

Watershed Summary Information

Accounting Unit Name:	Savannah
State(s):	SC GA
Political Boundaries:	Aiken, Burke, Allendale, Barnwell, Columbia, Richmond, Screven, McCormick, Edgefield, Mcduffie
Major Waterways:	Savannah R Horse Cr Lower Three Runs Kiokee Cr Upper Three Runs
Number of Stations in Watershed:	Tier1 - 20 Tier2 - 11 Tier3 - 5

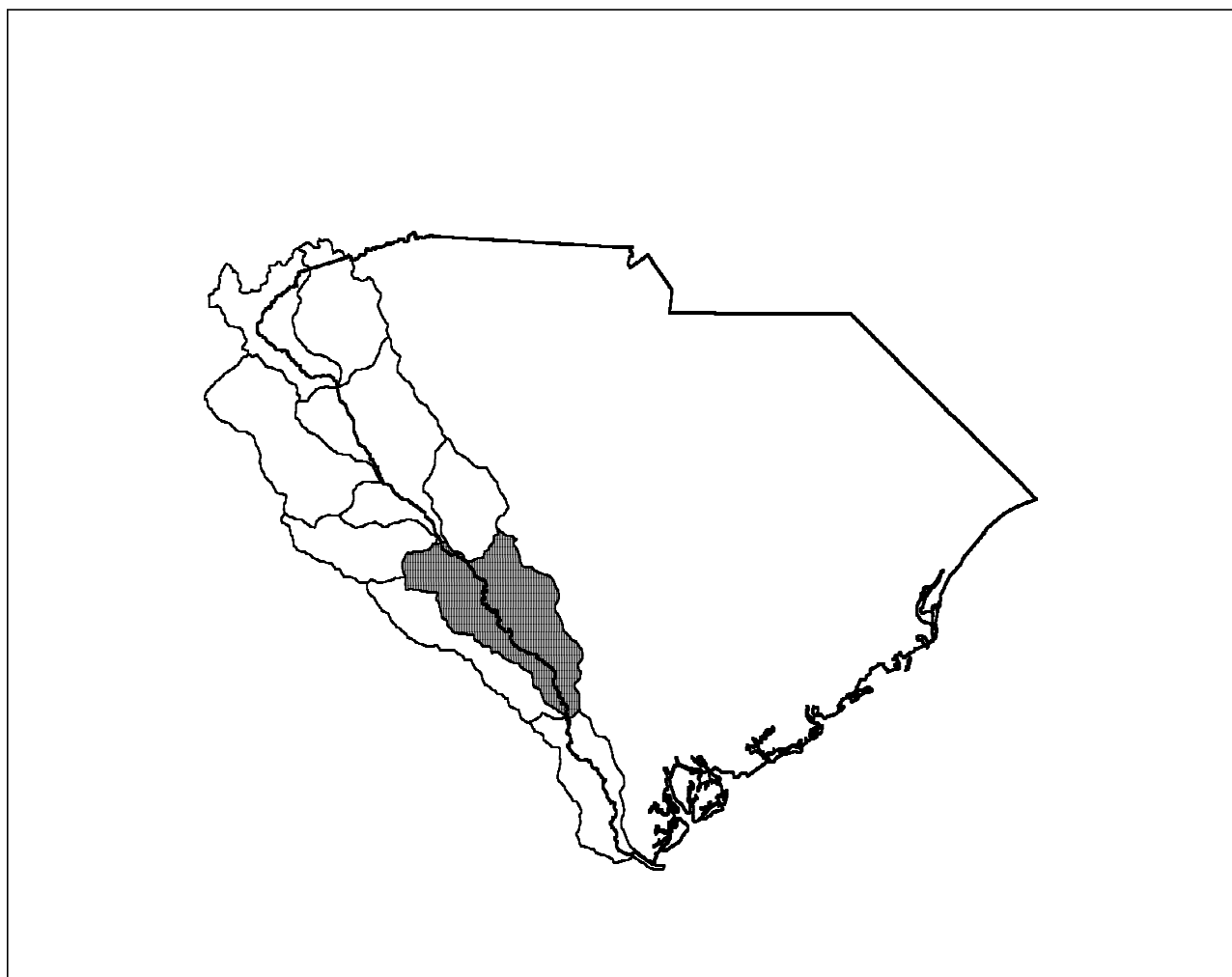


Figure 31. Watershed Location Map

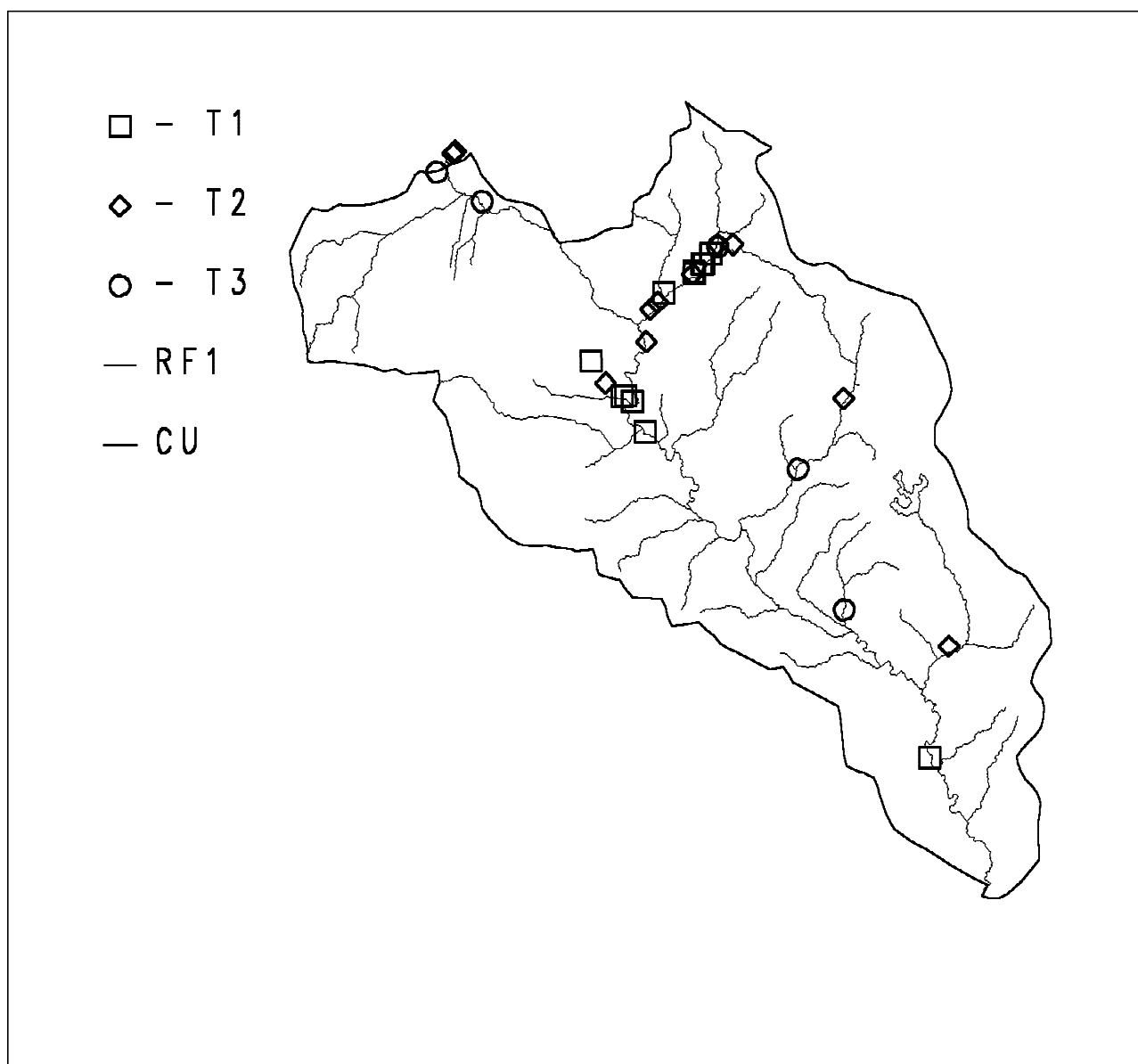


Figure 32. Major Waterways and Location of Sampling Stations

Data Source(s) Used in Evaluation

Source: **ODES** Agency: **GA**
 Monitoring Program: **Georgia**
 Num. of Stations: 2 Date Range: 1984-88

Source: **STORET** Agency: **11BIOACC**
 Monitoring Program: **USEPA National Bioaccumulation Study**
 Num. of Stations: 2 Date Range: 1984-88

Source: **STORET** Agency: **11COESAV**
 Monitoring Program: **Corps of Engineers Savannah District Stream Flow Data**
 Num. of Stations: 3 Date Range: 1981

Source: **STORET** Agency: **112WRD**
Monitoring Program: **US Geological Survey Data**
Num. of Stations: 1 Date Range: 1980

Source: **STORET** Agency: **21GAEPD**
Monitoring Program: **GA Dept of Nat Resources Resources Data**
Num. of Stations: 4 Date Range: 1980-93

Source: **STORET** Agency: **21SC60WQ**
Monitoring Program: **SC Dept of Health & Environmental Control Biostoret Data**
Num. of Stations: 24 Date Range: 1980-93

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
Polychlorinated biphenyls	30	22	19	3	12	4	8	14
Mercury	31	17	11	6	11	5	.	2
Copper	28	17	.	17	.	17	.	.
Lead	28	17	.	17	.	15	.	3
Cadmium	28	16	.	16	.	16	.	.
Nickel	27	13	.	13	.	13	.	.
DDT	28	12	3	9	3	8	.	5
Zinc	28	12	.	12	.	12	.	.
Chromium	29	11	10	1	10	1	.	.
Arsenic	20	8	3	5	3	5	.	.
Dioxins	4	4	4	.	.	.	4	.
BHC	28	4	.	4	.	1	.	3
Chlordane	20	4	.	4	.	3	.	3
Fluoranthene	12	3	2	1	2	1	.	1
Pyrene	12	3	2	1	2	1	.	1
Benzo(a)anthracene	12	2	2	.	2	.	.	2
Chrysene	12	2	2	.	2	.	.	1
Naphthalene	12	2	2	.	2	.	.	1
Bis(2-ethylhexyl)phthalate	11	2	1	1	1	1	.	1
Phenanthrene	11	2	1	1	1	1	.	.
Silver	17	2	1	1	1	1	.	.
Aldrin	25	2	.	2	.	.	.	2
Dieldrin	28	2	.	2	.	.	.	2
Acenaphthylene	10	1	1	.	1	.	.	.
Anthracene	11	1	1	.	1	.	.	.
Diethyl phthalate	11	1	1	.	1	.	.	.
Fluorene	11	1	1	.	1	.	.	1
Acenaphthene	11	1	.	1	.	1	.	.
Cresols	2	1	.	1	.	1	.	.
Di-n-butyl phthalate	10	1	.	1	.	1	.	.

Classifying Parameter	Number of Stations							
	All Parameters				Aquatic Life		Human Health	
	Total	T.1&2	Tier1	Tier2	Tier1	Tier2	Tier1	Tier2
Heptachlor epoxide	27	1	.	1	.	.	.	1
Nitrosodiphenylamine, N-	10	1	.	1	.	1	.	.
Pentachlorophenol	12	1	.	1	.	1	.	.
Phenol	12	1	.	1	.	1	.	.
Toxaphene	25	1	.	1	.	1	.	1

Sediment Chemistry Data: Chemical Summary

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Acenaphthene	25	16.00	0.00	1	400.00	400.00
Acenaphthylene	20	88600.00	0.00	1	1772000	1772000
Aldrin	106	0.05	0.00	2	2.91	2.30
Anthracene	25	47626.00	0.00	2	1190000	650.00
Antimony	16	13250.00	14500.00	9	40000.00	13000.00
Arsenic	46	15187.61	1030.00	26	220000.0	600.00
Benzene	23	0.00	0.00	0	.	.
Benzo(a)anthracene	28	10564.64	0.00	3	291000.0	380.00
Benzo(a)pyrene	18	0.00	0.00	0	.	.
Benzo(b)fluoranthene	18	0.00	0.00	0	.	.
Benzo(ghi)perylene	18	0.00	0.00	0	.	.
Benzo(k)fluoranthene	18	0.00	0.00	0	.	.
Benzoic acid	17	0.00	0.00	0	.	.
Benzyl alcohol	17	0.00	0.00	0	.	.
Biphenyl	5	0.00	0.00	0	.	.
Bis(2-ethylhexyl)phthalate	21	1038.10	0.00	3	12300.00	1700.00
Bromophenyl phenyl ether, 4-	18	0.00	0.00	0	.	.
Butyl benzyl phthalate	12	60.83	0.00	1	730.00	730.00
BHC	258	0.01	0.00	1	2.93	2.93
Cadmium	124	1020.16	0.00	24	33000.00	700.00
Chlordane	69	1.68	0.00	3	108.00	3.00
Chlorobenzene	15	0.00	0.00	0	.	.
Chromium	130	530235.7	14000.00	117	12000000	1000.00
Chrysene	28	10492.14	0.00	4	288000.0	380.00
Copper	128	32710.39	5150.00	88	1100000	1000.00
Cresol, o	14	0.00	0.00	0	.	.
Cresol, p-	16	0.00	0.00	0	.	.
Cresols	9	755.56	0.00	1	6800.00	6800.00
Di-n-butyl phthalate	24	151.25	0.00	2	1870.00	1760.00
Di-n-octyl phthalate	15	0.00	0.00	0	.	.
Diazinon/Spectracide	69	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	18	0.00	0.00	0	.	.
Dibenzofuran	23	18.26	0.00	1	420.00	420.00

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Dibromochloromethane	15	0.00	0.00	0	.	.
Dichlorobenzene, 1,2-	20	0.00	0.00	0	.	.
Dichlorobenzene, 1,3-	21	0.71	0.00	1	15.00	15.00
Dichlorobenzene, 1,4-	21	2.10	0.00	1	44.00	44.00
Dichloroethane 1,1-	18	0.11	0.00	1	2.00	2.00
Dichloroethane 1,2-	15	0.00	0.00	0	.	.
Dichloroethene, trans-1,2-	15	0.00	0.00	0	.	.
Dichloromethane	15	0.00	0.00	0	.	.
Dichloropropane, 1,2-	15	0.00	0.00	0	.	.
Dieldrin	109	0.00	0.00	0	.	.
Diethyl phthalate	23	29.13	0.00	1	670.00	670.00
Dimethyl phthalate	18	0.00	0.00	0	.	.
Dimethylphenol, 2,4-	18	0.00	0.00	0	.	.
DDT	564	3.03	0.00	47	504.30	1.00
Endosulfan mixed isomers	1	0.00	0.00	0	.	.
Endosulfan, alpha-	41	0.00	0.00	0	.	.
Endosulfan, beta-	41	0.00	0.00	0	.	.
Endrin	103	0.00	0.00	0	.	.
Ethion/Bladen	68	0.00	0.00	0	.	.
Ethylbenzene	15	0.00	0.00	0	.	.
Fluoranthene	28	93282.18	0.00	6	2602000	395.00
Fluorene	25	78222.80	0.00	2	1955000	570.00
Heptachlor	98	0.00	0.00	0	.	.
Heptachlor epoxide	99	0.05	0.00	1	4.70	4.70
Hexachlorobenzene	52	0.00	0.00	0	.	.
Hexachlorobutadiene	17	0.00	0.00	0	.	.
Hexachloroethane	18	0.00	0.00	0	.	.
Indeno(1,2,3-cd)pyrene	18	0.00	0.00	0	.	.
Isophorone	18	0.00	0.00	0	.	.
Lead	125	36386.64	6000.00	74	360000.0	3600.00
Malathion	68	0.00	0.00	0	.	.
Mercury	122	1165.76	0.00	28	25500.00	7.00
Methoxychlor	88	0.00	0.00	0	.	.
Methylnaphthalene, 2-	18	0.00	0.00	0	.	.
Mirex/Dechlorane	55	0.00	0.00	0	.	.
Naphthalene	27	46215.22	0.00	3	1247000	332.00
Nickel	115	6123.57	0.00	56	39000.00	2000.00
Nitrosodiphenylamine, N-	18	16.67	0.00	1	300.00	300.00
Pentachlorophenol	40	42.50	0.00	1	1700.00	1700.00
Phenanthrene	28	143654.3	0.00	4	4019000	950.00
Phenol	31	20.10	0.00	1	623.00	623.00
Polychlorinated biphenyls	351	111.64	0.00	24	9170.00	25.20
Pyrene	28	56027.46	0.00	6	1556000	427.00
Silver	25	528.00	0.00	3	5900.00	3200.00

Sediment Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Tetrachloroethane, 1,1,2,2-	15	0.00	0.00	0	.	.
Tetrachloroethene	18	0.00	0.00	0	.	.
Tetrachloromethane	15	0.00	0.00	0	.	.
Toluene	22	8.48	0.00	3	173.00	4.65
Toxaphene	109	1.82	0.00	1	198.00	198.00
Tribromomethane/Bromoform	15	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	20	0.00	0.00	0	.	.
Trichloroethane, 1,1,1-	17	0.00	0.00	0	.	.
Trichloroethane, 1,1,2-	15	0.00	0.00	0	.	.
Trichloroethene	16	0.00	0.00	0	.	.
Trichlorofluoromethane	15	0.00	0.00	0	.	.
Trichloromethane/Chloroform	23	0.00	0.00	0	.	.
Xylenes	8	0.38	0.00	1	3.00	3.00
Zinc	126	143159.7	14000.00	116	2600000	1500.00

Tissue Residue Data: Chemical Summary

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Acenaphthene	1	0.00	0.00	0	.	.
Aldrin	46	0.00	0.00	0	.	.
Anthracene	1	0.00	0.00	0	.	.
Antimony	3	0.00	0.00	0	.	.
Arsenic	13	0.00	0.00	0	.	.
Barium	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(k)fluoranthene	1	0.00	0.00	0	.	.
Beryllium	3	0.00	0.00	0	.	.
Biphenyl	4	6.25	6.25	2	12.50	12.50
Bis(2-chloroethyl)ether	1	0.00	0.00	0	.	.
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	119	2.77	0.00	8	100.00	3.00
Cadmium	57	0.00	0.00	0	.	.
Chlordane	59	2354.09	0.00	22	138000.0	3.90
Chloronaphthalene, 2-	1	0.00	0.00	0	.	.
Chlorophenol, 2-	1	0.00	0.00	0	.	.
Chlorpyrifos/Dursban	2	0.00	0.00	0	.	.
Chromium	57	755.96	0.00	22	5100.00	210.00
Chrysene	1	0.00	0.00	0	.	.

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Copper	57	620.53	410.00	29	2900.00	410.00
Di-n-butyl phthalate	1	0.00	0.00	0	.	.
Di-n-octyl phthalate	1	0.00	0.00	0	.	.
Diazinon/Spectracide	10	0.00	0.00	0	.	.
Dibenzo(a,h)anthracene	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	.	.
Dichlorophenol, 2,4-	1	0.00	0.00	0	.	.
Dichlorophenoxyacetic acid,	5	0.00	0.00	0	.	.
Dicofol/Kelthane	2	0.00	0.00	0	.	.
Dieldrin	49	0.86	0.00	2	21.10	21.10
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	.	.
Dinitrophenol, 2,4-	1	0.00	0.00	0	.	.
Dinitrotoluene, 2,4-	1	0.00	0.00	0	.	.
Dinitrotoluene, 2,6-	1	0.00	0.00	0	.	.
Dioxins	6	0.01	0.00	6	0.03	0.00
Diphenylhydrazine, 1,2-	1	0.00	0.00	0	.	.
DDT	218	72.66	0.00	83	6300.00	5.40
Endosulfan, alpha-	6	0.00	0.00	0	.	.
Endosulfan, beta-	6	0.00	0.00	0	.	.
Endrin	48	0.00	0.00	0	.	.
Ethion/Bladen	8	0.00	0.00	0	.	.
Fluoranthene	1	0.00	0.00	0	.	.
Fluorene	1	0.00	0.00	0	.	.
Heptachlor	21	0.00	0.00	0	.	.
Heptachlor epoxide	21	0.00	0.00	0	.	.
Hexachlorobenzene	48	0.00	0.00	0	.	.
Hexachlorobutadiene	3	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	.	.
Isopropalin	2	0.00	0.00	0	.	.
Lead	47	891.49	0.00	19	4200.00	900.00
Malathion	8	0.00	0.00	0	.	.
Manganese	1	1400.00	1400.00	1	1400.00	1400.00
Mercury	64	262.66	0.00	31	1650.00	80.00
Methoxychlor	48	0.00	0.00	0	.	.
Mirex/Dechlorane	48	0.00	0.00	0	.	.
Naphthalene	1	0.00	0.00	0	.	.
Nickel	39	789.74	0.00	17	3400.00	1000.00
Nitrobenzene	1	0.00	0.00	0	.	.

Tissue Parameter	Total Observations			Detected Observations		
	Num.	Mean (ppb)	Median (ppb)	Num.	Max (ppb)	Min (ppb)
Nitrophenol, 4	1	0.00	0.00	0	.	.
Nitrosodi-n-propylamine, N-	1	0.00	0.00	0	.	.
Nitrosodiphenylamine, N-	1	0.00	0.00	0	.	.
Parathion ethyl	8	0.00	0.00	0	.	.
Pentachlorobenzene	2	0.00	0.00	0	.	.
Pentachloronitrobenzene/Quin	2	0.00	0.00	0	.	.
Pentachlorophenol	13	0.00	0.00	0	.	.
Phenol	1	0.00	0.00	0	.	.
Polychlorinated biphenyls	204	164.73	0.00	59	4210.00	70.00
Pyrene	1	0.00	0.00	0	.	.
Selenium	4	0.00	0.00	0	.	.
Silver	3	0.00	0.00	0	.	.
Tetrachlorobenzene, 1,2,4,5-	3	8.00	12.00	2	12.00	12.00
Tin	9	2666.67	0.00	1	24000.00	24000.00
Toxaphene	46	0.00	0.00	0	.	.
Trichlorobenzene, 1,2,4-	4	52.00	52.00	2	104.00	104.00
Trichlorophenol, 2,4,6-	1	0.00	0.00	0	.	.
Trichlorophenoxypropionic ac	5	0.00	0.00	0	.	.
Trifluralin/Treflan	2	0.00	0.00	0	.	.
Vanadium	1	0.00	0.00	0	.	.
Zinc	47	13291.49	14000.00	46	28000.00	3800.00