

Watershed Summary Information

Accounting Unit Name:	Upper Mississippi-Meramec
State(s):	IL MO
Political Boundaries:	Madison, Monroe, St Louis, Ste Genevieve, St Clair, Jefferson, Macoupin, Randolph, St Francois, St Charles, St Louis City
Major Waterways:	Mississippi R Cahokia Canal Establishment Cr Joachim Cr Platin Cr
Number of Stations in Watershed:	Tier1 - 18 Tier2 - 34 Tier3 - 4

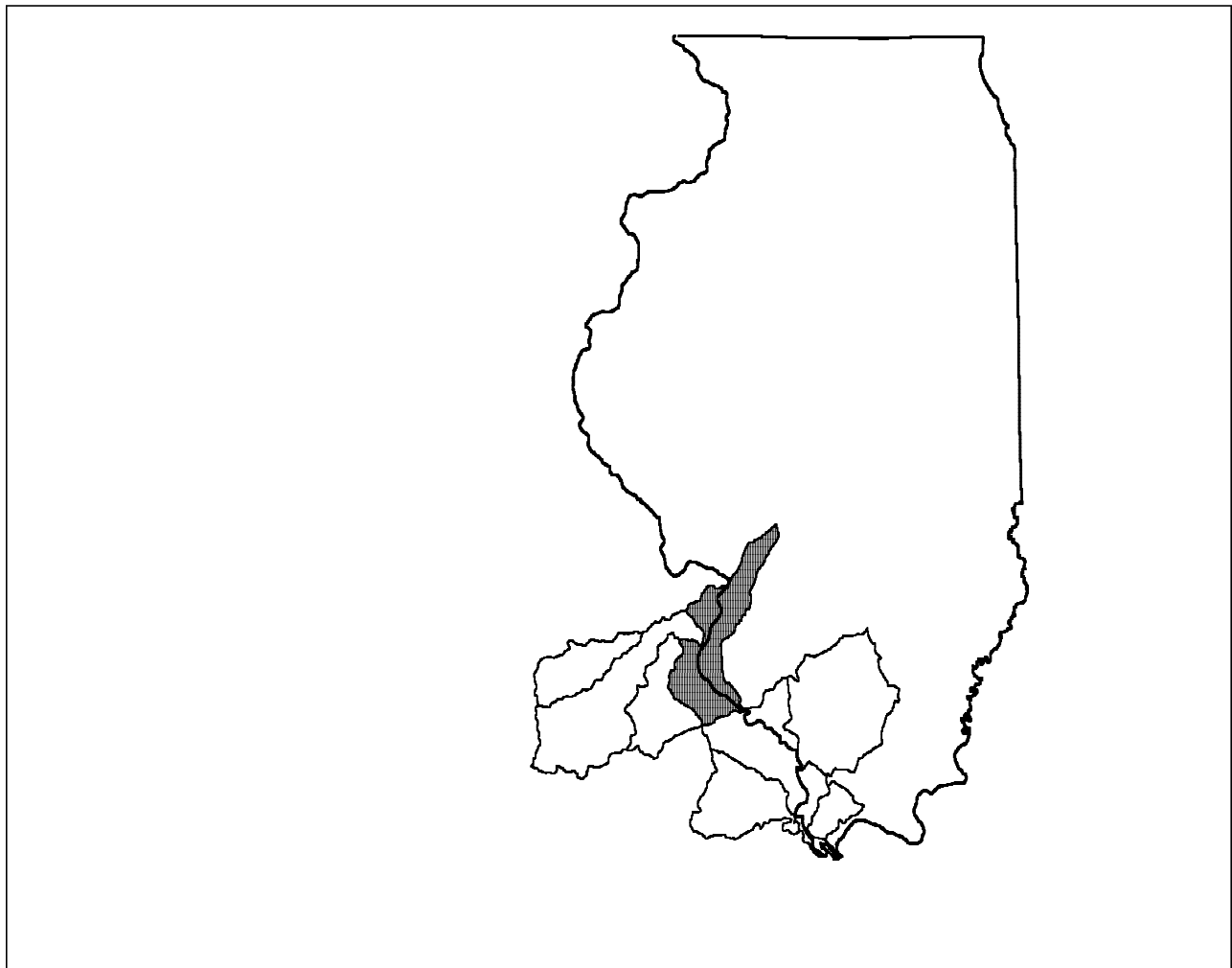


Figure 133. Watershed Location Map

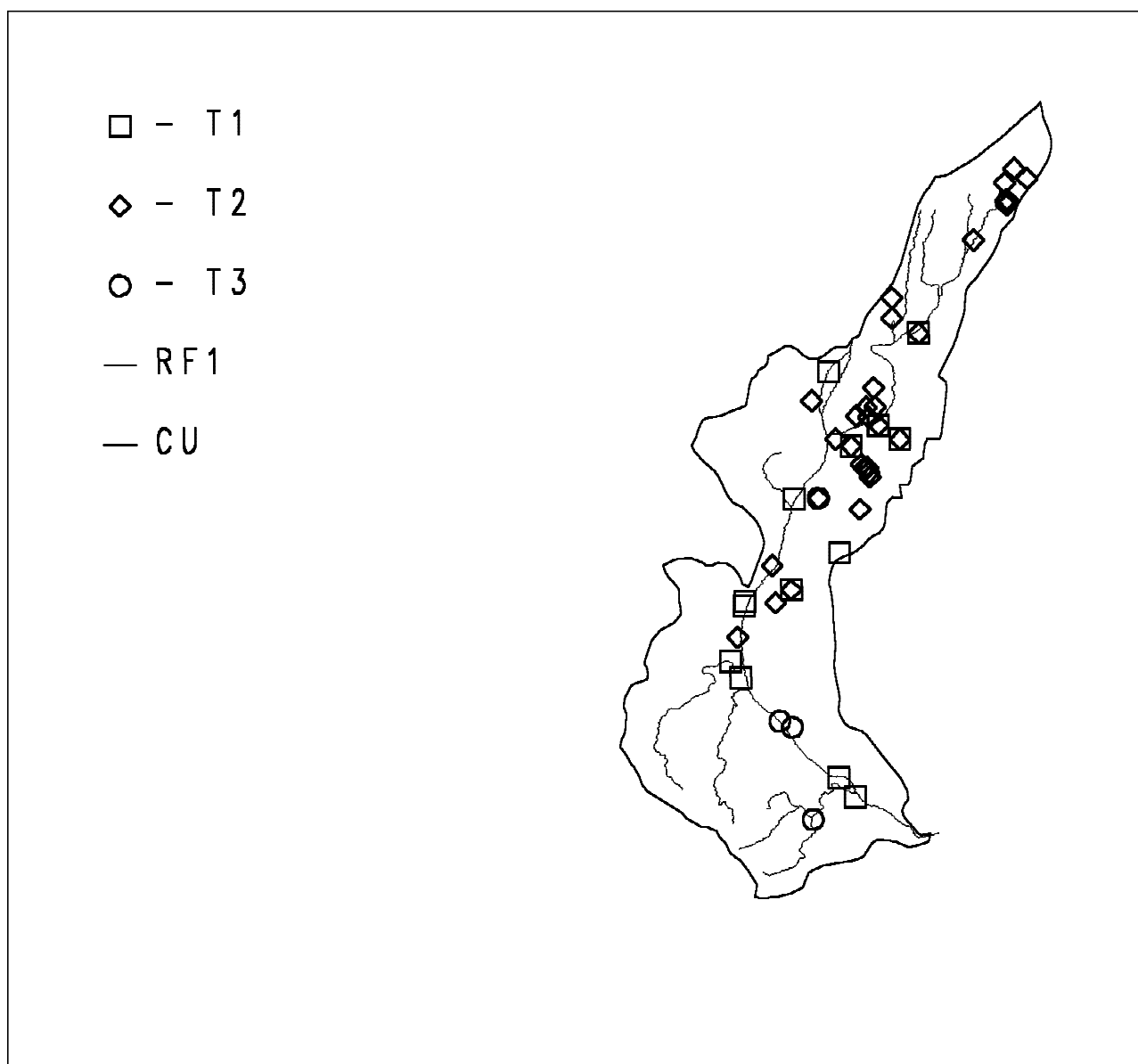


Figure 134. Major Waterways and Location of Sampling Stations

Data Source(s) Used in Evaluation

Source: **STORET** Agency: **11BIOACC**
 Monitoring Program: **USEPA National Bioaccumulation Study**
 Num. of Stations: 1 Date Range: 1986-89

Source: **STORET** Agency: **1117MBR**
 Monitoring Program: **USEPA Region 7 Data**
 Num. of Stations: 11 Date Range: 1981-91

Source: **STORET** Agency: **21ILFISH**
 Monitoring Program: **USEPA Region 5 Data**
 Num. of Stations: 12 Date Range: 1980-92

Source: **STORET** Agency: **21ILLAKE**
 Monitoring Program: **USEPA Region 5 Data**
 Num. of Stations: 13 Date Range: 1982-93

Source: **STORET** Agency: **21ILSED**
 Monitoring Program: **Illinois EPA Div of Water Pollution Control Data**
 Num. of Stations: 19 Date Range: 1984-88

Chemicals Responsible for Sampling Station Classification as Tier 1 or Tier 2

Classifying Parameter	Number of Stations							
	All Parameters				Aquatic Life		Human Health	
	Total	T.1&2	Tier1	Tier2	Tier1	Tier2	Tier1	Tier2
Dieldrin	50	37	.	37	.	21	.	37
Chlordane	52	35	.	35	.	20	.	31
Copper	38	25	.	25	.	25	.	.
Lead	39	23	.	23	.	23	.	.
Polychlorinated biphenyls	50	22	11	11	.	6	11	11
Zinc	37	21	.	21	.	21	.	.
Cadmium	38	17	.	17	.	17	.	.
Arsenic	39	16	.	16	.	16	.	.
Heptachlor epoxide	50	14	.	14	.	.	.	14
Mercury	42	12	4	8	4	8	.	.
DDT	50	10	2	8	2	6	.	4
Nickel	14	9	.	9	.	9	.	.
Dioxins	10	5	5	.	.	.	5	.
Chromium	37	4	1	3	1	3	.	.
Silver	13	2	.	2	.	2	.	.

Sediment Chemistry Data: Chemical Summary

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Acenaphthene	1	0.00	0.00	0	.	.
Acenaphthylene	1	0.00	0.00	0	.	.
Acrylonitrile	1	0.00	0.00	0	.	.
Aldrin	46	0.02	0.00	1	1.00	1.00
Anthracene	1	0.00	0.00	0	.	.
Antimony	1	0.00	0.00	0	.	.
Arsenic	72	7888.89	6500.00	71	44000.00	3700.00
Benzene	1	0.00	0.00	0	.	.
Benzo(a)anthracene	1	0.00	0.00	0	.	.
Benzo(a)pyrene	1	0.00	0.00	0	.	.
Benzo(b)fluoranthene	1	0.00	0.00	0	.	.
Benzo(ghi)perylene	1	0.00	0.00	0	.	.
Benzo(k)fluoranthene	1	0.00	0.00	0	.	.

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Bis(2-ethylhexyl)phthalate	1	0.00	0.00	0	.	.
Bromophenyl phenyl ether, 4-	1	0.00	0.00	0	.	.
Butyl benzyl phthalate	1	0.00	0.00	0	.	.
BHC	108	0.00	0.00	0	.	.
Cadmium	72	5420.83	300.00	37	91000.00	300.00
Chlordane	214	3.54	0.00	81	110.00	1.20
Chlorobenzene	1	0.00	0.00	0	.	.
Chlorpyrifos/Dursban	1	0.00	0.00	0	.	.
Chromium	72	26608.33	18000.00	72	293000.0	8100.00
Chrysene	1	0.00	0.00	0	.	.
Copper	72	108225.0	35000.00	72	1100000	7900.00
Di-n-butyl phthalate	1	0.00	0.00	0	.	.
Di-n-octyl phthalate	1	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	1	0.00	0.00	0	.	.
Dibromochloromethane	1	0.00	0.00	0	.	.
Dichlorobenzene, 1,2-	1	0.00	0.00	0	.	.
Dichlorobenzene, 1,3-	1	0.00	0.00	0	.	.
Dichlorobenzene, 1,4-	1	0.00	0.00	0	.	.
Dichloroethane 1,1-	1	0.00	0.00	0	.	.
Dichloroethane 1,2-	1	0.00	0.00	0	.	.
Dichloroethene, trans-1,2-	1	0.00	0.00	0	.	.
Dichloromethane	1	0.00	0.00	0	.	.
Dichloropropane, 1,2-	1	0.00	0.00	0	.	.
Dieldrin	66	4.08	1.35	37	79.00	1.00
Diethyl phthalate	1	0.00	0.00	0	.	.
Dimethyl phthalate	1	0.00	0.00	0	.	.
Dimethylphenol, 2,4-	1	0.00	0.00	0	.	.
Dioxins	1	0.00	0.00	0	.	.
DDT	341	1.21	0.00	29	150.00	1.20
Endosulfan, alpha-	1	0.00	0.00	0	.	.
Endosulfan, beta-	1	0.00	0.00	0	.	.
Endrin	47	0.00	0.00	0	.	.
Ethylbenzene	1	0.00	0.00	0	.	.
Fluoranthene	1	0.00	0.00	0	.	.
Fluorene	1	0.00	0.00	0	.	.
Heptachlor	46	0.00	0.00	0	.	.
Heptachlor epoxide	66	0.50	0.00	13	9.00	1.00
Hexachlorobenzene	46	0.00	0.00	0	.	.
Hexachlorobutadiene	1	0.00	0.00	0	.	.
Hexachloroethane	1	0.00	0.00	0	.	.
Indeno(1,2,3-cd)pyrene	1	0.00	0.00	0	.	.
Isophorone	1	0.00	0.00	0	.	.
Lead	72	79176.39	39500.00	72	420000.0	2700.00
Malathion	1	0.00	0.00	0	.	.

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Mercury	72	129.94	50.00	62	1217.00	10.00
Methoxychlor	46	0.00	0.00	0	.	.
Mirex/Dechlorane	1	0.00	0.00	0	.	.
Naphthalene	1	0.00	0.00	0	.	.
Nickel	15	29240.00	29000.00	15	54900.00	13000.00
Nitrosodiphenylamine, N-	1	0.00	0.00	0	.	.
Pentachlorophenol	2	0.00	0.00	0	.	.
Phenanthrene	1	0.00	0.00	0	.	.
Phenol	1	0.00	0.00	0	.	.
Polychlorinated biphenyls	72	5.94	0.00	14	75.00	10.00
Pyrene	1	0.00	0.00	0	.	.
Silver	15	333.33	0.00	3	2000.00	1000.00
Tetrachloroethane, 1,1,2,2-	1	0.00	0.00	0	.	.
Tetrachloroethene	1	0.00	0.00	0	.	.
Tetrachloromethane	1	0.00	0.00	0	.	.
Toluene	1	0.00	0.00	0	.	.
Toxaphene	1	0.00	0.00	0	.	.
Tribromomethane/Bromoform	1	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	1	0.00	0.00	0	.	.
Trichloroethane, 1,1,1-	1	0.00	0.00	0	.	.
Trichloroethane, 1,1,2-	1	0.00	0.00	0	.	.
Trichloroethene	1	0.00	0.00	0	.	.
Trichloromethane/Chloroform	1	0.00	0.00	0	.	.
Zinc	72	562487.5	134200.0	72	4100000	38000.00

Tissue Residue Data: Chemical Summary

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Acenaphthene	2	0.00	0.00	0	.	.
Acrolein	2	0.00	0.00	0	.	.
Acrylonitrile	2	0.00	0.00	0	.	.
Alachlor/Lasso	3	0.00	0.00	0	.	.
Aldrin	66	0.00	0.00	0	.	.
Anthracene	1	0.00	0.00	0	.	.
Antimony	2	0.00	0.00	0	.	.
Arsenic	8	0.00	0.00	0	.	.
Atrazine	4	0.00	0.00	0	.	.
Barium	4	4622.50	4560.00	4	6600.00	2770.00
Benzene	4	3.00	0.00	1	12.00	12.00
Benzidine	2	0.00	0.00	0	.	.
Benzo(a)anthracene	1	0.00	0.00	0	.	.
Benzo(a)pyrene	2	0.00	0.00	0	.	.

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Benzo(b)fluoranthene	2	0.00	0.00	0	.	.
Benzo(k)fluoranthene	1	0.00	0.00	0	.	.
Beryllium	3	0.00	0.00	0	.	.
Biphenyl	3	20.86	5.63	3	53.80	3.16
Bis(2-chloroethyl)ether	2	0.00	0.00	0	.	.
Bis(2-ethylhexyl)phthalate	2	0.00	0.00	0	.	.
Bromodichloromethane	2	0.00	0.00	0	.	.
Bromomethane	2	0.00	0.00	0	.	.
Bromophenyl phenyl ether, 4-	2	0.00	0.00	0	.	.
Butyl benzyl phthalate	2	0.00	0.00	0	.	.
BHC	145	0.00	0.00	0	.	.
Cadmium	5	131.60	62.00	4	370.00	56.00
Chlordane	118	131.12	60.00	103	1700.00	2.80
Chlorobenzene	2	415.00	415.00	2	530.00	300.00
Chloroethane	2	0.00	0.00	0	.	.
Chloroethene	4	0.00	0.00	0	.	.
Chloroethylvinyl ether, 2-	2	0.00	0.00	0	.	.
Chloromethane	2	0.00	0.00	0	.	.
Chloronaphthalene, 2-	2	0.00	0.00	0	.	.
Chlorophenol, 2-	2	0.00	0.00	0	.	.
Chlorpyrifos/Dursban	5	5.49	7.22	3	12.80	7.22
Chromium	4	409.50	424.00	4	470.00	320.00
Chrysene	2	0.00	0.00	0	.	.
Copper	7	433.14	618.00	4	1100.00	618.00
Cyanazine	1	0.00	0.00	0	.	.
Di-n-butyl phthalate	2	0.00	0.00	0	.	.
Di-n-octyl phthalate	2	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	2	0.00	0.00	0	.	.
Dibromochloromethane	2	0.00	0.00	0	.	.
Dichlorobenzene, 1,2-	2	0.00	0.00	0	.	.
Dichlorobenzene, 1,3-	2	0.00	0.00	0	.	.
Dichlorobenzene, 1,4-	2	0.00	0.00	0	.	.
Dichlorobenzidine, 3,3'-	2	0.00	0.00	0	.	.
Dichlorodifluoromethane	1	0.00	0.00	0	.	.
Dichloroethane 1,1-	2	0.00	0.00	0	.	.
Dichloroethane 1,2-	4	1.75	0.00	1	7.00	7.00
Dichloroethene, trans-1,2-	2	0.00	0.00	0	.	.
Dichloroethene, 1,1-	4	0.00	0.00	0	.	.
Dichloromethane	2	19.50	19.50	1	39.00	39.00
Dichlorophenol, 2,4-	2	0.00	0.00	0	.	.
Dichloropropane, 1,2-	2	0.00	0.00	0	.	.
Dicofol/Kelthane	3	0.00	0.00	0	.	.
Dieldrin	76	60.27	39.50	66	390.00	10.00
Diethyl phthalate	2	0.00	0.00	0	.	.

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Dimethyl phthalate	2	0.00	0.00	0	.	.
Dimethylphenol, 2,4-	2	0.00	0.00	0	.	.
Dinitrophenol, 2,4-	2	0.00	0.00	0	.	.
Dinitrotoluene, 2,4-	2	0.00	0.00	0	.	.
Dinitrotoluene, 2,6-	2	0.00	0.00	0	.	.
Dioxins	37	0.02	0.01	27	0.07	0.00
Diphenylhydrazine, 1,2-	2	0.00	0.00	0	.	.
DDT	91	66.30	26.00	63	1000.00	6.50
Endosulfan, alpha-	5	0.00	0.00	0	.	.
Endosulfan, beta-	3	0.00	0.00	0	.	.
Endrin	69	0.00	0.00	0	.	.
Ethylbenzene	2	58.50	58.50	2	59.00	58.00
Fluoranthene	2	0.00	0.00	0	.	.
Fluorene	2	0.00	0.00	0	.	.
Fonofos	2	0.00	0.00	0	.	.
Heptachlor	69	0.11	0.00	1	7.50	7.50
Heptachlor epoxide	75	8.40	0.03	40	56.00	0.01
Hexachlorobenzene	68	0.06	0.00	1	3.82	3.82
Hexachlorobutadiene	6	5.09	5.76	4	10.50	2.99
Hexachloroethane	2	0.00	0.00	0	.	.
Indeno(1,2,3-cd)pyrene	2	0.00	0.00	0	.	.
Isophorone	2	0.00	0.00	0	.	.
Isopropalin	3	0.00	0.00	0	.	.
Lead	8	100.00	40.00	4	510.00	80.00
Malathion	2	0.00	0.00	0	.	.
Manganese	3	6556.67	6700.00	3	8810.00	4160.00
Mercury	17	69.69	70.10	16	130.00	26.70
Methoxychlor	67	0.00	0.00	0	.	.
Metribuzin	2	0.00	0.00	0	.	.
Mirex/Dechlorane	66	0.52	0.00	1	34.30	34.30
Molybdenum	3	48.33	0.00	1	145.00	145.00
Naphthalene	2	0.00	0.00	0	.	.
Nickel	4	109.50	0.00	1	438.00	438.00
Nitrobenzene	2	0.00	0.00	0	.	.
Nitrophenol, 4	1	0.00	0.00	0	.	.
Nitrosodi-n-propylamine, N-	2	0.00	0.00	0	.	.
Nitrosodiphenylamine, N-	2	0.00	0.00	0	.	.
Parathion ethyl	2	0.00	0.00	0	.	.
Pentachlorobenzene	3	0.00	0.00	0	.	.
Pentachloronitrobenzene/Quin	3	0.00	0.00	0	.	.
Pentachlorophenol	2	0.00	0.00	0	.	.
Phenol	2	0.00	0.00	0	.	.
Polychlorinated biphenyls	88	232.96	0.00	40	3000.00	35.00
Prometon/Pramitol	2	0.00	0.00	0	.	.

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Pyrene	2	0.00	0.00	0	.	.
Selenium	2	505.00	505.00	2	740.00	270.00
Silver	3	0.00	0.00	0	.	.
Simazine	2	0.00	0.00	0	.	.
Styrene	2	0.00	0.00	0	.	.
Tetrachlorobenzene, 1,2,4,5-	3	0.00	0.00	0	.	.
Tetrachloroethane, 1,1,2,2-	4	0.00	0.00	0	.	.
Tetrachloroethene	4	17.75	13.00	2	45.00	26.00
Tetrachloromethane	4	0.00	0.00	0	.	.
Toluene	2	105.00	105.00	2	160.00	50.00
Toxaphene	66	0.00	0.00	0	.	.
Tribromomethane/Bromoform	2	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	5	1.00	0.00	1	4.98	4.98
Trichloroethane, 1,1,1-	2	0.00	0.00	0	.	.
Trichloroethane, 1,1,2-	4	0.00	0.00	0	.	.
Trichloroethene	4	0.00	0.00	0	.	.
Trichlorofluoromethane	1	0.00	0.00	0	.	.
Trichloromethane/Chloroform	4	0.00	0.00	0	.	.
Trichlorophenol, 2,4,6-	2	0.00	0.00	0	.	.
Trifluralin/Treflan	4	36.03	42.80	3	58.50	33.10
Vanadium	3	250.67	140.00	3	482.00	130.00
Zinc	4	35025.00	33300.00	4	61000.00	12500.00