Site:
Break: 3.7
Other:

3524

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

3 7 00001

Dear Colleague:

EPA Region IV, Water Quality Standards Unit, has prepared the attached "Toxic Substance Spreadsheet" to provide a complete and comprehensive listing of EPA published criteria for toxic substances under Section 304(a) of the Clean Water Act (CWA), and to include other related, relevant information.

This summary table reflects a current listing of all EPA published criteria with adjusted criteria for human health based on revised reference dose factors (RfD) or cancer potency factors (q_1*) obtained from IRIS (EPA's Integrated Risk Information System). These values are current as of December 1989. While the table should be self explanatory in many respects, certain items may require further explanation.

- Date Revised Column - This column is intended to indicate the last date EPA Region IV revised an entry for a particular polluant. We intend to update the table periodically.

- EPA Detection Level - Generally two methods are listed, both of which are found in 40 CFR 136.

- Bioconcentration Factor - All BCF values printed and used in the human health criteria calculations are from the 1980 Ambient Water Quality Criteria Documents.

- Human Health Criteria are expressed at the 1:1,000,000 ($1X10^{-6}$) risk level for carcinogens. Pollutants considered probable carcinogens are noted with a "c" next to the compound name.

- EPA Fish Tissue Concentrations - These are the fish tissue values from which the EPA Human Health water quality criteria are calculated using the bioconcentration factors listed in the previous column. These values can be used in evaluating the health risk associated with fish tissue data for priority pollutants. These values are based on the same exposure calculations outlined in EPA's criteria documents for consumption of aquatic organisms.

- Criteria Dates - This column contains the date of the applicable EPA criteria document and if appropriate the date of the most recent RfD or q_1* used to adjust the criteria document values.

Although this table was originally prepared as Region IV quidance to it's states, based on numerous requests from other EPA Regions and interested parties, it will be distributed periodically to all those who have received previous versions or have requested to be added to our (somewhat informal) mailing list. Please feel free to share this table with others as you see fit.

Any questions concerning the table itself can be addressed to me at (404)347-2126 , FTS 257-2126. Questions concerning the derivation of criteria should be addressed to the EPA Headquarters Criteria Branch at (202)475-7351.

Sincerely yours,

Larinda T. Gronner

Larinda T. Gronner
Water Quality Standards Unit
Water Management Division

Ambient Water Qual Criteria

Tom Gwin

TS81209 SCREENING LIST
UPDATE: DECEMBER 1989
EPA REG IV - WATER MANAGEMENT DIVISION
304(a) SCREENING VALUES AND RELATED INFORMATION
FOR TOXIC POLLUTANTS

DATE REVISED		COMPOUND	EPA DETECTION LEVEL [40 CFR 136] (ug/l)	Ref. Method	(ug/l)	Ref. Method	FRESHWATER Screening Value (Maximum) (ug/l)	Screening Value (Continuous) (ug/l)	95% LC50 Value (ug/l)	SALTWATER Screening Value (Maximum) (ug/l)	Screening Value (Continuous) (ug/l)	95% LC50 Value (ug/l)	HUMAN HEALTH (10 -6 risk factor for carcinogens) Consumption of: Water & Organisms (ug/l)	Organisms Only (ug/l)	BIO CONCENTRATION FACTOR (3% lipid) Weighted Avg. (l/kg)	EPA FISH TISSUE CONCENTRATION (ppm) (mg/kg)	CRITERIA DATES
							Hardness(mg/l as CaCO3):		50.0								
							pH:		6								
		PRIORITY POLLUTANTS															
4/89	1	m Antimony	200	204.1	3	204.2	1300 2m	160 2m	1300	--	--	--	14 *	4308 *	1	4.31	10/80, 1/87:RfD 0.0004
7/89	2	m Arsenic (c)	2	206.3	1	206.2	360 *III	190 *III	720 *III	69 *III	36 *III	138 *III	0.0175 *	0.14 *	44	0.0062	1/85:aq life, 6/21/88:ql* 1.75 Admin. r
4/89	3	m Beryllium (c)	5	210.1	0.2	210.2	16 6m	0.53 1m	16 6m	--	--	--	0.0068 *	0.117 *	19	0.0022	10/80
11/89	4	m Cadmium (H)	5	213.1	0.1	213.2	1.79 *	0.66 *	3.59 *	43 *	9.3 *	86 *	10 *MCL	168 *	64	10.77	10/80,1/85:aq life, 10/89:RfD 0.0005(water) 0.001(food)
12/89	5	m Chromium (III) (H)	50	218.1	1	218.2	984.32 *	117.32 *	1968.63 *	1030 2m	103	1030	33300 *	673077 *	16	10769	10/80, 1/85:aq life, 3/88:RfD 1
11/89	5	m Chromium (VI)	5	218.4			16 *	11 *	32 *	1100 *	50 *	2200 *	50 *MCL	3365 *	16	54928	10/80, 1/85:aq life, 3/88:RfD 0.005
4/89	6	m Copper (H)	20	220.1	1	220.2	9.22 *	6.54 *	18.45 *	2.9 *	2.9 *	5.8 *	1000 * 0	1000 *0	36	--	10/80, 1/85:aq life
4/89	7	m Lead (H)	100	239.1	1	239.2	33.78 *	1.32 *	67.57 *	140 *	5.6 *	280 *	50 *MCL	--	49	--	10/80, 1/85:aq life
6/89	8	m Mercury	0.2	245.1	--		2.40 *	0.012 *T	4.8 *	2.1 *	0.025 *T	4.2 *	0.151 *	0.153 *	5500 f 3760 e/c 9000 co	1 (T)	10/80, 1/85:aq life, 2/89:RfD 0.0003
4/89	9	m Nickel (H)	40	249.1	1	249.2	789.00 *	87.71 *	1578.01 *	75 *	8.3 *	150 *	607 *	4584 *	47	215.4	10/80, 9/86:aq life, 3/88:RfD 0.02
4/89	10	m Selenium	2	270.3	2	270.2	20.00 *	5.00 *	40 *	300 *	71 *	600 *	10 *MCL	--	6	5.4	10/80, 9/87:aq life
4/89	11	m Silver (H)	10	272.1	0.2	272.2	1.23 *	0.012 2m	1.23 *	2.3 *	0.23 1m	2.3 *	50 *MCL	--	0.5	2.48	10/80
11/89	12	m Thallium	100	279.1	1	279.2	140.00 3m	4.00 2m	140	213 3m	21.3	213	13 *	48 *	119	5.71	10/80
4/89	13	m Zinc (H)	5	289.1	0.05	289.2	65.04 *	58.91 *	130.09 *	95 *	86 *	190 *	5000 * 0	5000 *0	47	--	10/80, 2/87:aq life
11/89	14	Cyanide	5	335.3	--		22 *	5.2 *	44 *	1 *	1 *	2 *	200 *MCL	--	1.0	215.4	10/80, 1/85:aq life, 3/88:RfD 0.02
4/89		Asbestos					--	--	--	--	--	--	30,000 *f/l	--			10/80
7/89		2,3,7,8-TCDD-Dioxin (c)	0.00001 hrms		0.002	613	0.1	0.00001 T	0.1	--	0.00001 T	--	0.000000013 *	0.000000014 *	5000	0.00000007	2/84:ql* 156000
4/89	1	v Acrolein	nr	624x	0.7	603	6.8 3m	2.1 2m	6.8	5.5 1m	0.55	5.5	320 *	780 *	215	--	10/80
4/89	2	v Acrylonitrile (c)	nr	624x	0.5	603	755 4m	75.5	755	--	--	--	0.059 *	0.665 *	30	0.02	10/80, 2/89:ql* 0.54
4/89	3	v Benzene (c)	4.4	624	0.2	602	530 7m	53	530	1090 6m	109	1090	1.18 *	71.28 *	5.2	0.37	10/80, 12/88:ql* 0.029
4/89	5	v Bromoform (HM, c)	4.7	624	0.2	601	2930 2m	293	2930	1790 2m	640 1m	1790	5.67 *	470.8 *	3.75	1.77	10/80, 6/88:ql* CBC13
6/89	6	v Carbon Tetrachloride (c)	2.8	624	0.12	601	3520 3m	352	3520	15000 1m	1500	15000	0.254 *	4.42 *	18.75	0.083	10/80, 3/88:ql* 0.13
4/89	7	v Chlorobenzene	6	624	0.25	601	1950 5m	195	1950	1050 2m	105	1050	20 * 0	20 *0	10.3	155.1	10/80
4/89	8	v Chlorodibromomethane (HM, c)	3.1	624	0.09	601	--	--	--	--	--	--	5.67 *	470.8 *	3.75	1.77	10/80, 6/88:ql* CBC13
4/89	9	v Chloroethane	nr	624	0.52	601	--	--	--	--	--	--	--	--	--	--	10/80
4/89	10	v 2-Chloroethylvinyl Ether (c)	nr	624	0.13	601	35400 1m	3540	35400	--	--	--	[illegible] *	17.6 *	0.557	0.0098	10/80, 3/88:ql* 0.0011
4/89	11	v Chloroform (HM, c)	1.6	624	0.05	601	2890 3m	289	2890	8150 1m	815	8150	[illegible] *	470.8 *	3.75	1.77	10/80, 6/88:ql* 0.0061
4/89	12	v Dichlorobromomethane (HM, c)	2.2	624	0.1	601	--	--	--	--	--	--	[illegible] *	470.8 *	3.75	1.77	10/80, 6/88:ql* CBC13
4/89	14	v 1,1-Dichloroethane	4.7	624	0.07	601	--	--	--	--	--	--	--	--	--	--	10/80
4/89	15	v 1,2-Dichloroethane (c)	2.8	624	0.03	601	11800 3m	2000 1m	11800	11300 1m	1130	11300	0.38 *	98.6 *	1.2	0.118	10/80, 3/88:ql* 0.091
4/89	16	v 1,1-Dichloroethylene (c)	2.8	624	0.13	601	3030 3m	303	3030	22400 3m	2240	22400	0.057 *	3.2 *	5.6	0.018	10/80, 12/88:ql* 0.6
4/89	17	v 1,2-Dichloropropane	6	624	0.04	601	5250 3m	525	5250	24000 1m	2400	24000	--	--	4.11	--	10/80
11/89	18	v 1,3-Dichloropropylene (Cis)	5		0.34		606 2m	24.4 1m	606	79 2m	7.9	79	10.4 *	1691 *	1.91	3.23	10/80, 3/88:RfD 0.0003
11/89		v 1,3-Dichloropropylene (Trans)	nr	624	0.2	601	606 2m	24.4 1m	606	79 2m	7.9	79	10.4 *	1691 *	1.91	3.23	10/80, 3/88:RfD 0.0003
4/89	19	v Ethylbenzene	7.2	624	0.2	602	4530 5m	453	4530	43 5m	4.3	43	3120 *	28718 *	37.5	1077	10/80, 3/88:RfD 0.1
4/89	20	v Methyl Bromide (HM, c)	nr	624	1.18	601	1100 1m	110	1100	1200 1m	120	1200	5.67 *	470.8 *	3.75	1.77	10/80, 6/88:ql* CBC13

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TS51289 SCREENING LIST
UPDATE: DECEMBER 1989
EPA REG IV - WATER MANAGEMENT DIVISION
304(a) SCREENING VALUES AND RELATED INFORMATION
FOR TOXIC POLLUTANTS

DATE REVISED		COMPOUND	EPA DETECTION LEVEL [40 CFR 136] (ug/l)	Ref. Method	(ug/l)	Ref. Method	FRESHWATER Screening Value (Maximum) (ug/l)	Screening Value (Continuous) (ug/l)	95% LC50 Value (ug/l)	SALTWATER Screening Value (Maximum) (ug/l)	Screening Value (Continuous) (ug/l)	95% LC50 Value (ug/l)	HUMAN HEALTH (10 -6 risk factor for carcinogens) Consumption of: Water & Organisms (ug/l)	Organisms Only (ug/l)	BIO CONCENTRATION FACTOR (3% lipid) Weighted Avg. (l/kg)	EPA FISH TISSUE CONCENTRATION (ppm) (mg/kg)	CRITERIA DATES
4/89	21	v Methyl Chloride (HM, c)	nr	624	0.08	601	55000 1s	5500	55000	27000 1s	2700	27000	5.67 *	470.8 *	3.75	1.77	10/80, 6/88:q1* CHCl3
4/89	22	v Methylene Chloride (c)	2.8	624	0.25	601	19300 3s	1930	19300	25600 2s	2560	25600	4.65 *	1578 *	0.8	1.44	10/80, 1/89:q1* 0.0075
6/89	23	v 1,1,2,2-Tetrachloroethane (c)	6.9	624	0.03	601	932 3s	240 1s	932	902 2s	90.2	902	0.172 *	10.8 *	5	0.054	10/80, 3/88:q1* 0.2
4/89	24	v Tetrachloroethylene (c)	4.1	624	0.03	601	528 5s	84 1s	528	1020 1s	45 1s	1020	0.8 *	8.85 *	30.6	0.27	10/80
7/89	25	v Toluene	6	624	0.2	602	1750 5s	175	1750	370 5s	37	370	10147 *	301941 *	10.7	3231	10/80, 3/88:RfD 0.3
4/89	26	v 1,2-Trans-Dichloroethylene	1.6	624	0.1	601	13500 1s	1350	13500	--	--	--	696.4 *	136319 *	1.58	215.4	10/80, 1/89:RfD 0.02
11/89	27	v 1,1,1-Trichloroethane	3.8	624	0.03	601	5280 2s	528	5280	3120 2s	312	3120	200 *MCL	173077 *	5.6	969.2	10/80, 6/88:RfD 0.09
4/89	28	v 1,1,2-Trichloroethane (c)	5	624	0.02	601	3600 3s	940 1s	3600	--	--	--	0.605 *	41.99 *	4.5	0.189	10/80, 3/88:q1* 0.057
7/89	29	v Trichloroethylene (c)	1.9	624	0.12	601							2.7 *	80.7 *	10.6	0.855	10/80
4/89	31	v Vinyl Chloride (c)	nr	624	0.18	601	--	--	--	--	--	--	2 *	525 *	1.17	0.614	10/80
4/89	1	a 2-Chlorophenol	3.3	625	0.31	604	438 5s	43.8	438	--	--	--	0.1 * 0	0.1 *0	134	53.8	10/80, 8/88:RfD 0.005
4/89	2	a 2,4-Dichlorophenol	2.7	625	0.39	604	202 3s	36.5 1s	202	--	--	--	0.3 * 0	0.3 *0	40.7	32.3	10/80, 6/88:RfD 0.003
4/89	3	a 2,4-Dimethylphenol	2.7	625	0.32	604	212 3s	21.2	212	--	--	--	400 * 0	400 *0	93.8		10/80
4/89	4	a 2-Methyl-4,6-Dinitrophenol	24	625	16	604	23 4s	2.3	23	--	--	--	13.4 *	765 *	5.5	4.2	10/80
4/89	5	a 2,4-Dinitrophenol	42	625	13	604	62 3s	6.2	62	485 3s	48.5	485	69.7 *	14264 *	1.5	21.4	10/80, 3/88:RfD 0.002
4/89	6	a 2-Nitrophenol	3.6	625	0.45	604	--	3500	--	--	--	--	--	--	2.33	--	10/80
4/89	7	a 4-Nitrophenol	2.4	625	2.8	604	828 3s	82.8	828	717 2s	71.7	717	--	--	3.31	--	10/80
4/89	8	a 3-Methyl-4-Chlorophenol	3	625	0.36	604	3 1s	0.3	3	--	--	--	3000 * 0	3000 *0	--	--	10/80
4/89	9	a Pentachlorophenol (pH)	3.6	625	7.4	604	3.32 *	2.10 *	29.98 *	13 *	7.9 *	26 *	30 * 0	30 *0	11	323	10/80, 9/86:aq life, 6/88:RfD 0.03
6/89	10	a Phenol	1.5	625	0.14	604	1020 16s	256 1s	1020	580 4s	58	580	300 * 0	300 *0	1.4	6462	10/80, 6/89:RfD 0.6
11/89	11	a 2,4,6-Trichlorophenol (c)	2.7	625	0.64	604	32 3s	3.2	32	--	--	--	1.2 *	3.6 *	150	0.54	10/80, 3/88:q1* 0.02
4/89	1	bn Acenaphthene	1.9	625	1.8	610	170 2s	17	170	97 2s	9.7	97	20 * 0	20 *0	242	--	10/80
4/89	2	bn Acenaphthylene (PAH, c)	3.5	625	2.3	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
4/89	3	bn Anthracene (PAH)	1.9	625	0.66	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
4/89	4	bn Benzidine (c)	44	625	--		250 4s	25	250	--	--	--	0.000119 *	0.000535 *	87.5	0.0000468	10/80, 3/88:q1* 230
4/89	5	bn Benzo(a)Anthracene (PAH, c)	7.8	625	0.013	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
4/89	6	bn Benzo(a)Pyrene (PAH, c)	2.5	625	0.023	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
4/89	7	bn 3,4-Benzofluoranthene (PAH, c)	2.5	625	0.018	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
4/89	8	bn Benzo(ghi)Perylene (PAH)	4.1	625	0.076	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
4/89	9	bn Benzo(k)Fluoranthene (PAH,c)	2.5	625	0.017	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
4/89	10	bn Bis(2-Chloroethoxy)Methane	5.3	625	0.5	611	--	--	--	--	--	--	--	--	0.64	--	10/80
4/89	11	bn Bis(2-Chloroethyl)Ether (c)	5.7	625	0.3	611	23800 1s	2380	23800	--	--	--	0.031 *	1.42 *	6.9	0.0098	10/80, 3/85:q1* 1.1
11/89	12	bn Bis(2-Chloroisopropyl)Ether	5.7	625	0.8	611	--	--	--	--	--	--	1389 *	174400 *	2.47	431	10/80, 10/89:RfD 0.04
4/89	13	bn Bis(2-Ethylhexyl)Phthalate (c)	2.5	625	2	606	1110 2s	<0.3 2s	1110	--	--	--	1.76 *	5.92 *	130	0.77	10/80, 2/89:q1* 0.014
4/89	14	bn 4-Bromophenylphenyl Ether	1.9	625	2.3	611	36 2s	12.2 1s	36	--	--	--	--	--	1640	--	10/80
11/89	15	bn Butylbenzyl Phthalate	2.5	625	0.34	606	330 4s	22 2s	330	294.4 2	29.4	294.4	2984 *	5202 *	414	2154	10/80, 9/89:RfD 0.2
4/89	16	bn 2-Chloronaphthalene	1.9	625	0.94	612	-	--	--	--	--	--	--	--	202	--	10/80
4/89	17	bn 4-Chlorophenyl Phenyl Ether	4.2	625	3.9	611	--	--	--	--	--	--	--	--	1200	--	10/80
4/89	18	bn Chrysene (PAH)	2.5	625	0.15	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.00093	10/80
4/89	19	bn Dibenz(a,h)Anthracene (PAH, c)	2.5	625	0.03	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.00093	10/80
11/89	20	bn 1,2-Dichlorobenzene	nr	624	1.9	625	158 4s	15.8 3s	158	197 3s	19.7	197	2667 *	17432 *	55.6	969	10/80, 8/89:RfD 0.09
4/89	21	bn 1,3-Dichlorobenzene	nr	624	1.9	625	502 3s	50.2	502	285 2s	28.5	285	400 *	2600 *	55.6	145	10/80
4/89	22	bn 1,4-Dichlorobenzene	nr	624	4.4	625	112 5s	11.2	112	199 2s	19.9	199	75 *MCL	--	55.6	145	10/80
4/89	23	bn 3,3'-Dichlorobenzidine (c)	16.5	625	0.13	605	--	--	--	--	--	--	0.01 *	0.02 *	312	0.00624	10/80

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TS81289 SCREENING LIST
UPDATE: DECEMBER 1989
EPA REG IV - WATER MANAGEMENT DIVISION
304(a) SCREENING VALUES AND RELATED INFORMATION
FOR TOXIC POLLUTANTS

DATE REVISED	COMPOUND	EPA DETECTION LEVEL [40 CFR 136] (ug/l)	Ref. Method	(mg/l)	Ref. Method	FRESHWATER Screening Value (Maximum) (ug/l)	Screening Value (Continuous) (ug/l)	95% LC50 Value (ug/l)	SALTWATER Screening Value (Maximum) (ug/l)	Screening Value (Continuous) (ug/l)	95% LC50 Value (ug/l)	HUMAN HEALTH (10 -6 risk factor for carcinogens) Consumption of: Water & Organisms (ug/l)	Organisms Only (ug/l)	BIO CONCENTRATION FACTOR (3% lipid) Weighted Avg. (l/kg)	EPA FISH TISSUE CONCENTRATION (ppm) (mg/kg)	CRITERIA DATES
11/89	24 bn Diethyl Phthalate	1.9	625	0.49	606	5210 2a	521	5210	759 2a	75.9	759	22631 *	118019 *	73	8615	10/80, 9/87:RfD 0.8
4/89	25 bn Dimethyl Phthalate	1.6	625	0.29	606	3300 2a	330	3300	5800 2a	580	5800	313000 *	2900000 *	36	104400	10/80
4/89	26 bn Di-n-Butyl Phthalate	2.5	625	0.36	606	94 6a	9.4	94	--	3.4 p	--	2715 *	12100 *	89	1077	10/80, 1/87:RfD 0.1
4/89	27 bn 2,4-Dinitrotoluene (c)	5.7	625	0.02	609-EC	3100 2a	310	3100	--	--	--	0.11 *	9.1 *	3.8	0.0346	10/80
4/89	28 bn 2,6-Dinitrotoluene	1.9	625	0.01	609-EC	--	--	--	--	--	--	--	--	--	--	10/80
4/89	29 bn Di-n-Octyl Phthalate	2.5	625	3	606	--	--	--	--	--	--	--	--	--	--	10/80
4/89	30 bn 1,2-Diphenylhydrazine (c)					27 2a	2.7	27	--	--	--	0.041 *	0.54 *	24.9	0.013	10/80, 3/88:q1* 0.8
4/89	31 bn Fluoranthene	2.2	625	0.21	610	398 2a	39.8	398	4 2a	1.6 1a	4	42 *	54 *	1150	62.1	10/80
4/89	32 bn Fluorene (PAH)	1.9	625	0.21	610	--	--	--	--	--	--	0.0028 *	0.031 *	30	0.000933	10/80
4/89	33 bn Hexachlorobenzene (c)	1.9	625	0.05	612	--	--	--	--	--	--	0.00072 *	0.00074 *	8690	0.00643	10/80
7/89	34 bn Hexachlorobutadiene (c)	0.9	625	0.34	612	9 5a	0.93 1a	9	3.2 4a	0.32	3.2	0.45 *	49.7 *	2.78	0.138	10/80, 3/88:q1*, 6/89:q1* 0.078
4/89	35 bn Hexachlorocyclopentadiene	nr	625	0.4	612	0.7 4a	0.07	0.7	0.7 6a	0.07	0.7	1 * 0	1 *0	4.34	75.4	10/80, 3/88:RfD 0.007
4/89	36 bn Hexachloroethane (c)	1.6	625	0.03	612	98 5a	9.8	98	94 2a	9.4	94	1.95 *	8.85 *	86.9	0.77	10/80, 3/88:q1* 0.014
4/89	37 bn Indeno(1,2,3-cd)Pyrene (PAH, c)	3.7	625	0.043	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
11/89	38 bn Isophorone	2.2	625	15.7	609-EC	11700 2a	1170	11700	1290 1a	129	1290	6901 *	491746 *	4.38	2154	10/80, 9/89:RfD 0.2
4/89	39 bn Naphthalene	1.6	625	1.8	610	230 4a	62 1a	230	235 3a	23.5	235	--	--	10.5	--	10/80
12/89	40 bn Nitrobenzene	1.9	625	13.7	609-EC	2700 2a	270	2700	668 2a	66.8	668	17.3 *	1863 *	2.89	5.38	10/80, 5/88:RfD 0.0005
4/89	41 bn N-Nitrosodimethylamine (c)	nr	625	0.15	607	--	--	--	--	--	--	0.000686 *	8.12 *	0.026	0.000211	10/80, 3/88:q1* 5.1
4/89	42 bn N-Nitrosodi-n-Propylamine (c)	nr	625	0.46	607	--	--	--	--	--	--	0.005 *	8.55 *	0.18	0.00154	10/80, 3/88:q1* 7.0
4/89	43 bn N-Nitrosodiphenylamine (c)	1.9	625	0.81	607	585 2a	58.5	585	330000 1a	33000	330000	4.95 *	16.2 *	136	2.2	10/80, 3/88:q1* 0.0049
4/89	44 bn Phenanthrene (PAH)	5.4	625	0.64	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
4/89	45 bn Pyrene (PAH)	1.9	625	0.27	610	--	--	--	--	--	--	0.0028 *	0.0311 *	30	0.000933	10/80
11/89	46 bn 1,2,4-Trichlorobenzene	1.9	625	0.05	612	150 4a	44.9 1a	150	45 2a	4.5	45			14		10/80
12/89	1 p Aldrin (c)	1.9	625	0.004	608	3 *	0.3	3 *	1.3 *	0.13	1.3 *	0.00127 *	0.00136 *	4670	0.00635	10/80, 12/88:q1* 1.7
4/89	2 p a-BHC (c)	nr	625	0.003	608	--	500 p	--	--	1400 p	--	0.0039 *	0.0131 *	130	0.0017	10/80, 3/88:q1* 6.3
4/89	3 p b-BHC (c)	4.2	625	0	608	--	5000 p	--	--	--	--	0.0137 *	0.046 *	130	0.006	10/80, 9/87:q1* 1.8
4/89	4 p g-BHC (c)	nr	625	0	608	2 *	0.08 *	2 *	0.16 *	0.016	0.16 *	0.0186 *	0.0625 *	130	0.0081	10/80
4/89	5 p d-BHC (c)	3.1	625	0.009	608	--	--	--	--	--	--	--	--	130	--	10/80
4/89	6 p Chlordane (c)	nr	625	0.014	608	2.4 *	0.0043 *T	2.4 *	0.09 *	0.004 *T	0.09 *	0.000575 *	0.000588 *	14100	0.0083	10/80, 3/88:q1* 1.3
6/89	7 p 4-4'-DDT (c)	4.7	625	0.012	608	1.1 *	0.001 *W	1.1 *	0.13 *	0.001 *W	0.13 *	0.00059 *	0.00059 *	53600	0.0316	10/80, 8/88:q1* 0.34
11/89	8 p 4,4'-DDE (c)	5.6	625	0.004	608	105 1a	10.5	105	1.4 1a	0.14	1.4	--	--	--	0.0316	10/80, 8/88:q1* 0.34
11/89	9 p 4,4'-DDD (c)	2.8	625	0.011	608	0.064 8a	0.0064	0.064	0.25 3a	0.025	0.25	--	--	--	0.0449	10/80, 8/88:q1* 0.24
4/89	10 p Dieldrin (c)	2.5	625	0.002	608	2.5 *	0.0019 *T	2.5 *	0.71 *	0.0019 *T	0.71 *	0.000135 *	0.000144 *	4670	0.00067	10/80, 9/88:q1* 16
4/89	11 p a-Endosulfan	--a	625	0.014	608	0.22 *	0.056 *	0.22 *	0.034 *	0.0087 *	0.034 *	0.932 *	1.99 *	270	0.54	10/80, 3/88:RfD 0.00005
4/89	12 p b-Endosulfan	--b	625	0.004	608	0.22 *	0.056 *	0.22 *	0.034 *	0.0087 *	0.034 *	0.932 *	1.99 *	270	0.54	10/80, 3/88:RfD 0.00005
4/89	13 p Endosulfan Sulfate	5.6	625	0.066	608	--	--	--	--	--	--	--	--	--	--	10/80
11/89	14 p Endrin	nr	625	0.006	608	0.18 *	0.0023 *T	0.18 *	0.037 *	0.0023 *T	0.037 *	0.2 *MCL	0.814 *	3970	3.23	10/80, 9/88:RfD 0.0003
4/89	15 p Endrin Aldehyde	nr	625	0.023	608	--	--	--	--	--	--	--	--	--	--	10/80
4/89	16 p Heptachlor (c)	1.9	625	0.003	608	0.52 *	0.0038 *T	0.52 *	0.053 *	0.0036 *T	0.053 *	0.000208 *	0.000214 *	11200	0.0024	10/80, 3/88:q1* 4.5
12/89	17 p Heptachlor Epoxide (c)	2.2	625	0.083	608	0.52 *	0.0038 *T	0.52 *	0.053 *	0.0036 *T	0.053 *	0.0001 *	0.0001 *	11200	0.0012	10/80, 3/88:q1* 9.1
6/89	18 p PCB-1242 (PCB, c)	nr	625	0.065	608	0.2 7a	0.014 *W	0.2	1.05 3a	0.03 *W	1.05	0.000044 *	0.000045 *	31200	0.0014	10/80, 5/89:q1* 7.7
6/89	19 p PCB-1254 (PCB, c)	36	625	nr	608	0.2 7a	0.014 *W	0.2	1.05 3a	0.03 *W	1.05	0.000044 *	0.000045 *	31200	0.0014	10/80, 5/89:q1* 7.7
6/89	20 p PCB-1221 (PCB, c)	30	625	nr	608	0.2 7a	0.014 *W	0.2	1.05 3a	0.03 *W	1.05	0.000044 *	0.000045 *	31200	0.0014	10/80, 5/89:q1* 7.7
6/89	21 p PCB-1232 (PCB, c)	nr	625	nr	608	0.2 7a	0.014 *W	0.2	1.05 3a	0.03 *W	1.05	0.000044 *	0.000045 *	31200	0.0014	10/80, 5/89:q1* 7.7
6/89	22 p PCB-1248 (PCB, c)	nr	625	nr	608	0.2 7a	0.014 *W	0.2	1.05 3a	0.03 *W	1.05	0.000044 *	0.000045 *	31200	0.0014	10/80, 5/89:q1* 7.7

TBS1289 SCREENING LIST
UPDATE: DECEMBER 1989
EPA REG IV - WATER MANAGEMENT DIVISION
304(a) SCREENING VALUES AND RELATED INFORMATION
FOR TOXIC POLLUTANTS

DATE REVISED		COMPOUND	EPA DETECTION LEVEL (40 CFR 136) (ug/l)	Ref. Method	(ug/l)	Ref. Method	FRESHWATER Screening Value (Maximum) (ug/l)	Screening Value (Continuous) (ug/l)	95% LC50 Value (ug/l)	SALTWATER Screening Value (Maximum) (ug/l)	Screening Value (Continuous) (ug/l)	95% LC50 Value (ug/l)	HUMAN HEALTH (10 -6 risk factor for carcinogens) Consumption of: Water & Organisms (ug/l)	Organisms Only (ug/l)	BIO CONCENTRATION FACTOR (3% lipid) Weighted Avg. (l/kg)	EPA FISH TISSUE CONCENTRATION (ppm) (mg/kg)	CRITERIA DATES
6/89	23	p PCB-1260 (PCB, c)	nr	625	nr	608	0.2 7s	0.014 *W	0.2	1.05 3s	0.03 *W	1.05	0.000044 *	0.000045 *	31200	0.0014	10/80, 5/89:ql* 7.7
6/89	24	p PCB-1016 (PCB, c)	nr	625	nr	608	0.2 7s	0.014 *W	0.2	1.05 3s	0.03 *W	1.05	0.000044 *	0.000045 *	31200	0.0014	10/80, 5/89:ql* 7.7
4/89	25	p Toxaphene (c)	nr	625	0.24	608	0.73 *	0.0002 *T	1.46 *	0.21 *	0.0002 *T	0.42 *	0.00073 *	0.00075 *	13100	0.0098	10/80, 9/86:aq life, 8/88:ql* 1.1

NON-PRIORITY POLLUTANTS

Aluminum (pH 6.5-9.0)	3	202.2	100	202.1	750 *	87 *	1500 *	--	--	--	--	--	--	--	--	8/88
Ammonia	50	350.3	30	350.2			--d--		--e--		--	--	--	--	--	1/85
Barium	2	200.7			--	--	--	--	--	--	1000 *MCL	--	--	--	--	7/76
Bis(chloromethyl)Ether (c)	nr	--	nr	--	--	--	--	--	--	--	0.000159 *	0.0777 *	0.63	0.000049	10/80, 9/88:ql* 220
Boron	5	200.7			--	750 *lr	--	--	--	--	--	--	--	--	--	7/76, 10/89:RfD 0.09
Chloride	nr	325.3	1000	325.1	860000 *	230000 *	1720000 *	--	--	--	--	--	--	--	--	2/88
Chlorine(TRC)	200	330.5	100	330.3	19 *	11 *	38 *	13 *	7.5 *	26 *	--	--	--	--	--	1/85
Chlorpyrifos					0.083 *	0.041 *	0.166 *	0.011 *	0.0056 *	0.022 *	--	--	--	--	--	9/86
Demeton					--	0.1 *	--	--	0.1 *	--	--	--	--	--	--	7/76
Dichlorodifluoromethane (BN, c)	--		1.81	601	--	--	--	--	--	--	5.67 *	470.8 *	3.75	1.77	10/80
2,4-dichlorophenoxy acetic acid					--	--	--	--	--	--	100 *MCL	--	--	--	7/76
Dissolved Gases					--	110% saturation *		--	110% saturation *		--	--	--	--	7/76
Dissolved Solids (chlorides,sulfides)					--	--	--	--	--	--	500000 *MCL	--	--	--	7/76
Guthion					--	0.01 *	--	--	0.01 *	--	--	--	--	--	7/76
Iron					--	1000 *	--	--	--	--	300 *MCL	--	--	--	7/76
Malathion					--	0.1 *	--	--	0.01 *	--	--	--	--	--	7/76
Manganese	2	200.7			--	--	--	--	--	--	30 *MCL	100 Marine *		--	7/76
Methoxychlor					--	0.03 *	--	--	0.03 *	--	100 *MCL	--	--	--	7/76
Mirex					--	0.001 *	--	--	0.001 *	--	--	--	--	--	7/76
Nitrates (as N)					--	--	--	--	--	--	10000 *MCL	--	--	--	7/76
N-nitrosopyrrolidene					5850	--		3300000	--		0.016 *	91.9 *	--	--	10/80
Oil and Grease					--	0.01 low LC50 *		--	0.1 low LC50 *		--	--	--	--	7/76
Parathion					0.065 *	0.013 *	0.13 *	1.78 2s	0.178	1.78	--	--	--	--	7/76
Pentachlorobenzene					250	50		160	129		74 *	85 *	2125	180.6	10/80
pH					--	6.5-9 *	--	--	6.5-8.5 (-0.2) *		5.0-9 *	--	--	--	7/76
Phosphorus (elemental)					--	--	--	--	0.1 *	--	--	--	--	--	7/76
Solids (Turbidity)					--	<10% comp. pt. *		--	<10% comp. pt. *		--	--	--	--	7/76
Sulfide (HS-, H2S-)					--	2 *	--	--	2	--	--	--	--	--	7/76
1,2,4,5-tetrachlorobenzene					250	50		160	129		30 *	48 *	1125	54	10/80
Trichlorofluoromethane	nr	624	nr	601	--	--	--	--	--	--	5.67 *	470.8 *	3.75	1.77	10/80, 6/88:ql* CHCl3
2,4,5-trichlorophenol					--	--	--	--	--	--	1 *O	--	--	--	10/80
2-(2,4,5-trichlorophenoxy)propionic acid					--	--	--	--	--	--	10 *MCL	--	--	--	7/76

(D.O. and Bacteria are not included)

ADVISORIES	Action Level Freshwater	Action Level Saltwater
Tributyltin	0.026	0.01