

	IWQC (Non-cancer, FIR - US EPA HH DW + C)	IWQC (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 Pollutant	(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	
Acenaphthene	4.79		6.00E-02	ND	ND	510.00			0.00001	80	2.4	0.3881	0.2	
Acrolein	2.87		5.00E-04		1	1.00	1.00	1.00	0.00001	80	2.4	0.3881	0.2	
Acrylonitrile			N	5.40E-01	1	1.00	1.00	1.00	0.00001	80	2.4	0.3881	0.2	
Aldrin	0.0001	0.00001	3.00E-05	1.70E+01	18000	18000.00	310000.00	650000.00	0.00001	80	2.4	0.3881	0.2	
alpha-Hexachlorocyclohexane (HCH)	0.19	0.0002	8.00E-03	6.30E+00	#N/A	1700.00	1400.00	1500.00	0.00001	80	2.4	0.3881	0.2	
alpha-Endosulfan	1.82		6.00E-03	ND	130	130.00	180.00	200.00	0.00001	80	2.4	0.3881	0.2	
Anthracene	20.07		3.00E-01	ND	ND	610.00			0.00001	80	2.4	0.3881	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	0.25	0.03	3.00E-04	1.50E+00	#N/A	44.00			0.00001	80	2.4	0.3881	0.2	
Asbestos			N		#N/A				0.00001			0.3881	0.2	
Barium	1147.74		2.00E-01		#N/A	1.00			0.00001	80	2.4	0.3881	0.2	Appendix C, USEPA, 1986 AWQC
Benzene	2.11	14.05	5.00E-04	1.50E-02	#N/A	3.60	4.50	5.00	0.00001	80	2.4	0.3881	0.2	two values b/c range
	2.11	3.83	5.00E-04	5.50E-02	#N/A	3.60	4.50	5.00	0.00001	80	2.4	0.3881	0.2	two values b/c range
Benzidine	16.31	0.001	3.00E-03	2.30E+02	1.4	1.40	1.60	1.70	0.00001	80	2.4	0.3881	0.2	
Benzo(a)anthracene		0.001	N	7.30E-01	ND	3900.00			0.00001	80	2.4	0.3881	0.2	
Benzo(a)pyrene	0.003	0.0001	3.00E-04	7.30E+00	ND	3900.00			0.00001	80	2.4	0.3881	0.2	
Benzo(b)fluoranthene		0.001	N	7.30E-01	ND	3900.00			0.00001	80	2.4	0.3881	0.2	
Benzo(k)fluoranthene		0.01	N	7.30E-02	ND	3900.00			0.00001	80	2.4	0.3881	0.2	
Beryllium	3.27		2.00E-03		#N/A	19.00	19.00	19.00	0.00001	80	2.4	0.3881	0.2	
beta-Hexachlorocyclohexane (HCH)		0.01	N	1.80E+00	#N/A	110.00	160.00	180.00	0.00001	80	2.4	0.3881	0.2	
beta-Endosulfan	2.87		0.006		80	80.00	110.00	130.00	0.00001	80	2.4	0.3881	0.2	
Bis(2-Chloro-1-methylethyl) Ether	127.99		4.00E-02		6.7	6.70	8.80	10.00	0.00001	80	2.4	0.3881	0.2	
Bis(2-Chloroethyl) Ether		0.25	—	1.10E+00	1.4	1.40	1.60	1.70	0.00001	80	2.4	0.3881	0.2	
Bis(2-Ethylhexyl) Phthalate	3.45	0.21	0.06	1.40E-02	ND	710.00			0.00001	80	2.4	0.3881	0.2	
Bis(Chloromethyl) Ether		0.001	N	2.20E+02	1	1.00	1.00	1.00	0.00001	80	2.4	0.3881	0.2	
Bromoform	103.20	38.22	3.00E-02	4.50E-03	5.8	5.80	7.50	8.50	0.00001	80	2.4	0.3881	0.2	
Butylbenzyl Phthalate	2.82	0.06	1.30E+00	1.90E-03	ND	19000.00			0.00001	80	2.4	0.3881	0.2	
Cadmium	0.002		5.00E-04		#N/A	12400.00	12400.00	12400.00	0.00001	80	2.4	0.3881	0.2	
Carbon Tetrachloride	10.65	1.90	4.00E-03	7.00E-02	9.3	9.30	12.00	14.00	0.00001	80	2.4	0.3881	0.2	
Chlordane	0.004	0.001	5.00E-04	3.50E-01	5300.00	5300.00	44000.00	60000.00	0.00001	80	2.4	0.3881	0.2	
Chlorobenzene	40.85		2.00E-02		14	14.00	19.00	22.00	0.00001	80	2.4	0.3881	0.2	
Chlorodibromomethane	83.42	5.21	2.00E-02	4.00E-02	3.7	3.70	4.80	5.30	0.00001	80	2.4	0.3881	0.2	
Chloroform	45.89		1.00E-02		2.8	2.80	3.40	3.80	0.00001	80	2.4	0.3881	0.2	
Chlorophenoxy Herbicide (2,4-D)	451.29		2.10E-01		ND	13.00			0.00001	80	2.4	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)	10000.00		1.50E+00		#N/A				0.00001	80	2.4	0.3881	0.2	
Chromium (VI)	13.47		3.00E-03		#N/A	3.00	3.00	3.00	0.00001	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 Calculation Matrix
Copper			N		#N/A	290.00	290.00	290.00	0.00001	80	2.4	0.3881	0.2	
Cyanide	3.62		6.30E-04		ND	1.00			0.00001	80	2.4	0.3881	0.2	
Cylindrospermopsin			N		#N/A				0.00001	80	2.4	0.3881	0.2	
Dibenz(a,h)anthracene		0.0001	N	7.30E+00	ND	3900.00			0.00001	80	2.4	0.3881	0.2	
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	0.0001	0.00001	5.00E-05	1.60E+01	14000	14000.00	210000.00	410000.00	0.00001	80	2.4	0.3881	0.2	
Diethyl Phthalate	35.61		8.00E-01		ND	920.00			0.00001	80	2.4	0.3881	0.2	
Dimethyl Phthalate	102.91		1.00E+01		ND	4000.00			0.00001	80	2.4	0.3881	0.2	
Di-n-Butyl Phthalate	1.42		1.00E-01		ND	2900.00			0.00001	80	2.4	0.3881	0.2	
Dinitrophenols	10.72		2.00E-03		ND	1.51			0.00001	80	2.4	0.3881	0.2	
Endosulfan Sulfate	2.63		6.00E-03		88	88.00	120.00	140.00	0.00001	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
Endrin Aldehyde	0.11		3.00E-04		440	440.00	920.00	850.00	0.00001	80	2.4	0.3881	0.8	RSC = diff
Ethylbenzene	8.54		2.20E-02		100	100.00	140.00	160.00	0.00001	80	2.4	0.3881	0.2	
Fluoranthene	1.09		4.00E-02		ND	1500.00			0.00001	80	2.4	0.3881	0.2	
Fluorene	6.98		4.00E-02		230	230.00	450.00	710.00	0.00001	80	2.4	0.3881	0.2	
gamma-Hexachlorocyclohexane (HCH) [Linda]	0.40		4.70E-03		1200	1200.00	2400.00	2500.00	0.00001	80	2.4	0.3881	0.5	RSC = diff
Heptachlor	0.0003	0.00004	1.00E-04	4.10E+00	12000	12000.00	180000.00	330000.00	0.00001	80	2.4	0.3881	0.2	
Heptachlor Epoxide	0.0001	0.0001	1.30E-05	5.50E+00	4000	4000.00	28000.00	35000.00	0.00001	80	2.4	0.3881	0.2	
Hexachlorobenzene	0.002	0.0001	8.00E-04	1.02E+00	18000	18000.00	46000.00	90000.00	0.00001	80	2.4	0.3881	0.2	
Hexachlorobutadiene	0.001	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		0.007		1.80E+00	160	160.00	220.00	250.00	0.00001	80	2.4	0.3881	0.2	
Hexachlorocyclopentadiene	0.40		6.00E-03		620	620.00	1500.00	1300.00	0.00001	80	2.4	0.3881	0.2	
Hexachloroethane	0.02	0.04	7.00E-04	4.00E-02	1200	1200.00	280.00	600.00	0.00001	80	2.4	0.3881	0.2	
Indeno[1,2,3-cd]pyrene	0.001		N	7.30E-01	ND	3900.00			0.00001	80	2.4	0.3881	0.2	
Isophorone	1019.96	268.41	2.00E-01	9.50E-04	1.9	1.90	2.20	2.40	0.00001	80	2.4	0.3881	0.2	
Manganese	933.33		1.40E-01		#N/A				0.00001	80	2.4	0.3881	0.2	
Methylmercury	0.67		1.00E-04		#N/A		27900.00	140000.00	0.00001	80	2.4	0.3881	0.2	
Methoxychlor	0.001		2.00E-05		1400	1400.00	4800.00	4400.00	0.00001	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	
Methylene Chloride	32.62	135.90	6.00E-03	2.00E-03	1.4	1.40	1.50	1.60	0.00001	80	2.4	0.3881	0.2	
Microcystins			N		#N/A				0.00001	80	2.4	0.3881	0.2	
Nickel	7.35		2.00E-02		#N/A	106.00	106.00	106.00	0.00001	80	2.4	0.3881	0.2	
Nitrates	10666.67		1.60E+00		#N/A				0.00001	80	2.4	0.3881	0.2	
Nitrobenzene	9.72		2.00E-03		2.3	2.30	2.80	3.10	0.00001	80	2.4	0.3881	0.2	
Nitrosamines			N		#N/A				0.00001	80	2.4	0.3881	0.2	
Nitrosodibutylamine	10.72	0.05	2.00E-03	5.40E+00	#N/A	1.51			0.00001	80	2.4	0.3881	0.2	
Nitrosodiethylamine		0.002	1.50E+02		#N/A	0.20			0.00001	80	2.4	0.3881	0.2	
Nitrosopyrrolidine		0.16	2.10E+00		#N/A				0.00001	80	2.4	0.3881	0.2	
N-Nitrosodimethylamine		0.01	5.10E+01		#N/A				0.00001	80	2.4	0.3881	0.2	
N-Nitrosodi-n-Propylamine		0.05	7.00E+00		#N/A				0.00001	80	2.4	0.3881	0.2	
N-Nitrosodiphenylamine		68.03	4.90E-03		#N/A				0.00001	80	2.4	0.3881	0.2	
Pathogen and Pathogen Indicators					#N/A				0.00001	80	2.4	0.3881	0.2	
Pentachlorobenzene	0.01		8.00E-04		3500	3500.00	4500.00	10000.00	0.00001	80	2.4	0.3881	0.2	
Pentachlorophenol	4.11	0.10	5.00E-03	4.00E-01	44	44.00	290.00	520.00	0.00001	80	2.4	0.3881	0.2	
Phenol	1609.58		3.00E-01		1.5	1.50	1.70	1.90	0.00001	80	2.4	0.3881	0.2	
Polychlorinated Biphenyls (PCBs)				2.00E+00	#N/A				0.00001	80		0.3881	0.2	
Pyrene	1.43		3.00E-02		ND	860.00			0.00001	80	2.4	0.3881	0.2	
Selenium	18.77		5.00E-03		#N/A	4.80			0.00001	80	2.4	0.3881	0.2	
Tetrachloroethylene	4.48	17.79	6.00E-03	2.10E-03	49	49.00	66.00	76.00	0.00001	80	2.4	0.3881	0.2	
Thallium	0.02		6.80E-05		#N/A	116.00			0.00001	80	2.4	0.3881	0.2	
Toluene	191.93		8.00E-02		11	11.00	15.00	17.00	0.00001	80	2.4	0.3881	0.2	
Toxaphene	0.01	0.001	3.50E-04	1.10E+00	1700	1700.00	6600.00	690						

Parameter	BW (kg)	Conversion factor (ug/mg)	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)	BCF sed-plant (US EPA 1999)	Medicinal Plant SW Quality Criteria (ug/L)
	80	1000					0.0068		
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