Table A-1
SO, MO-1, and Appendix H MO-2 Toxicity Values

Constituent of Concern	CAS No.	SF_o $(mg/kg\text{-}day)^{-1}$	ref	IUR $(ug/m^3)^{-1}$	ref	RfD_o (mg/kg-day)	ref	RfC_i (mg/m^3)	ref	voc	Mutagen	GIABS	ABS
Acenaphthene	83-32-9					6.0E-02	I			V		1	0.13
Acetone	67-64-1					9.0E-01	I	3.1E+01	A	V		1	
Aldrin	309-00-2	1.7E+01	I	4.9E-03	I	3.0E-05	I			V		1	0
Aniline	62-53-3	5.7E-03	I	1.6E-06	C	7.0E-03	P	1.0E-03	I			1	0.1
Anthracene	120-12-7					3.0E-01	I			V		1	0.13
Antimony (metallic)	7440-36-0					4.0E-04	I					0.15	
Arsenic, Inorganic	7440-38-2	1.5E+00	I	4.3E-03	I	3.0E-04	I	1.5E-05	C			1	0.03
Barium	7440-39-3					2.0E-01	I	5.0E-04	H			0.07	
Benz[a]anthracene	56-55-3	1.0E-01	D	6.0E-05	D					V	M	1	0.13
Benzene	71-43-2	5.5E-02	I	7.8E-06	I	4.0E-03	I	3.0E-02	I	V		1	
Benzo[a]pyrene	50-32-8	1.0E+00	I	6.0E-04	I	3.0E-04	I	2.0E-06	I		M	1	0.13
Benzo[b]fluoranthene	205-99-2	1.0E-01	D	6.0E-05	D						M	1	0.13
Benzo[k]fluoranthene	207-08-9	1.0E-02	D	6.0E-06	D						M	1	0.13
Beryllium and compounds	7440-41-7			2.4E-03	I	2.0E-03	I	2.0E-05	I			0.007	
Biphenyl, 1,1'-	92-52-4	8.0E-03	I			5.0E-01	I			V		1	
Bis(2-chloro-1-methylethyl) ether	108-60-1					4.0E-02	I			V		1	
Bis(2-chloroethyl)ether	111-44-4	1.1E+00	I	3.3E-04	I					V		1	
Bis(2-ethylhexyl)phthalate	117-81-7	1.4E-02	I	2.4E-06	C	2.0E-02	I					1	0.1
Bromodichloromethane	75-27-4	6.2E-02	I	3.7E-05	C	2.0E-02	I			V		1	
Bromoform	75-25-2	7.9E-03	I	1.1E-06	I	2.0E-02	I			V		1	0
Bromomethane	74-83-9					1.4E-03	I	5.0E-03	I	V		1	
Butyl Benzyl Phthlate	85-68-7	1.9E-03	P			2.0E-01	I					1	0.1
Cadmium (Diet)	7440-43-9			1.8E-03	I	1.0E-03	I	1.0E-05	A			0.025	0.001
Cadmium (Water)	7440-43-9			1.8E-03	I	5.0E-04	I	1.0E-05	A			0.05	0.001
Carbon Disulfide	75-15-0					1.0E-01	I	7.0E-01	I	V		1	
Carbon Tetrachloride	56-23-5	7.0E-02	I	6.0E-06	I	4.0E-03	I	1.0E-01	I	V		1	
Chlordane	12789-03-6	3.5E-01	I	1.0E-04	I	5.0E-04	I	7.0E-04	I	V		1	0.04
Chloroaniline, p-	106-47-8	2.0E-01	P			4.0E-03	I					1	0.1
Chlorobenzene	108-90-7					2.0E-02	I	5.0E-02	P	V		1	
Chlorodibromomethane	124-48-1	8.4E-02	I			2.0E-02	I			V		1	0.1
Chloroethane	75-00-3							1.0E+01	I	V		1	
Chloroform	67-66-3	3.1E-02	C	2.3E-05	I	1.0E-02	I	9.8E-02	A	V		1	
Chloromethane	74-87-3							9.0E-02	I	V		1	
Chloronaphthalene, Beta-	91-58-7					8.0E-02	I			V		1	
Chlorophenol, 2-	95-57-8					5.0E-03	I			V		1	
Chromium(III), Insoluble Salts	16065-83-1					1.5E+00	I					0.013	
Chromium(VI)	18540-29-9			1.2E-02	I	3.0E-03	I	1.0E-04	I		M	0.025	
Chrysene	218-01-9	1.0E-03	D	6.0E-07	D						M	1	0.13
Cobalt	7440-48-4			9.0E-03	P	3.0E-04	P	6.0E-06	P			1	
Copper	7440-50-8					4.0E-02	H					1	
Cyanide (CN-)	57-12-5					6.0E-04	I			V		1	
DDD	72-54-8	2.4E-01	I	6.9E-05	C							1	0.1
DDE, p,p'-	72-55-9	3.4E-01	I	9.7E-05	C					V		1	0
DDT	50-29-3	3.4E-01	I	9.7E-05	I	5.0E-04	I					1	0.03
Dibenz[a,h]anthracene	53-70-3	1.0E+00	D	6.0E-04	D						M	1	0.13
Dibromo-3-chloropropane, 1,2-	96-12-8	8.0E-01	P	6.0E-03	P	2.0E-04	P	2.0E-04	I	V	M	1	
Dibromoethane, 1,2-	106-93-4	2.0E+00	I	6.0E-04	I	9.0E-03	I	9.0E-03	I	V		1	
Dichlorobenzene, 1,2-	95-50-1					9.0E-02	I	2.0E-01	H	V		1	
Dichlorobenzene, 1,4-	106-46-7					7.0E-02	A	8.0E-01	I	V		1	
Dichlorobenzidine, 3,3'-	91-94-1	4.5E-01	I	3.4E-04	C							1	0.1
Dichloroethane, 1,1-	75-34-3	5.7E-03	C	1.6E-06	C	2.0E-01	P			V		1	
Dichloroethane, 1,2-	107-06-2	9.1E-02	I	2.6E-05	I			7.0E-03	P	V		1	
Dichloroethylene, 1,1-	75-35-4					5.0E-02	I	2.0E-01	I	V		1	
Dichloroethylene, 1,2-cis-	156-59-2					2.0E-03	I			V		1	
Dichloroethylene, 1,2-trans-	156-60-5					2.0E-02	I			V		1	
Dichlorophenol, 2,4-	120-83-2					3.0E-03	I					1	0.1
Dichloropropane, 1,2-	78-87-5	3.7E-02	P	3.7E-05	P	4.0E-02	P	4.0E-03	I	V		1	
Dichloropropene, 1,3-	542-75-6	1.0E-01	I	4.0E-06	I	3.0E-02	I	2.0E-02	I	V		1	
Dieldrin	60-57-1	1.6E+01	I	4.6E-03	I	5.0E-05	I					1	0.1
Diethyl Phthalate	84-66-2					8.0E-01	I					1	0.1
Dimethylphenol, 2,4-	105-67-9					2.0E-02	I					1	0.1
Dinitrobenzene, 1,3-	99-65-0					1.0E-04	I					1	0.1
Dinitrophenol, 2,4-	51-28-5					2.0E-03	I					1	0.1
Dinitrotoluene, 2,4-	121-14-2					2.0E-03	I					1	0.102
Dinitrotoluene, 2,6-	606-20-2	1.5E+00	P									1	0.099
Dinoseb	88-85-7					1.0E-03	I					1	0.1
Endosulfan	115-29-7					6.0E-03	I			V		1	0
Endrin	72-20-8					3.0E-04	I					1	0.1
Ethanol	64-17-5					5.7E+01	F						0.1
Ethylbenzene	100-41-4					1.0E-01	I	1.0E+00	I	V		1	
Ethylene Glycol	107-21-1					2.0E+00	I	4.0E-01	C			1	0.1
Fluoranthene	206-44-0					4.0E-02	I					1	0.13
Fluorene	86-73-7					4.0E-02	I			V		1	0.13
Formaldehyde	50-00-0			1.3E-05	I	2.0E-01	I	9.8E-03	A	V		1	0
Heptachlor	76-44-8	4.5E+00	I	1.3E-03	I	5.0E-04	I			V		1	0
Heptachlor Epoxide	1024-57-3	9.1E+00	I	2.6E-03	I	1.3E-05	I			V		1	0
Hexachlorobenzene	118-74-1	1.6E+00	I	4.6E-04	I	8.0E-04	I			V		1	0
Hexachlorobutadiene	87-68-3	7.8E-02	I	2.2E-05	I	1.0E-03	P			V		1	0
Hexachlorocyclohexane, Alpha-	319-84-6	6.3E+00	I	1.8E-03	I	8.0E-03	A					1	0.1
Hexachlorocyclohexane, Beta-	319-85-7	1.8E+00	I	5.3E-04	I							1	0.1

Table A-1
SO, MO-1, and Appendix H MO-2 Toxicity Values

Constituent of Concern	CAS No.	SF_o $(mg/kg\text{-}day)^{-1}$	ref	IUR $(ug/m^3)^{-1}$	ref	RfD_o (mg/kg-day)	ref	RfC_i (mg/m^3)	ref	voc	Mutagen	GIABS	ABS
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	1.3E+00	H			3.0E-04	I					1	0.04
Hexachlorocyclopentadiene	77-47-4					6.0E-03	I	2.0E-04	I	V		1	0
Hexachloroethane	67-72-1	4.0E-02	I	1.1E-05	C	7.0E-04	I	3.0E-02	I	V		1	0
Indeno[1,2,3-cd]pyrene	193-39-5	1.0E-01	D	6.0E-05	C						M	1	0.13
Isobutyl alcohol	78-83-1					3.0E-01	I			V		1	0
Isophorone	78-59-1	9.5E-04	I			2.0E-01	I	2.0E+00	C			1	0.1
Lead and Compounds	7439-92-1											1	_
Mercury (inorganic, Mercury chloride)	7487-94-7					3.0E-04	I					0.07	_
Methoxychlor	72-43-5					5.0E-03	I					1	0.1
Methyl Ethyl Ketone (2-Butanone)	78-93-3					6.0E-01	I	5.0E+00	I	V		1	_
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1					8.0E-02	X	3.0E+00	I	V		1	_
Methyl tert-Butyl Ether (MTBE)	1634-04-4	1.8E-03	X					3.0E+00	I	V		1	_
Methylene Chloride	75-09-2	2.0E-03	I	1.0E-08	I	6.0E-03	I	6.0E-01	I	V	M	1	_
Methylnaphthalene, 2-	91-57-6					4.0E-03	I			V		1	0.13
Naphthalene	91-20-3					2.0E-02	I	3.0E-03	I	V		1	0.13
Nickel Soluble Salts	7440-02-0					2.0E-02	I	9.0E-05	A			0.04	_
Nitrate	14797-55-8					1.6E+00	I					1	_
Nitrite	14797-65-0					1.0E-01	I					1	_
Nitroaniline, 4-	100-01-6	2.0E-02	P			4.0E-03	P	6.0E-03	P			1	0.1
Nitrobenzene	98-95-3			4.0E-05	I	2.0E-03	I	9.0E-03	I	V		1	_
Nitroso-di-N-propylamine, N-	621-64-7	7.0E+00	I	2.0E-03	C							1	0.1
N-nitrosodiphenylamine	86-30-6	4.9E-03	I	2.6E-06	C							1	0.1
Octyl Phthalate, di-N-	117-84-0					1.0E-02	P					1	0.1
Pentachlorophenol	87-86-5	4.0E-01	I	5.1E-06	C	5.0E-03	I					1	0.25
Phenol	108-95-2					3.0E-01	I	2.0E-01	C			1	0.1
Polychlorinated Biphenyls [D]	1336-36-3	2.0E+00	I	5.7E-04	I					V		1	0.14
Pyrene	129-00-0					3.0E-02	I			V		1	0.13
Selenium	7782-49-2					5.0E-03	I	2.0E-02	C			1	_
Silver	7440-22-4					5.0E-03	I					0.04	_
Styrene	100-42-5					2.0E-01	I	1.0E+00	I	V		1	_
TCDD, 2,3,7,8- (Total TEQ [D])	1746-01-6					7.0E-10	I			V		1	0.03
Tetrachlorobenzene, 1,2,4,5-	95-94-3					3.0E-04	I			V		1	0
Tetrachloroethane, 1,1,1,2-	630-20-6	2.6E-02	I	7.4E-06	I	3.0E-02	I			V		1	_
Tetrachloroethane, 1,1,2,2-	79-34-5	2.0E-01	I	5.8E-05	C	2.0E-02	I			V		1	_
Tetrachloroethylene	127-18-4	2.1E-03	I	2.6E-07	I	6.0E-03	I	4.0E-02	I	V		1	_
Tetrachlorophenol, 2,3,4,6-	58-90-2					3.0E-02	I					1	0.1
Thallium (Soluble Salts)	7440-28-0					1.0E-05	X					1	_
Toluene	108-88-3					8.0E-02	I	5.0E+00	I	V		1	_
Toxaphene	8001-35-2	1.1E+00	I	3.2E-04	I							1	0.1
Trichlorobenzene, 1,2,4-	120-82-1	2.9E-02	P			1.0E-02	I	2.0E-03	P	V		1	_
Trichloroethane, 1,1,1-	71-55-6					2.0E+00	I	5.0E+00	I	V		1	_
Trichloroethane, 1,1,2-	79-00-5	5.7E-02	I	1.6E-05	I	4.0E-03	I			V		1	_
Trichloroethylene	79-01-6	4.6E-02	I	4.1E-06	I	5.0E-04	I	2.0E-03	I	V	M	1	_
Trichlorofluoromethane	75-69-4					3.0E-01	I			V		1	_
Trichlorophenol, 2,4,5-	95-95-4					1.0E-01	I					1	0.1
Trichlorophenol, 2,4,6-	88-06-2	1.1E-02	I	3.1E-06	I	1.0E-03	P					1	0.1
Vanadium and Compounds	7440-62-2					7.0E-05	P	1.0E-04	A			0.026	_
Vinyl Chloride	75-01-4	7.2E-01	I	4.4E-06	I	3.0E-03	I	1.0E-01	I	V	M	1	_
Xylenes	1330-20-7					2.0E-01	I	1.0E-01	I	V		1	_
Zinc and Compounds	7440-66-6					3.0E-01	I					1	_
Aliphatics C_5-C_8 [D]	NA					5.00E+00	T	6.00E-01	P	V		1	
Aliphatics $C_{>8}$-C_{10} [D]	NA					1.00E-01	T	1.00E-01	P	V		1	
Aliphatics $C_{>10}$-C_{12} [D]	NA					1.00E-01	T	1.00E-01	P	V		1	
Aliphatics $C_{>12}$-C_{16} [D]	NA					1.00E-01	T	1.00E-01	P			1	0.1
Aliphatics $C_{>16}$-C_{35} [D]	NA					3.00E+00	P					1	0.1
Aromatics $C_{>8}$-C_{10} [D]	NA					4.00E-02	T	1.00E-01	P	V		1	
Aromatics $C_{>10}$-C_{12} [D]	NA					4.00E-02	T	1.00E-01	P			1	0.1
Aromatics $C_{>12}$-C_{16} [D]	NA					4.00E-02	T	1.00E-01	P			1	0.1
Aromatics $C_{>16}$-C_{21} [D]	NA					3.00E-02	T	1.00E-01	P			1	0.1
Aromatics $C_{>21}$-C_{35} [D]	NA					4.00E-02	P					1	0.1

A = ATSDR
C = California
D = refer to Appendix D
F = Center for Environmental and Human Toxicology, University of Florida
H = HEAST
I = IRIS
P = PPRTV
T = TPHCWG
X = Toxicity value used only for GW3 and SoilGW3
Hierarchy: 1) IRIS; 2) PPRTV; 3) HEAST, ATSDR, state agencies