		IWQC (Non-cancer, FIR - US EPA HH DW + C)	IWQC (Cancer, FIR - US EPA HH DW + C)	Rfd (US EPA IRIS, "new")	Factor (CSF)	Bioaccumulati on Factor (BAF) (national supp info)	BAF TL2	BAFTL3	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 0.2	
	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 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Acrylonitrile Aldrin	0.0001	0.53 0.00001	N 3.00E-05	5.40E-01 1.70E+01	1 18000	1.00 18000.00	1.00 310000.00	1.00 650000.00	0.00001	80 80	2.4	0.3881 0.3881	0.2	
	alpha-Hexachlorocyclohexane (HCH) alpha-Endosulfan	0.19 1.82	0.0002	8.00E-03 6.00E-03	6.30E+00 ND	#N/A 130	1700.00 130.00	1400.00 180.00	1500.00 200.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Anthracene	20.07		3.00E-01	ND	ND	610.00			0.00001	80	2.4	0.3881	0.2	RSC = diff (National water qualit
	Antimony Arsenic	4.59 0.25	0.03	4.00E-04 3.00E-04	1.50E+00	#N/A #N/A	1.00 44.00	1.00	1.00	0.00001	80 80	2.4 2.4	0.3881 0.3881	0.4	criteria)
	Asbestos Barium	1147.74		N 2.00E-01		#N/A #N/A	1.00			0.00001 0.00001	80	2.4	0.3881 0.3881	0.2	Appendix C, USEPA, 1986 AWQC
	Benzene	2.11 2.11	14.05 3.83	5.00E-04 5.00E-04	1.50E-02 5.50E-02	#N/A #N/A	3.60 3.60	4.50 4.50	5.00 5.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	two values b/c range two values b/c range
	Benzidine Benzo(a)anthracene Benzo(a)pyrene	16.31 0.003	0.001 0.001 0.0001	3.00E-03 N 3.00E-04	2.30E+02 7.30E-01 7.30E+00	1.4 ND	1.40 3900.00 3900.00	1.60	1.70	0.00001	80 80 80	2.4 2.4 2.4	0.3881 0.3881 0.3881	0.2 0.2 0.2	
	Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene	0.003	0.001 0.001 0.01	3.00E-04 N N	7.30E-00 7.30E-01 7.30E-02	ND ND ND	3900.00 3900.00			0.00001 0.00001 0.00001	80 80	2.4	0.3881 0.3881 0.3881	0.2 0.2 0.2	
	Beryllium beta-Hexachlorocyclohexane (HCH)	3.27	0.01	2.00E-03 N	1.80E+00	#N/A #N/A	19.00 110.00	19.00 160.00	19.00 180.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	beta-Endosulfan Bis(2-Chloro-1-methylethyl) Ether	2.87 127.99	0.01	0.006 4.00E-02	1.002.00	80 6.7	80.00 6.70	110.00	130.00	0.00001	80 80	2.4	0.3881	0.2	
	Bis(2-Chloroethyl) Ether Bis(2-Ethylhexyl) Phthalate	3.45	0.25 0.21	0.06	1.10E+00 1.40E-02	1.4 ND	1.40 710.00	1.60	1.70	0.00001	80 80	2.4	0.3881	0.2	
	Bis(Chloromethyl) Ether Bromoform	103.20	0.001 38.22	N 3.00E-02	2.20E+02 4.50E-03	1 5.8	1.00 5.80	1.00 7.50	1.00 8.50	0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Butylbenzyl Phthalate Cadmium	2.82 0.002	0.06	1.30E+00 5.00E-04	1.90E-03	ND #N/A	19000.00 12400.00	12400.00	12400.00	0.00001 0.00001	80 80	2.4 2.4	0.3881 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 2.4	0.3881 0.3881	0.2 0.2	
	Chlorophenoxy Herbicide (2,4,5-TP) [Silvex] Chromium (III)	20.55 10000.00		8.00E-03 1.50E+00		ND #N/A	58.00			0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.8	RSC = diff
	Chromium (VI) Chrysene	13.47	0.07	3.00E-03 N	7.30E-03	#N/A ND	3.00 3900.00	3.00	3.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Copper			N		#N/A	290.00	290.00	290.00	0.00001	80	2.4	0.3881	0.2	US EPA Human Health Criteria Calculation Matrix
	Cyanide Cylindrospermopsin	3.62	0.0004	6.30E-04 N	7.005.00	ND #N/A	1.00			0.00001	80 80	2.4	0.3881	0.2	
	Dibenzo(a,h)anthracene Dichlorobromomethane Dieldrin	12.90 0.0001	0.0001 6.33 0.00001	N 3.00E-03 5.00E-05	7.30E+00 3.40E-02 1.60E+01	ND 3.4 14000	3900.00 3.40 14000.00	4.30 210000.00	4.80 410000.00	0.00001 0.00001 0.00001	80 80 80	2.4 2.4 2.4	0.3881 0.3881 0.3881	0.2 0.2 0.2	
	Diethyl Phthalate	35.61 102.91	0.00001	8.00E-05 8.00E-01 1.00E+01	1.60E+01	ND ND	920.00 4000.00	210000.00	410000.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881 0.3881	0.2	
	Dimethyl Phthalate Di-n-Butyl Phthalate Dinitrophenols	1.42 10.72		1.00E-01 2.00E-03		ND ND	2900.00 1.51			0.00001 0.00001 0.00001	80 80	2.4	0.3881	0.2	
	Endosulfan Sulfate Endrin	2.63 0.01		6.00E-03 3.00E-04		88 4600	88.00 4600.00	120.00 36000.00	140.00 46000.00	0.00001 0.00001	80 80	2.4	0.3881	0.2	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	RSC = diff
	Fluoranthene Fluorene	1.09 6.98		4.00E-02 4.00E-02		ND 230	1500.00 230.00	450.00	710.00	0.00001	80 80	2.4	0.3881 0.3881	0.2	
	gamma-Hexachlorocyclohexane (HCH) [Lind 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	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 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Hexachlorobutadiene Hexachlorocyclohexane (HCH) -Technical	0.001	0.002 0.007	3.00E-04	4.00E-02 1.80E+00	23000 160	23000.00 160.00	2800.00 220.00	1100.00 250.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Hexachlorocyclopentadiene Hexachloroethane	0.40 0.02	0.04	6.00E-03 7.00E-04	4.00E-02	620 1200	620.00 1200.00	1500.00 280.00	1300.00 600.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Indeno(1,2,3-cd)pyrene Isophorone	1019.96	0.001 268.41	N 2.00E-01	7.30E-01 9.50E-04	ND 1.9	3900.00 1.90	2.20	2.40	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Manganese Methylmercury	933.33 0.67		1.40E-01 1.00E-04		#N/A #N/A		27900.00	140000.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Methoxychlor Methyl Bromide	0.001 111.66		2.00E-05 2.00E-02		1400 1.2	1400.00 1.20	4800.00 1.30	4400.00 1.40	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	RSC = diff
	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	80 80	2.4	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	80 80	2.4	0.3881	0.2	
	Nitrobenzene Nitrosamines Nitrosodibutylamine	9.72	0.05	2.00E-03 N 2.00E-03	5.40E+00	2.3 #N/A #N/A	2.30	2.80	3.10	0.00001 0.00001 0.00001	80 80 80	2.4 2.4 2.4	0.3881 0.3881 0.3881	0.2 0.2 0.2	
	Nitrosodiethylamine Nitrosopyrrolidine	10.72	0.002	2.001-03	1.50E+02 2.10E+00	#N/A #N/A	0.20			0.00001	80 80	2.4	0.3881	0.2	
	N-Nitrosodimethylamine N-Nitrosodi-n-Propylamine		0.01		5.10E+01 7.00E+00	#N/A #N/A				0.00001	80 80	2.4	0.3881	0.2	
	N-Nitrosodiphenylamine Pathogen and Pathogen Indicators		68.03		4.90E-03	#N/A #N/A				0.00001	80 80	2.4	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 Polychlorinated Biphenyls (PCBs)	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	
	Pyrene Selenium	1.43 18.77		3.00E-02 5.00E-03		ND #N/A	860.00 4.80			0.00001 0.00001	80 80	2.4 2.4	0.3881 0.3881	0.2	
	Tetrachloroethylene Thallium	4.48 0.02	17.79	6.00E-03 6.80E-05	2.10E-03	49 #N/A	49.00 116.00	66.00	76.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Toluene Toxaphene	191.93 0.01	0.001	8.00E-02 3.50E-04	1.10E+00	11 1700	11.00 1700.00	15.00 6600.00	17.00 6300.00	0.00001 0.00001	80 80	2.4	0.3881 0.3881	0.2	
	Trichloroethylene Vinyl Chloride	1.38 16.31 12.72	2.77 0.18	5.00E-04 3.00E-03	5.00E-02 1.50E+00	8.7 1.4	8.70 1.40	12.00 1.60 966.00	13.00	0.00001	80 80 80	2.4 2.4 2.4	0.3881	0.2 0.2 0.2	
	Zinc 1,1,1-Trichloroethane 1,1,2,3 Totrochloroethane	12.72		3.00E-01 2.00E+00	2.00E-01	#N/A 6.9	966.00 6.90 5.70	9.00 7.40	966.00 10.00 8.40	0.00001 0.000001 0.000001	80 80	2.4	0.3881	0.2	
	1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethylene			2.00E-02 4.00E-03 5.00E-02	5.70E-02	5.7 6 2	6.00 2.00	7.80 2.40	8.90 2.60	0.000001	80 80	2.4		0.2	
	1,2,4,5-Tetrachlorobenzene 1,2,4-Trichlorobenzene			3.00E-02 3.00E-04 1.00E-02	2.90E-02	17000 2800	17000.00 2800.00	2900.00 1500.00	1500.00 430.00	0.000001 0.000001	80 80	2.4		0.2	
	1,2-Dichlorobenzene 1,2-Dichloroethane			3.00E-01 7.80E-02	3.30E-03	52 1.6	52.00 1.60	71.00 1.80	82.00 1.90	0.000001	80 80	2.4		0.2	
	1,2-Dichloropropane 1,2-Diphenylhydrazine			8.93E-02	3.60E-02 8.00E-01	2.9 18	2.90 18.00	3.50 24.00	3.90 27.00	0.000001 0.000001	80 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 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 42.00	150.00 48.00	0.000001 0.000001	80 80	2.4		0.2	
	2,4-Dimethylphenol 2,4-Dinitrophenol	12.82		2.00E-02 2.00E-03		4.8 ND	4.80	6.20	7.00	0.000001	80 80	2.4	0.022	0.2	
	2,4-Dinitrotoluene 2-Chloronaphthalene 2-Chlorophenol			2.00E-03 8.00E-02 5.00E-03	6.67E-01	2.8 150 3.8	2.80 150.00 3.80	3.50 210.00 4.80	3.90 240.00 5.40	0.000001 0.000001 0.000001	80 80 80	2.4 2.4 2.4		0.2 0.8 0.2	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	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 p,p'-Dichlorodiphenyltrichloroethane (DDT))		5.00E-04 5.00E-04	1.67E-01 3.40E-01	270000 35000	270000.00 35000.00	1100000.00 240000.00	3100000.00 1100000.00	0.000001	80 80	2.4		0.2	
	Ammonia Nitrite	666.67		1.00E-01 N		#N/A #N/A				0.000001 0.000001	80 80	2.4	0.161 0.161	0.2	
	Calcium Chloride			N N		#N/A #N/A				0.000001 0.000001	80 80	2.4 2.4	0.161 0.161	0.2	
	Fluoride Sulfate	400.00		6.00E-02 N		#N/A #N/A				0.000001 0.000001	80 80	2.4 2.4	0.161 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 2.4	0.161 0.161	0.2 0.2	
	Petroleum hydrocarbons - F2 Naphthenic acids (total)			N N		#N/A #N/A				0.000001 0.000001	80 80	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 Iron	1333.33		2.00E-01 N		#N/A #N/A				0.000001	80 80	2.4	0.161	0.2	
	Lead Lithium Marrupy (inorganis)			N N		#N/A #N/A		1		0.000001	80 80	2.4	0.161 0.161	0.2	
1	Mercury (inorganic) Molybdenum Silver	33.33 33.33		N 5.00E-03 5.00E-03		#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	
Version 25	Sirver Ostrontium Uranium	4000.00 20.00		6.00E-01 3.00E-03		#N/A #N/A				0.000001 0.000001 0.000001	80 80	2.4	0.161 0.161 0.161	0.2	
	Vanadium Naphthalene	133.33		N 2.00E-02		#N/A #N/A				0.000001 0.000001	80 80	2.4	0.161 0.161	0.2	
	Phenanthrene	200.00		3.00E-02		#N/A				0.000001	80	2.4	0.161	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					х	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