	IWQC (Non-cancer, FIR - US EPA HH DW + C)		Rfd (US EPA IRIS, "new")	Oral Slope Factor (CSF)	Bioaccumulati on Factor (BAF) (national supp info)	BAF TL2	BAF TL3	BAF TL4	Cancer risk level (10-5, AB)	BW (US EPA)	Drinking Water Intake (DI) (US EPA)	General Fish IR (calculated)	Relative Source Contribution (RSC)	Notes
Units	(μg/L)	(μg/L)	mg/kg	per mg/kg- day	L/kg	L/kg	L/kg	L/kg	unitless	kg	L/d	kg/d	unitless	
Pollutant Acenaphthene Acrolein	4.79 2.87		6.00E-02 5.00E-04	ND	ND 1	510.00 1.00	1.00	1.00	0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2 0.2 0.2	
Acrylonitrile		0.53	N	5.40E-01	1	1.00	1.00	1.00	0.00001	80	2.4	0.3881	0.2	
Aldrin alpha-Hexachlorocyclohexane (HCH)	0.0001 0.19	0.00001 0.0002	3.00E-05 8.00E-03	1.70E+01 6.30E+00	18000 #N/A	18000.00 1700.00	310000.00 1400.00	650000.00 1500.00	0.00001	80 80	2.4	0.3881	0.2	
alpha-Endosulfan Anthracene	1.82 20.07		6.00E-03 3.00E-01	ND ND	130 ND	130.00 610.00	180.00	200.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2 0.2	
Antimony	4.59		4.00E-04		#N/A	1.00	1.00	1.00	0.00001	80	2.4	0.3881	0.4	RSC = diff (National water quality criteria)
Arsenic Asbestos	0.25	0.03	3.00E-04 N	1.50E+00	#N/A #N/A	44.00			0.00001 0.00001	80	2.4	0.3881 0.3881	0.2 0.2	
Barium	1147.74 2.11	14.05	2.00E-01 5.00E-04	1.50E-02	#N/A #N/A	1.00 3.60	4.50	5.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	Appendix C, USEPA, 1986 AWQC two values b/c range
Benzene Benzidine	2.11 2.11 16.31	3.83 0.001	5.00E-04 5.00E-04 3.00E-03	5.50E-02 2.30E+02	#N/A #N/A 1.4	3.60 3.60 1.40	4.50 4.50 1.60	5.00 5.00 1.70	0.00001 0.00001	80 80	2.4 2.4 2.4	0.3881 0.3881 0.3881	0.2 0.2	two values b/c range
Benzo(a)anthracene	0.003	0.001 0.0001	N 3.00E-04	7.30E-01 7.30E+00	ND ND	3900.00 3900.00	1.00	1.70	0.00001	80 80	2.4	0.3881	0.2	
Benzo(a)pyrene Benzo(b)fluoranthene	0.003	0.001	N	7.30E-01	ND	3900.00			0.00001	80	2.4	0.3881	0.2	
Benzo(k)fluoranthene Beryllium	3.27	0.01	N 2.00E-03	7.30E-02	ND #N/A	3900.00 19.00	19.00	19.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
beta-Hexachlorocyclohexane (HCH) beta-Endosulfan	2.87	0.01	N 0.006	1.80E+00	#N/A 80	110.00 80.00	160.00 110.00	180.00 130.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Bis(2-Chloro-1-methylethyl) Ether Bis(2-Chloroethyl) Ether	127.99	0.25	4.00E-02 —	1.10E+00	6.7 1.4	6.70 1.40	8.80 1.60	10.00 1.70	0.00001 0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2	
Bis(2-Ethylhexyl) Phthalate Bis(Chloromethyl) Ether	3.45	0.21 0.001	0.06 N	1.40E-02 2.20E+02	ND 1	710.00 1.00	1.00	1.00	0.00001	80 80	2.4	0.3881 0.3881	0.2	
Bromoform	103.20 2.82	38.22	3.00E-02 1.30E+00	4.50E-03 1.90E-03	5.8 ND	5.80 19000.00	7.50	8.50	0.00001	80 80	2.4	0.3881	0.2	
Butylbenzyl Phthalate Cadmium	0.002	0.06	5.00E-04		#N/A	12400.00	12400.00	12400.00	0.00001 0.00001	80	2.4	0.3881	0.2	
Carbon Tetrachloride Chlordane	10.65 0.004	1.90 0.001	4.00E-03 5.00E-04	7.00E-02 3.50E-01	9.3 5300	9.30 5300.00	12.00 44000.00	14.00 60000.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Chlorobenzene Chlorodibromomethane	40.85 83.42	5.21	2.00E-02 2.00E-02	4.00E-02	14 3.7	14.00 3.70	19.00 4.80	22.00 5.30	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Chloroform Chlorophenoxy Herbicide (2,4-D)	45.89 451.29		1.00E-02 2.10E-01		2.8 ND	2.80 13.00	3.40	3.80	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Chlorophenoxy Herbicide (2,4,5-TP) [Silvex]	20.55		8.00E-03		ND	58.00			0.00001	80	2.4	0.3881	0.8	RSC = diff
Chromium (III) Chromium (VI)	10000.00 13.47		1.50E+00 3.00E-03		#N/A #N/A	3.00	3.00	3.00	0.00001 0.00001	80 80	2.4	0.3881	0.2	
Chrysene		0.07	N	7.30E-03	ND	3900.00			0.00001	80	2.4	0.3881	0.2	US EPA Human Health Criteria
Copper Cyanide	3.62		N 6.30E-04		#N/A ND	290.00 1.00	290.00	290.00	0.00001	80 80	2.4	0.3881 0.3881	0.2	Calculation Matrix
Cylindrospermopsin		0.0001	N N	7.30E+00	#N/A ND	3900.00			0.00001	80 80	2.4	0.3881	0.2	
Dibenzo(a,h)anthracene Dichlorobromomethane	12.90	6.33	3.00E-03	3.40E-02	3.4	3.40	4.30	4.80	0.00001	80	2.4	0.3881	0.2	
Dieldrin Diethyl Phthalate	0.0001 35.61	0.00001	5.00E-05 8.00E-01	1.60E+01	14000 ND	14000.00 920.00	210000.00	410000.00	0.00001 0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2	
Dimethyl Phthalate Di-n-Butyl Phthalate	102.91 1.42		1.00E+01 1.00E-01		ND ND	4000.00 2900.00			0.00001 0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2	
Dinitrophenols Endosulfan Sulfate	10.72		2.00E-03 6.00E-03		ND 88	1.51	120.00	140.00	0.00001	80 80	2.4	0.3881	0.2	
Endrin	0.01		3.00E-04		4600	4600.00	36000.00	46000.00	0.00001	80	2.4	0.3881	0.8	RSC = diff RSC = diff
Endrin Aldehyde Ethylbenzene	0.11 8.54		3.00E-04 2.20E-02		440 100	440.00 100.00	920.00 140.00	850.00 160.00	0.00001	80 80	2.4	0.3881	0.8	noc = um
Fluoranthene Fluorene	1.09 6.98		4.00E-02 4.00E-02		ND 230	1500.00 230.00	450.00	710.00	0.00001 0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2 0.2	
gamma-Hexachlorocyclohexane (HCH) [Linda Heptachlor		0.00004	4.70E-03 1.00E-04	4.10E+00	1200 12000	1200.00 12000.00	2400.00 180000.00	2500.00 330000.00	0.00001 0.00001	80 80	2.4 2.4	0.3881 0.3881	0.5 0.2	RSC = diff
Heptachlor Epoxide Hexachlorobenzene	0.0001 0.002	0.0001 0.0001	1.30E-05 8.00E-04	5.50E+00 1.02E+00	4000 18000	4000.00 18000.00	28000.00 46000.00	35000.00 90000.00	0.00001	80 80	2.4	0.3881	0.2	
Hexachlorobutadiene	0.002	0.002	3.00E-04	4.00E-02	23000	23000.00	2800.00	1100.00	0.00001	80	2.4	0.3881	0.2	
Hexachlorocyclohexane (HCH) -Technical Hexachlorocyclopentadiene	0.40	0.007	6.00E-03	1.80E+00	160 620	160.00 620.00	220.00 1500.00	250.00 1300.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Hexachloroethane Indeno(1,2,3-cd)pyrene	0.02	0.04 0.001	7.00E-04 N	4.00E-02 7.30E-01	1200 ND	1200.00 3900.00	280.00	600.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Isophorone Manganese	1019.96 933.33	268.41	2.00E-01 1.40E-01	9.50E-04	1.9 #N/A	1.90	2.20	2.40	0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2	
Methylmercury Methoxychlor	0.67 0.001		1.00E-04 2.00E-05		#N/A 1400	1400.00	27900.00 4800.00	140000.00 4400.00	0.00001 0.00001	80 80	2.4	0.3881	0.2	RSC = diff
Methyl Bromide	111.66		2.00E-02		1.2	1.20	1.30	1.40	0.00001	80	2.4	0.3881	0.2	NSC = UIII
Methylene Chloride Microcystins	32.62	135.90	6.00E-03 N	2.00E-03	1.4 #N/A	1.40	1.50	1.60	0.00001 0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2	
Nickel Nitrates	7.35 10666.67		2.00E-02 1.60E+00		#N/A #N/A	106.00	106.00	106.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Nitrobenzene Nitrosamines	9.72		2.00E-03 N		2.3 #N/A	2.30	2.80	3.10	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Nitrosodibutylamine Nitrosodiethylamine	10.72	0.05 0.002	2.00E-03	5.40E+00 1.50E+02	#N/A #N/A	1.51 0.20			0.00001	80 80	2.4	0.3881	0.2	
Nitrosopyrrolidine		0.16		2.10E+00	#N/A	0.20			0.00001	80	2.4	0.3881	0.2	
N-Nitrosodimethylamine N-Nitrosodi-n-Propylamine		0.01 0.05		5.10E+01 7.00E+00	#N/A #N/A				0.00001 0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2	
N-Nitrosodiphenylamine Pathogen and Pathogen Indicators		68.03		4.90E-03	#N/A #N/A				0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Pentachlorobenzene Pentachlorophenol	0.01 4.11	0.10	8.00E-04 5.00E-03	4.00E-01	3500 44	3500.00 44.00	4500.00 290.00	10000.00 520.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Phenol	1609.58		3.00E-01	2.00E+00	1.5 #N/A	1.50	1.70	1.90	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Polychlorinated Biphenyls (PCBs) Pyrene	1.43		3.00E-02	2.00L#UU	ND	860.00			0.00001	80	2.4	0.3881	0.2	
Selenium Tetrachloroethylene	18.77 4.48	17.79	5.00E-03 6.00E-03	2.10E-03	#N/A 49	4.80 49.00	66.00	76.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Thallium Toluene	0.02 191.93		6.80E-05 8.00E-02		#N/A 11	116.00 11.00	15.00	17.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
Toxaphene Trichloroethylene	0.01 1.38	0.001 2.77	3.50E-04 5.00E-04	1.10E+00 5.00E-02	1700 8.7	1700.00 8.70	6600.00 12.00	6300.00 13.00	0.00001 0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2	
Vinyl Chloride Zinc	16.31 12.72	0.18	3.00E-03 3.00E-01	1.50E+00	1.4 #N/A	1.40 966.00	1.60 966.00	1.70 966.00	0.00001	80 80	2.4	0.3881	0.2	
1,1,1-Trichloroethane	26.76		2.00E+00	2.00E-01	6.9	6.90	9.00	10.00	0.000001	80	2.4	0.5001	0.2	
1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane			2.00E-02 4.00E-03	2.00E-01 5.70E-02	5.7 6	5.70 6.00	7.40 7.80	8.40 8.90	0.000001 0.000001	80 80	2.4 2.4		0.2	
1,1-Dichloroethylene 1,2,4,5-Tetrachlorobenzene			5.00E-02 3.00E-04		2 17000	2.00 17000.00	2.40 2900.00	2.60 1500.00	0.000001 0.000001	80 80	2.4 2.4		0.2	
1,2,4-Trichlorobenzene 1,2-Dichlorobenzene			1.00E-02 3.00E-01	2.90E-02	2800 52	2800.00 52.00	1500.00 71.00	430.00 82.00	0.000001 0.000001	80 80	2.4 2.4		0.2	
1,2-Dichloroethane 1,2-Dichloropropane			7.80E-02 8.93E-02	3.30E-03 3.60E-02	1.6 2.9	1.60 2.90	1.80	1.90 3.90	0.000001	80 80	2.4		0.2	
1,2-Diphenylhydrazine				8.00E-01	18	18.00	24.00	27.00	0.000001	80	2.4		0.2	
Trans-1,2-Dichloroethylene 1,3-Dichlorobenzene	13.33		2.00E-02 2.00E-03		3.3 31	3.30 31.00	4.20 120.00	4.70 190.00	0.000001	80 80	2.4		0.2	
1,3-Dichloropropene 1,4-Dichlorobenzene			2.50E-02 7.00E-02	1.22E-01	2.3 28	2.30 28.00	2.70 66.00	3.00 84.00	0.000001 0.000001	80 80	2.4 2.4		0.2	
2,3,7,8-TCDD (Dioxin) 2,4,5-Trichlorophenol			7.00E-10 1.00E-01		#N/A 100	100.00	140.00	160.00	0.000001 0.000001	80 80	2.4		0.2	
2,4,6-Trichlorophenol 2.4-Dichlorophenol			1.00E-03 3.00E-03	1.10E-02	94 31	94.00 31.00	130.00	150.00 48.00	0.000001	80 80	2.4		0.2	
2,4-Dimethylphenol	12.82		2.00E-02		4.8	4.80 4.40	6.20	7.00	0.000001	80	2.4 2.4 2.4	0.022	0.2	
2,4-Dinitrophenol 2,4-Dinitrotoluene	12.82		2.00E-03 2.00E-03	6.67E-01	ND 2.8	2.80	3.50	3.90	0.000001	80 80	2.4		0.2	PCC 177
2-Chloronaphthalene 2-Chlorophenol			8.00E-02 5.00E-03		150 3.8	150.00 3.80	210.00 4.80	240.00 5.40	0.000001 0.000001	80 80	2.4 2.4		0.8	RSC = diff
2-Methyl-4,6-Dinitrophenol 3,3'-Dichlorobenzidine			3.00E-04	4.50E-01	6.8 44	6.80 44.00	8.90 60.00	10.00 69.00	0.000001 0.000001	80 80	2.4		0.2	
3-Methyl-4-Chlorophenol p,p'-Dichlorodiphenyldichloroethane (DDD)			1.00E-01 5.00E-04	2.40E-01	25 33000	25.00 33000.00	34.00 140000.00	39.00 240000.00	0.000001	80 80	2.4		0.2	
p,p'-Dichlorodiphenyldichloroethylene (DDE)		5.00E-04	1.67E-01	270000	270000.00	1100000.00	3100000.00	0.000001	80	2.4		0.2	
p,p'-Dichlorodiphenyltrichloroethane (DDT) Ammonia	666.67		5.00E-04 1.00E-01	3.40E-01	35000 #N/A	35000.00	240000.00	1100000.00	0.000001	80 80	2.4	0.161	0.2	
Nitrite Calcium			N N		#N/A #N/A				0.000001 0.000001	80 80	2.4 2.4	0.161 0.161	0.2	
Chloride Fluoride	400.00		N 6.00E-02		#N/A #N/A				0.000001 0.000001	80 80	2.4 2.4	0.161 0.161	0.2	
Sulfate		0.07	N	F 005	#N/A				0.000001	80	2.4	0.161	0.2	
Acrylamide Petroleum hydrocarbons - F1	13.33	0.07	2.00E-03 N	5.00E-01	#N/A #N/A				0.000001 0.000001	80 80	2.4	0.161 0.161	0.2	
Petroleum hydrocarbons - F2 Naphthenic acids (total)			N N		#N/A #N/A				0.000001 0.000001	80 80	2.4 2.4	0.161 0.161	0.2	
Xylene Aluminum	114.15		2.00E-01 N		#N/A #N/A	159.22 231.00	165.91 231.00	160.65 231.00	0.000001	80 80	2.4	0.161	0.2	
Boron	1333.33		2.00E-01		#N/A #N/A				0.000001	80	2.4	0.161 0.161	0.2	
			N N		#N/A				0.000001 0.000001	80 80	2.4	0.161	0.2	
Iron Lead					#N/A				0.000001	80	2.4	0.161 0.161	0.2	
Lead Lithium Mercury (inorganic)			N		#N/A				0.000001	80	2.4		0.2	
Lead Lithium	33.33 33.33		N 5.00E-03 5.00E-03		#N/A #N/A #N/A				0.000001	80 80 80	2.4 2.4 2.4	0.161 0.161 0.161	0.2 0.2	
Lead Lithium Mercury (inorganic) Molybdenum Silver Strontium	33.33 4000.00		5.00E-03 5.00E-03 6.00E-01		#N/A #N/A #N/A				0.000001 0.000001 0.000001	80 80 80	2.4 2.4 2.4	0.161 0.161 0.161	0.2 0.2 0.2	
Lead Lithium Mercury (inorganic) Molybdenum Silver	33.33		5.00E-03 5.00E-03		#N/A #N/A				0.000001 0.000001	80 80	2.4 2.4	0.161 0.161	0.2 0.2	

Parameter	BW (kg) 80	Conversion factor (ug/mg) 1000	Cancer risk level (10-5)	Cancer Slope Factor, CSF (per mg/kg-d)	Reference Dose, RfD (mg/kg-d)	Relative Source Contribution, RSC (-)	Plant Consumption Rate (kg/d) 0.0068	BCF sed- plant (US EPA 1999)	Medicinal Plant SW Quality Criteria (ug/L)
Acenaphthene					0.06	0.2			
Anthracene					0.3	0.2			
Antimony					0.0004	0.4		0.2	9.41E+03
Arsenic			0.00001	1.5				0.036	2.18E+03
Barium					0.2	0.2		0.15	3.14E+06
Benzene			0.00001	0.015	0.0005			0	
Benzo(a)anthracene			0.00001	0.73				0.0202	7.98E+03
Benzo(a)pyrene			0.00001	7.3				0	
Benzo(b)fluoranthene			0.00001	0.73				0.0101	1.60E+04
Benzo(k)fluoranthene			0.00001	0.073				0.0101	1.60E+05
Cadmium					0.0005	0.2		0.364	3.23E+03
Chrysene			0.00001	0.0073				0.0187	8.62E+05
Copper					x	0.2		0.4	
Chromium IV					0.003	0.2		0.0075	9.41E+05
Chromium III					1.5	0.2		0	
Cyanide					0.00063	0.2		0	
Dibenzo(a,h)anthracene			0.00001	7.3				0.0064	2.52E+03
Ethylbenzene					0.022	0.2		0	
Fluoranthene					0.04	0.2		0	
Fluorene					0.04	0.2		0	
Indeno(1,2,3-cd)pyrene			0.00001	0.73				0.0039	4.13E+04
Lead					0.14	0.2		0.045	7.32E+06
Manganese									
Mercury (total)					0.0003	0.2		0.0375	1.88E+04
Nickel					0.02	0.2		0.032	1.47E+06
Phenol					0.6	0.2			
Pyrene					0.03	0.2		0	
Selenium					0.005	0.2		0.016	7.35E+05
Thallium					0.000068	0.2		0.04	4.00E+03
Toluene					0.0097	0.2		0	
Zinc					0.3	0.2		1.2E-12	5.88E+17