Limit

\* = Action Level. The Federal and State standards for lead and copper are treatment techniques requiring agencies to optimize corrosion control treatment.

umho/cm = Micromhos per centimeter

X = Recommended Level

NS = No Standard

PCS = Platinum-Cobalt Standard

TON = Threshold Odor Number

\*\* Sample analysis was not required in 2010. Shown is most recent data collected.

\*\*\*Copper Data Submitted 2011