Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H '*(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Cresol, p-	106-44-5	O	108.14	3.99E-05	1.15E+02	1.63E-01	7.40E-02	1.00E-05	2.30E+04	1.30E-01
Crotonaldehyde	123-73-9	O	70.09	8.15E-04	3.99E+00	3.27E-03	9.37E-02	1.02E-05	1.60E+05	1.90E+01
Cumene	98-82-8	O	120.19	6.07E-01	2.81E+03	6.93E+00	6.50E-02	7.10E-06	5.00E+01	4.60E+00
Cyanide	57-12-5	I	26.02	CE	2.03E-01	9.90E+00	5.21E-01	2.28E-05	1.00E+05	1.38E+01
Cyanogen	460-19-5	O	52.04	2.06E-01	1.17E+00	2.72E-03	2.04E-01	1.37E-05	1.00E+04	3.88E+03
Cyclohexanone	108-94-1	O	98.14	4.99E-04	1.34E+01	1.10E-02	7.72E-02	8.73E-06	2.30E+04	4.00E+00
Cyclotrimethylenetrinitramine	121-82-4	O	222.12	4.99E-04	7.41E+00	1.26E-01	6.65E-02	6.39E-06	3.87E+01	1.00E-09
DDD	72-54-8	O	320.05	1.66E-04	7.47E+05	1.70E+02	1.69E-02	4.76E-06	9.00E-02	8.66E-07
DDE	72-55-9	O	241.93	8.73E-04	9.90E+05	2.19E+02	1.44E-02	5.87E-06	6.50E-02	5.66E-06
DDT	50-29-3	O	354.49	2.23E-03	6.23E+06	2.75E+02	1.37E-02	4.95E-06	3.10E-03	3.93E-07
Di-n-butyl phthalate	84-74-2	O	278.35	5.94E-05	4.07E+04	6.78E+01	4.38E-02	7.86E-06	1.12E+01	4.25E-05
Di-n-octyl phthalate	117-84-0	O	390.56	2.78E-03	3.46E+08	1.66E+05	1.51E-02	3.90E-06	2.00E-02	4.47E-06
Diallate	2303-16-4	O	270.22	1.58E-04	1.19E+04	3.80E+00	8.00E-02	8.00E-06	1.40E+01	1.50E-04
Diazinon	333-41-5	O	304.35	4.70E-06	7.31E+03	2.64E-01	1.80E-02	4.90E-06	4.00E+01	8.40E-05
Dibenz-a,h-anthracene	53-70-3	O	278.35	4.66E-07	4.98E+06	3.81E+03	2.00E-02	5.18E-06	5.00E-04	2.10E-11
Dibromo-3-chloropropane, 1,2-	96-12-8	O	236.33	8.31E-03	4.81E+02	3.40E-01	8.00E-02	8.00E-06	1.00E+03	7.60E-01
Dibromochloromethane	124-48-1	O	208.28	3.25E-02	5.01E+01	1.26E-01	1.96E-02	1.05E-05	5.25E+03	1.50E+01
Dicamba	1918-00-9	O	209.03	3.28E-07	1.39E+02	4.40E-03	6.02E-02	6.69E-06	5.60E+03	9.70E-05
Dichlorobenzene, 1,2-	95-50-1	O	147.00	8.73E-02	1.91E+03	1.38E+00	6.90E-02	7.90E-06	1.50E+02	1.36E+00
Dichlorobenzene, 1,4-	106-46-7	O	147.00	1.17E-01	1.91E+03	1.29E+00	6.90E-02	7.90E-06	7.38E+01	1.06E+00
Dichlorobenzidine, 3,3-	91-94-1	O	253.13	8.65E-07	1.63E+03	1.45E+00	1.94E-02	6.74E-06	3.11E+00	2.20E-07
Dichloro-2-butene, 1,4	764-41-0	O	125.00	1.24E-02	3.97E+02	3.64E-01	7.43E-02	8.62E-06	6.91E+03	1.26E+01
Dichlorodifluoromethane	75-71-8	O	120.91	1.67E+01	6.54E+01	2.58E-01	5.20E-02	1.05E-05	2.80E+02	4.80E+03
Dichloroethane, 1,1-	75-34-3	O	98.96	2.39E-01	5.73E+01	6.32E-02	7.42E-02	1.05E-05	5.50E+03	2.28E+02
Dichloroethane, 1,2-	107-06-2	O	98.96	5.32E-02	6.79E+01	3.48E-02	1.04E-01	9.90E-06	8.70E+03	8.13E+01
Dichloroethylene, 1,1-	75-35-4	O	96.94	1.06E+00	1.30E+02	1.29E-01	9.00E-02	1.04E-05	2.40E+03	5.91E+02
Dichloroethylene, cis-1,2-	156-59-2	O	96.94	1.87E-01	7.24E+01	5.80E-02	7.35E-02	1.13E-05	4.93E+03	1.75E+02
Dichloroethylene, trans-1,2	156-60-5	O	96.94	3.90E-01	1.17E+02	1.00E-01	7.07E-02	1.19E-05	6.30E+03	3.52E+02
Dichlorophenol, 2,4-	120-83-2	OA	163.00	1.31E-04	6.34E+02	1.44E-01	3.46E-02	8.77E-06	4.50E+03	7.15E-02

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H '*(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Dichlorophenoxyacetic acid, 2,4-	94-75-7	O	221.04	5.82E-09	4.14E+02	1.78E+00	5.90E-02	6.50E-06	8.90E+02	2.40E-05
Dichloropropane, 1,2	78-87-5	O	112.99	1.17E-01	1.78E+02	1.18E-01	7.82E-02	8.73E-06	2.80E+03	5.00E+01
Dichloro-1-propanol, 2,3-	616-23-9	O	128.99	3.97E-05	6.09E+00	6.78E-02	4.84E-02	9.84E-06	2.95E+05	5.82E-01
Dichloropropene, 1,3-	542-75-6	O	110.97	1.23E-01	5.62E+01	1.05E-01	6.26E-02	1.00E-05	1.55E+03	3.12E+01
Dichlorvos	62-73-7	O	220.98	3.98E-05	2.51E+01	7.78E+06	2.32E-02	7.80E-06	1.60E+04	5.27E-02
Dieldrin	60-57-1	O	380.91	1.11E-04	2.80E+05	4.28E+01	1.25E-02	4.74E-06	1.95E-01	9.96E-07
Diethylhexyl adipate	103-23-1	O	370.57	9.78E-01	1.30E+08	7.60E+02	3.56E-02	3.72E-06	1.71E-03	8.25E-05
Diethyl phthalate	84-66-2	O	222.24	1.87E-05	4.42E+02	3.03E-01	2.56E-02	6.35E-06	1.08E+03	1.65E-03
Diethylstilbestrol	56-53-1	O	268.36	2.62E-13	4.37E+05	1.50E+02	4.43E-02	8.00E-06	1.30E+04	1.06E-09
Dimethoate	60-51-5	O	229.26	2.58E-09	1.90E+00	8.53E-03	8.00E-02	8.00E-06	2.50E+04	5.09E-06
Dimethoxybenzidine, 3,3'-	119-90-4	O	244.29	1.66E-08	1.22E+02	1.21E-01	2.42E-02	5.50E-06	2.40E+02	2.50E-07
Dimethylbenzidine, 3,3'-	119-93-7	O	212.29	5.40E-09	1.04E+03	3.99E-01	5.10E-02	8.00E-06	2.40E+02	3.70E-07
Dimethyl phenol, 2,4-	105-67-9	O	122.17	8.31E-05	4.05E+02	2.35E-01	5.84E-02	8.69E-06	6.20E+03	1.26E-01
Dinitrobenzene, 1,3-	99-65-0	O	168.11	4.57E-06	4.25E+01	6.00E-02	2.80E-01	7.60E-06	5.40E+02	2.49E-04
Dinitrobenzene, 1,4-	100-25-4	O	168.11	4.44E-06	4.25E+01	5.24E-02	6.15E-02	7.18E-06	1.00E+02	4.83E-05
Dinitrophenol, 2,4-	51-28-5	OA	184.11	2.01E-07	5.32E+01	2.00E-05	2.73E-02	9.06E-06	5.80E+03	1.14E-04
Dinitrotoluene, 2,4-	121-14-2	O	182.14	3.60E-05	1.50E+02	1.03E-01	2.03E-01	7.06E-06	2.85E+02	1.74E-04
Dinitrotoluene, 2,6-	606-20-2	O	182.14	3.11E-05	1.50E+02	8.34E-02	3.27E-02	7.26E-06	1.82E+02	5.70E-04
Dinoseb	88-85-7	O	240.22	2.08E-02	4.71E+03	2.40E+00	2.25E-02	6.25E-06	5.20E+01	7.52E-02
Dioxane, 1,4-	123-91-1	O	88.11	2.04E-04	4.79E-01	1.08E-03	2.30E-01	1.00E-05	9.00E+05	3.80E+01
Diphenylamine	122-39-4	O	169.23	1.83E-04	1.96E+03	6.93E-01	6.80E-02	6.30E-06	3.00E+02	4.26E-03
Diphenylhydrazine, 1,2-	122-66-7	O	184.24	1.42E-07	1.14E+03	1.32E+00	5.62E-02	5.70E-06	1.84E+03	2.60E-05
Diquat dibromide	85-00-7	O	344.05	2.69E-12	1.50E-03	4.10E-01	5.52E-02	5.52E-06	7.00E+05	1.00E-07
Disulfoton	298-04-4	O	274.41	2.58E-04	7.21E+03	1.78E+01	8.00E-02	8.00E-06	1.60E+01	2.30E-04
Diuron	330-54-1	O	233.10	3.04E-08	4.71E+02	8.53E-01	5.40E-02	5.30E-06	4.20E+01	1.00E-07
Endosulfan	115-29-7	O	406.93	4.66E-04	6.90E+03	1.48E+00	1.15E-02	4.55E-06	5.10E-01	9.96E-06
Endothall	145-73-3	O	230.13	1.08E-08	7.81E+01	1.70E-01	CE	CE	1.00E+05	1.80E-04
Endrin	72-20-8	O	380.91	4.95E-05	2.80E+05	1.87E+01	1.25E-02	4.74E-06	2.50E-01	5.84E-07
Epichlorohydrin	106-89-8	O	92.53	1.37E-03	4.23E+00	3.99E-03	8.60E-02	9.80E-06	6.60E+04	1.67E+01

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H '*(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Ethion	563-12-2	O	384.48	2.87E-05	5.57E+04	3.08E+01	CE	CE	1.20E+00	1.50E-06
Ethoxy ethanol, 2-	110-80-5	O	90.12	2.13E+00	3.84E-01	1.60E-03	9.47E-02	9.75E-06	1.20E+01	4.56E+00
Ethyl acetate	141-78-6	O	88.11	5.57E-03	7.31E+00	1.05E-02	7.30E-02	9.70E-06	7.90E+04	9.41E+01
Ethyl acrylate	140-88-5	O	100.12	1.06E-02	1.66E+01	2.14E-01	7.40E-02	8.68E-06	2.00E+04	2.95E+01
Ethyl benzene	100-41-4	O	106.17	3.28E-01	1.07E+03	4.08E-01	7.50E-02	7.80E-06	1.69E+02	9.60E+00
S-Ethyl dipropylthiocarbamate	759-94-4	O	189.32	4.57E-03	1.04E+03	4.80E-01	5.35E-02	5.65E-06	3.70E+02	1.60E-01
Ethyl ether	60-29-7	O	74.12	2.70E-02	1.12E+01	1.52E-02	7.40E-02	9.30E-06	6.10E+04	5.40E+02
Ethyl methacrylate	97-63-2	O	114.14	6.65E-03	5.84E+01	7.40E-02	8.00E-02	8.00E-06	1.90E+04	1.75E+01
Ethyl-2-methylbenzene, 1-	611-14-3	O	120.19	2.19E-01	3.39E+03	2.15E+00	6.76E-02	7.29E-06	7.46E+01	2.48E+00
Ethyl-4-methylbenzene, 1-	622-96-8	O	120.19	3.27E-01	3.80E+03	2.34E+00	6.70E-02	7.18E-06	9.49E+01	2.95E+00
Ethylenediamine	107-15-3	O	60.10	7.19E-08	2.41E-02	9.42E-03	1.53E-01	1.12E-05	7.95E+06	1.10E+01
Ethylene dibromide	106-93-4	O	187.86	2.93E-02	1.02E+02	1.07E-01	2.17E-02	1.90E-05	4.32E+03	1.10E+01
Ethylene glycol	107-21-1	O	62.07	2.49E-06	6.32E-02	2.52E-04	1.08E-01	1.22E-05	1.00E+06	7.00E-02
Ethylene oxide	75-21-8	O	44.05	4.92E-03	9.01E-01	4.40E-03	1.04E-01	1.45E-05	3.83E+05	1.32E+03
Ethylene thiourea	96-45-7	O	102.16	4.99E-05	3.23E-01	4.38E-04	7.15E-02	1.02E-05	1.20E+04	8.36E-02
Fluoranthene	206-44-0	O	202.26	3.88E-04	8.57E+04	9.80E+01	3.02E-02	6.35E-06	2.60E-01	8.13E-06
Fluorene	86-73-7	O	166.22	2.64E-03	1.04E+04	1.52E+01	3.63E-02	7.88E-06	1.98E+00	3.24E-03
Fluorine (soluble Fluoride)	7782-41-4	I	38.00	CE	1.67E+00	1.50E+02	CE	CE	NA/reacts	7.60E+02
Formaldehyde	50-00-0	O	30.03	1.37E-05	2.24E+00	4.38E-03	1.80E-01	2.00E-05	5.50E+05	3.88E+03
Formic acid	64-18-6	O	46.03	1.79E-04	3.46E-01	5.77E-04	7.90E-02	1.40E-06	1.00E+06	4.10E+01
Furan	110-00-9	O	68.08	2.24E-01	2.31E+01	4.18E-02	1.04E-01	1.20E-05	1.00E+04	6.00E+02
Fufural	98-01-1	O	96.09	1.25E-04	6.80E+00	5.57E-03	8.72E-02	1.12E-05	8.60E+04	2.00E+00
Glycidylaldehyde	765-34-4	O	72.06	1.08E-05	7.63E-01	1.84E-02	9.64E-02	1.16E-05	8.55E+07	2.70E+01
Heptachlor	76-44-8	O	373.32	2.44E-02	1.61E+06	2.35E+01	1.12E-02	5.69E-06	1.80E-01	3.26E-04
Heptachlor epoxide	1024-57-3	O	389.32	3.45E-04	8.04E+04	1.45E+01	1.32E-02	4.23E-06	2.75E-01	4.34E-06
Hexachlorobenzene	118-74-1	O	284.78	2.22E-02	7.24E+05	5.64E+01	5.42E-02	5.91E-06	6.00E-03	1.23E-05
Hexachloro-1,3-butadiene	87-68-3	O	260.76	9.94E-01	5.21E+04	1.38E+01	5.61E-02	6.16E-06	2.55E+00	1.77E-01
Hexachlorocyclohexane, alpha	319-84-6	O	290.83	2.82E-04	1.81E+04	2.64E+00	1.42E-02	7.34E-06	2.00E+00	4.26E-05
Hexachlorocyclohexane, beta	319-85-7	O	290.83	1.44E-05	1.81E+04	2.76E+00	1.42E-02	7.34E-06	5.42E-01	4.90E-07

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H '*(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Hexachlorocyclohexane, gamma	58-89-9	O	290.83	1.41E-04	1.81E+04	2.19E+00	1.42E-02	7.34E-06	5.75E+00	3.72E-05
Hexachlorocyclohexane, techn	608-73-1	O	290.83	5.99E-05	1.81E+04	4.80E+00	1.42E-02	7.34E-06	4.35E+01	1.64E-04
Hexachlorocyclopentadiene	77-47-4	O	273.78	7.15E-01	4.22E+04	1.91E+01	1.61E-02	7.21E-06	1.80E+00	7.32E-02
Hexachloroethane	67-72-1	O	236.74	1.62E-01	1.08E+04	3.64E+00	2.50E-03	6.80E-06	5.00E+01	4.72E-01
Hexachlorophene	70-30-4	O	406.91	2.54E-09	8.36E+06	4.00E+04	8.00E-02	8.00E-06	3.00E-03	2.74E-12
Hexane, n-	110-54-3	O	86.18	4.66E+01	1.94E+03	9.57E-01	2.00E-01	7.77E-06	1.30E+01	1.52E+02
Hexazinone	51235-04-2	O	252.32	8.62E-11	1.42E+02	7.40E-02	5.08E-02	5.11E-06	3.30E+04	2.03E-07
Hydrazine	302-01-2	O	32.05	7.20E-08	3.41E-02	2.00E-04	4.16E-01	1.90E-05	3.41E+08	1.40E+01
Indeno-(1,2,3-cd)-pyrene	193-39-5	O	276.34	2.85E-06	4.98E+06	6.93E+03	1.90E-02	5.66E-06	3.75E-03	1.40E-10
Isobutyl alcohol	78-83-1	O	74.12	4.99E-04	5.85E+00	1.12E-02	8.60E-02	8.00E-06	9.49E+04	1.00E+01
Isophorone	78-59-1	O	138.21	2.57E-04	4.15E+02	6.04E-02	6.23E-02	6.76E-06	1.20E+04	4.10E-01
Kepone	143-50-0	O	490.64	1.04E-06	8.05E+04	5.40E+01	4.22E-02	4.30E-06	7.60E+00	2.25E-07
Lead	7439-92-1	M	207.20	0.00E+00	5.36E+00	1.00E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Malathion	121-75-5	O	330.36	9.98E-07	1.94E+02	5.77E-01	1.50E-02	4.40E-06	1.45E+02	7.90E-06
Maleic anhydride	108-31-6	O	98.06	8.31E-06	4.16E+01	5.14E-02	9.50E-02	1.11E-05	8.65E+02	1.34E-03
Maleic hydrazide	123-33-1	O	112.09	1.03E-10	1.30E-01	5.00E-02	8.75E-02	8.75E-06	6.00E+03	7.50E-08
Malononitrile	109-77-3	O	66.06	1.97E-07	6.63E-01	9.80E-03	9.97E-02	1.09E-05	6.96E+06	3.79E-01
Manganese	7439-96-5	M	54.94	0.00E+00	1.00E+00	5.01E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mercury	7439-97-6	M	200.59	4.74E-01	3.38E-01	4.00E-02	3.07E-02	6.30E-06	3.00E-02	1.30E-03
Methacrylonitrile	126-98-7	O	67.09	3.03E-03	5.71E+00	6.78E-03	8.00E-02	8.00E-06	2.50E+04	6.80E+01
Methanol	67-56-1	O	32.04	1.94E-04	2.33E-01	3.64E-04	1.50E-01	1.64E-05	1.00E+06	1.22E+02
Methomyl	16752-77-5	O	162.21	7.48E-09	4.07E+00	3.20E-01	4.07E-02	7.20E-06	5.80E+04	5.00E-05
Methoxychlor	72-43-5	O	345.65	6.57E-04	4.65E+05	1.55E+02	1.56E-02	4.46E-06	4.50E-02	1.23E-06
Methoxyethanol	109-86-4	O	76.10	1.28E+00	1.24E-01	1.71E-02	9.15E-02	1.02E-05	2.01E+01	6.20E+00
Methyl ethyl ketone	78-93-3	O	72.11	1.94E-03	1.80E+00	3.80E-03	8.08E-02	9.80E-06	2.40E+05	9.10E+01
Methyl isobutyl ketone	108-10-1	O	100.16	5.82E-03	1.46E+01	3.00E-02	7.50E-02	7.80E-06	1.90E+04	1.45E+01
Methyl mercury	22967-92-6	I	215.62	CE	1.19E+00	---	CE	CE	CE	CE
Methyl methacrylate	80-62-6	O	100.12	1.33E-02	1.88E+01	4.60E-02	7.70E-02	8.60E-06	1.60E+04	3.80E+01
Methyl naphthalene, 2-	91-57-6	O	142.20	1.85E-02	5.20E+03	8.63E+00	6.29E-02	7.20E-06	2.54E+01	6.75E-02

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H '*(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Methyl parathion	298-00-0	O	263.21	5.82E-06	5.61E+02	1.30E+00	8.00E-02	8.00E-06	5.00E+01	1.52E-05
Methylene-bis (2-chloroaniline), 4,4'-	101-14-4	O	267.16	1.40E-05	2.95E+03	1.58E+01	1.99E-02	5.80E-06	7.24E+01	6.94E-05
Methylene chloride	75-09-2	O	84.93	9.10E-02	2.19E+01	2.35E-02	1.01E-01	1.17E-05	1.54E+04	4.55E+02
Molinate	2212-67-1	O	187.31	5.25E-05	8.05E+02	1.00E-01	5.65E-02	6.00E-06	9.00E+02	5.60E-03
Molybdenum	7439-98-7	M	95.94	0.00E+00	1.00E+00	2.00E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MTBE	1634-04-4	O	88.15	2.44E-02	2.69E+01	2.83E-02	7.92E-02	9.41E-05	4.80E+04	2.49E+02
Naled	300-76-5	O	380.78	2.71E-03	4.02E+01	2.66E-01	CE	6.80E-06	1.50E+00	2.00E-04
Naphthalene	91-20-3	O	128.17	2.00E-02	1.48E+03	3.10E+00	5.90E-02	7.50E-06	3.14E+01	8.89E-02
Nickel and compounds (soluble salts)	7440-02-0	M	58.69	0.00E+00	2.69E-01	1.60E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nitrate	14797-55-8	I	62.00	CE	1.62E+00	---	CE	CE	CE	CE
Nitrite	14797-65-0	I	46.01	CE	1.14E+00	---	CE	CE	CE	CE
Nitroaniline 2-	88-74-4	O	138.13	2.08E-05	1.04E+02	5.38E-02	5.99E-02	7.18E-06	1.26E+03	4.75E-03
Nitrobenzene	98-95-3	O	123.11	8.56E-04	6.47E+01	2.64E-01	7.60E-02	8.60E-06	1.90E+03	2.44E-01
Nitropropane, 2-	79-46-9	O	89.09	5.15E-03	7.44E+00	7.00E-03	9.23E-02	1.01E-05	1.70E+04	1.82E+01
Nitroso-n-ethylurea, n-	759-73-9	O	117.11	1.05E-04	9.45E-01	6.47E-02	8.08E-02	8.25E-06	4.85E+04	7.97E-01
Nitroso-methyl-ethyl-amine, n-	10595-95-6	O	88.11	3.70E-05	7.12E-01	4.20E-02	8.00E-02	8.00E-06	3.00E+05	2.28E+00
Nitrosodi-n-butylamine, n-	924-16-3	O	158.24	3.58E-03	2.03E+02	4.60E-01	8.00E-02	8.00E-06	1.20E+03	2.89E-01
Nitrosodi-n-propylamine, n-	621-64-7	O	130.19	9.35E-05	2.25E+01	3.94E-02	5.45E-02	8.17E-06	9.89E+03	4.00E-01
Nitrosodiethanolamine	1116-54-7	O	134.14	2.05E-09	5.25E-02	5.98E-03	7.27E-02	7.70E-06	7.33E+07	5.00E-04
Nitrosodiethylamine, N-	55-18-5	O	102.14	3.60E-05	2.21E+00	6.00E-03	8.00E-02	8.00E-06	1.47E+05	1.42E+00
Nitrosodimethylamine, N-	62-75-9	O	74.08	2.16E-05	2.30E-01	7.20E-03	1.34E-01	9.72E-06	1.00E+06	5.37E+00
Nitrosodiphenylamine	86-30-6	O	198.22	2.08E-04	1.45E+03	6.62E-01	3.12E-02	6.35E-06	3.51E+01	9.88E-02
Nitrosopyrrolidine, n-	930-55-2	O	100.12	7.48E-07	1.70E+00	1.30E-03	8.00E-02	8.00E-06	7.80E+05	1.75E-01
Nitrotoluene, m	99-08-1	O	137.14	2.24E-03	2.28E+02	2.81E-01	6.42E-02	7.69E-06	4.98E+02	1.50E-01
Nitrotoluene, o	88-72-2	O	137.14	1.87E-03	2.28E+02	2.81E-01	6.47E-02	7.73E-06	6.00E+02	1.50E-01
Nitrotoluene, p	99-99-0	O	137.14	2.29E-03	2.28E+02	2.81E-01	6.40E-02	7.70E-06	4.00E+02	1.20E-01
Octamethylpryrophosphoramide	152-16-9	O	286.25	1.16E-08	9.84E-02	6.20E-04	8.00E-02	8.00E-06	1.00E+06	9.88E-04
Oxamyl	23135-22-0	O	219.26	1.60E-11	6.32E-02	1.00E-02	5.57E-02	5.75E-06	2.80E+05	3.83E-07
Parathion	56-38-2	O	291.26	2.37E-05	5.38E+03	1.12E+01	1.70E-02	5.80E-06	1.18E+01	1.73E-05

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H '*(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Pebulate	1114-71-2	O	203.35	9.85E-04	3.23E+03	8.60E-01	5.10E-02	5.38E-06	9.20E+01	8.85E-03
Pentachlorobenzene	608-93-5	O	250.34	3.16E-02	1.64E+05	6.32E+01	6.70E-02	6.30E-06	6.50E-01	1.67E-03
Pentachloronitrobenzene	82-68-8	O	295.34	2.57E-02	1.08E+05	2.60E+01	1.59E-02	6.10E-06	7.11E-02	1.13E-04
Pentachlorophenol	87-86-5	OA	266.34	1.16E-05	5.44E+04	8.20E-01	5.60E-02	6.10E-06	1.40E+01	1.70E-05
Phenanthrene	85-01-8	O	178.23	5.40E-03	2.21E+04	2.83E+01	3.33E-02	7.47E-06	9.94E-01	6.80E-04
Phenol	108-95-2	O	94.11	2.47E-05	3.26E+01	3.48E-02	8.20E-02	9.10E-06	8.70E+04	4.63E-01
Phenyl mercuric acetate	62-38-4	O	336.74	3.41E-09	7.76E+00	3.20E-01	8.00E-02	8.00E-06	4.37E+03	3.04E-06
Phenylene diamine, m-	108-45-2	O	108.14	9.56E-07	4.06E-01	2.20E-03	6.63E-02	9.90E-06	3.51E+05	2.28E-02
Phenylene diamine, p-	106-50-3	O	108.14	5.24E-08	4.06E-01	2.20E-03	7.15E-02	8.92E-06	3.80E+04	4.60E-03
Phorate	298-02-2	O	260.38	4.99E-04	2.33E+03	1.10E+01	8.00E-02	8.00E-06	4.40E+01	1.30E-03
Phosphine	7803-51-2	I	34.00	1.46E+02	5.36E-01	---	3.81E-01	1.82E-05	4.00E+02	3.14E+04
Phosphorus, white	7723-14-0	I	123.90	5.65E-02	1.20E+03	2.24E+00	CE	CE	3.00E+00	2.50E-02
Phthalic anhydride	85-44-9	O	148.12	2.54E-07	1.17E+02	1.59E-01	6.36E-02	7.90E-06	6.20E+03	2.00E-04
Polybrominated biphenyls	67774-32-7	O	627.59	1.62E-04	2.45E+06	4.28E+00	CE	4.63E-06	1.10E-02	5.20E-08
Polychlorinated biphenyls	1336-36-3	O	290.00	1.75E-02	2.00E+06	1.06E+03	1.04E-01	1.00E-05	5.55E-02	7.60E-05
Pronamide	23950-58-5	O	256.13	3.74E-04	3.76E+03	4.00E-01	8.00E-02	8.00E-06	1.50E+01	4.00E-04
Propargite	2312-35-8	O	350.48	1.44E-06	5.37E+03	1.12E+01	3.94E-02	4.20E-06	5.00E-01	4.48E-08
Propargyl alcohol	107-19-7	O	56.06	1.34E-05	3.79E-01	1.08E-02	1.04E-01	1.24E-05	5.57E+06	1.20E+01
Propham	122-42-9	O	179.22	5.30E-06	4.57E+02	1.02E-01	5.71E-02	6.28E-06	2.50E+02	1.35E-04
Propylene oxide	75-56-9	O	58.08	3.47E-03	1.07E+00	2.53E-03	1.04E-01	1.16E-05	4.76E+05	5.32E+02
Pyrene	129-00-0	O	202.26	4.57E-04	8.57E+04	7.60E+01	2.72E-02	7.24E-06	1.35E-01	4.25E-06
Pyridine	110-86-1	O	79.10	2.91E-01	6.38E+00	8.80E-03	9.10E-02	7.60E-06	3.00E+02	2.00E+01
Quinoline	91-22-5	O	129.16	1.15E-04	1.39E+02	1.14E+00	5.46E-02	8.31E-06	6.78E+03	9.60E-02
Selenium	7782-49-2	M	78.96	0.00E+00	1.73E+00	2.20E+00	CE	CE	0.00E+00	0.00E+00
Selenourea	630-10-4	O	118.98	CE	2.35E-03	---	CE	CE	CE	CE
Silver	7440-22-4	M	107.87	0.00E+00	1.00E+00	1.00E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sodium diethyldithiocarbamate	148-18-5	O	171.26	CE	1.86E+00	---	CE	CE	CE	CE
Strychnine	57-24-9	O	334.42	6.65E-12	7.04E+01	1.58E-01	8.00E-02	8.00E-06	1.43E+02	1.67E-10
Styrene	100-42-5	O	104.15	1.14E-01	7.85E+02	1.52E+00	7.10E-02	8.00E-06	3.10E+02	6.24E+00

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H '*(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
TCDDioxins, 2,3,7,8-	1746-01-6	O	321.97	1.47E-03	1.05E+07	2.83E+04	4.70E-02	8.00E-06	1.93E-05	7.40E-10
Tetrachlorobenzene, 1,2,4,5-	95-94-3	O	215.89	4.99E-02	3.72E+04	3.20E+00	2.11E-02	8.80E-06	3.00E-01	5.40E-03
Tetrachloroethane, 1,1,1,2-	630-20-6	O	167.85	9.98E-02	8.57E+02	1.91E+00	7.10E-02	7.90E-06	1.10E+03	1.22E+01
Tetrachloroethane, 1,1,2,2-	79-34-5	O	167.85	1.55E-02	1.56E+02	1.55E-01	7.10E-02	7.90E-06	2.97E+03	5.17E+00
Tetrachloroethylene	127-18-4	O	165.83	7.65E-01	9.23E+02	3.10E-01	7.20E-02	8.20E-06	2.00E+02	1.84E+01
Tetrachlorophenol, 2,3,4,6-	58-90-2	OA	231.89	2.54E-04	1.23E+04	2.10E-01	2.17E-02	7.10E-06	1.00E+02	5.02E-03
Tetraethyl dithiopyrophosphate	3689-24-5	O	322.32	1.75E-04	9.56E+03	1.48E+00	1.50E-02	5.50E-06	2.50E+01	1.70E-04
Tetraethyl lead	78-00-2	O	323.45	3.31E+00	7.63E+04	9.80E+00	1.32E-02	6.40E-06	8.00E-01	1.50E-01
Thallium chloride	7791-12-0	I	239.84	0.00E+00	---	---	CE	CE	2.90E+03	0.00E+00
Thiofanox	39196-18-4	O	218.32	3.90E-07	1.44E+02	1.18E-01	2.55E-02	6.62E-06	5.20E+03	3.10E-04
Thiophanatemethyl	23564-05-8	O	342.40	3.82E-07	3.16E+01	1.80E-02	4.55E-02	4.68E-06	3.50E+00	7.50E-08
Thiram	137-26-8	O	240.44	3.28E-06	5.05E+01	1.34E+00	2.25E-02	6.24E-06	3.00E+01	7.50E-06
Tin	7440-31-5	M	118.71	0.00E+00	1.95E+01	---	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108-88-3	O	92.14	2.76E-01	3.47E+02	2.80E-01	8.70E-02	8.60E-06	5.30E+02	2.82E+01
Toluenediamine, 2,4-	95-80-7	O	122.17	7.48E-08	1.43E+00	2.58E+00	8.00E-02	8.00E-06	7.47E+03	8.36E-05
Toluenediamine, 2,6-	823-40-5	O	122.17	5.15E-10	1.43E+00	---	6.87E-02	7.97E-06	4.80E+04	1.98E-05
Toluene diisocyanate, 2,4/2,6-	26471-62-5	O	174.16	6.86E-06	5.50E+03	4.51E+00	6.09E-02	6.80E-06	1.11E+05	8.00E-02
Toluidine, p-	106-49-0	O	107.16	3.82E-04	4.20E+01	5.00E-02	8.00E-02	8.00E-06	7.20E+03	3.30E-01
Toxaphene	8001-35-2	O	413.81	1.40E-04	6.24E+06	1.92E+02	1.16E-02	4.34E-06	7.40E-01	4.19E-06
TP Silvex, 2,4,5-	93-72-1	O	269.51	5.45E-07	4.78E+03	5.20E+00	1.94E-02	5.80E-06	1.40E+02	5.20E-06
Triallate	2303-17-5	O	304.67	4.53E-04	3.70E+04	2.88E+00	4.58E-02	4.84E-06	4.00E+00	1.20E-04
Bis (tri-n-butyltin) oxide	56-35-9	O	596.11	2.08E-03	6.25E+05	---	CE	CE	1.80E+01	6.91E-05
Trichloro-1,2,2-trifluoroethane, 1,1,2	76-13-1	O	187.38	2.20E+01	1.24E+03	2.58E+00	7.80E-02	8.20E-06	2.00E+02	3.60E+02
Trichlorobenzene, 1,2,4-	120-82-1	O	181.45	5.90E-02	8.44E+03	3.32E+00	3.00E-02	8.23E-06	4.88E+01	3.36E-01
Trichloroethane, 1,1,1-	71-55-6	O	133.40	7.15E-01	4.78E+02	2.19E-01	7.80E-02	8.80E-06	1.33E+03	1.24E+02
Trichloroethane, 1,1,2-	79-00-5	O	133.40	3.80E-02	1.03E+02	1.00E-01	7.92E-02	8.80E-06	4.42E+03	2.52E+01
Trichloroethylene	79-01-6	O	131.39	4.28E-01	2.97E+02	1.87E-01	7.90E-02	9.10E-06	1.10E+03	7.20E+01
Trichlorofluoromethane	75-69-4	O	137.37	4.03E+00	1.35E+02	2.70E-01	8.70E-02	9.70E-06	1.10E+03	6.87E+02
Trichlorophenol, 2,4,5-	95-95-4	OA	197.45	1.78E-04	2.79E+03	5.96E-01	2.91E-02	7.03E-06	1.20E+03	1.63E-02

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H '*(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Trichlorophenol, 2,4,6-	88-06-2	OA	197.45	3.19E-04	2.79E+03	2.62E-01	3.18E-02	6.25E-06	9.82E+02	1.18E-02
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	O	255.48	3.62E-07	1.83E+03	1.06E-01	8.00E-02	8.00E-06	2.78E+02	3.61E-06
Trichloropropane, 1,1,2-	598-77-6	O	147.43	1.21E+00	2.69E+02	3.47E-01	3.96E-02	9.30E-06	4.44E+01	6.64E+00
Trichloropropane, 1,2,3-	96-18-4	O	147.43	1.58E-02	3.19E+02	7.78E-01	7.10E-02	7.90E-06	1.90E+03	3.70E+00
Triethylamine	121-44-8	O	101.19	1.99E-02	3.25E+01	2.67E-02	7.54E-02	7.51E-06	1.50E+04	5.00E+01
Trifluralin	1582-09-8	O	335.28	2.01E-03	2.05E+05	2.74E+01	1.49E-02	4.70E-06	6.00E-01	1.10E-04
Trimethylbenzene, 1,2,3-	526-73-8	O	120.19	1.33E-01	3.55E+03	1.18E+00	6.77E-02	7.41E-06	7.52E+01	1.49E+00
Trinitrobenzene, 1,3,5-	99-35-4	O	213.11	2.87E-06	2.79E+01	2.83E-02	8.00E-02	8.00E-06	3.53E+02	9.90E-05
Trinitrophenylmethylnitramine, 2,4,6-	479-45-8	O	287.15	8.31E-11	1.10E+02	4.69E-01	5.69E-02	6.40E-06	7.50E+01	4.00E-10
Trinitrotoluene, 2,4,6-	118-96-7	O	227.13	1.90E-05	9.85E+01	6.04E-01	5.41E-02	6.57E-06	1.30E+02	1.24E-04
Uranium	7440-61-1	M	238.03	0.00E+00	1.00E+00	2.96E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Vanadium	7440-62-2	M	50.94	0.00E+00	1.00E+00	1.00E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Vernam	1929-77-7	O	203.35	7.36E-04	3.23E+03	5.51E+00	5.10E-02	5.39E-06	9.85E+01	1.04E-02
Vinyl acetate	108-05-4	O	86.09	2.29E-02	5.34E+00	1.05E-02	8.50E-02	9.20E-06	2.00E+04	1.09E+02
Vinyl chloride	75-01-4	O	62.50	3.49E+00	4.20E+01	2.19E-02	1.06E-01	1.23E-05	2.76E+03	2.80E+03
Warfarin	81-81-2	O	308.33	1.15E-07	1.58E+03	1.82E+00	1.63E-02	4.40E-06	1.70E+01	1.16E-07
Xylene, m-	108-38-3	O	106.17	3.05E-01	1.58E+03	3.92E-01	7.00E-02	7.80E-06	1.60E+02	8.00E+00
Xylene, o-	95-47-6	O	106.17	7.36E-04	1.35E+03	2.58E-01	8.70E-02	1.00E-05	1.78E+02	6.75E+00
Xylene, p-	106-38-3	O	106.17	3.18E-01	1.48E+03	6.18E-01	7.69E-02	8.44E-06	1.85E+02	8.76E+00
Xylenes	1330-20-7	O	106.17	2.93E-01	1.22E+03	4.80E-01	7.40E-02	8.50E-06	1.98E+02	8.06E+00
Zinc	7440-66-6	M	65.39	0.00E+00	3.38E-01	1.60E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Type - O: Organic, I: Inorganic, M: Metal, OA: Organic Acid
MW - Molecular Weight (g/mole)
H' - Dimensionless Henry's Law Constant H' = H x 41.57 @ 20ºC (cm^3-H_2O/cm^3-air)
K_{ow} - Octanol-water partition coefficient (cm^3-H_2O/cm^3-Octanol)
K_d - Soil-water partition coefficient (cm^3-H_2O/g-Soil)
D_{air} - Diffusion coefficient in air (cm^2/s)
D_{wat} - Diffusion coefficient in water (cm^2/s)

CE - Not found; cannot estimate
NA/reacts - Not applicable because reacts with water
Values in italics - Estimated by TNRCC

Implementation schedule for new risk reduction rule guidance

Regulatory direction for any site (or unique project within a site) under jurisdiction of 30 Texas Administrative Code (TAC) §335.551-599 is required to conform with the July 23, 1998, guidance memorandum Implementation of the Existing Risk Reduction Rule. The TNRCC recognizes that sites or unique projects may currently have submitted reports or approved proposals. Therefore, in an effort to promote reasonableness, exceptions to this requirement may be made for approved/submitted reports and proposals for sites (projects) which meet one of the following conditions and were received by October 15, 1998:

(1) the TNRCC has approved a Baseline Risk Assessment Report;
(2) a Baseline Risk Assessment has been submitted that is substantially complete with conclusions that are health protective and acceptable to TNRCC. The intent of this option is to recognize conclusions which are protective of human health, but which may be based on alternate assumptions and methodologies; or
(3) a site investigation/remediation report has been submitted that is substantially complete with conclusions that are health protective and acceptable to the TNRCC, and which includes elements such that the document is considered equivalent to a Baseline Risk Assessment as detailed below.

Submittals that are considered equivalent to an acceptable Baseline Risk Assessment Report include:

- a site investigation report sufficient to determine that a risk assessment and remedial action are not warranted.

- remedial actions as appropriate under the existing Risk Reduction Rule. This includes submittals that propose/document:

    a. cleanup to background;
    b. cleanup to Practical Quantitation Limits (PQLs) as defined in §335.554(d);
    c. cleanup to TNRCC accepted health-based levels that include all appropriate exposure pathways; or
    d. a remedial action that eliminates all potential exposure pathways by institutional and/or engineering controls.

Your TNRCC project manager/coordinator may be contacted as necessary for clarification and assistance on site specific issues. As the guidance memorandum is used by the public and agency staff, the document will be evaluated and possibly revised to more appropriately clarify the Risk Reduction Rule. If modifications and/or additions occur, the TNRCC will aim to keep the public informed through the Internet.

September 11, 1998, ERRATUM sheet to the July 23, 1998 memorandum from Ron Pedde regarding the implementation of the existing risk reduction rules (the "Consistency Document"). The text on this sheet should replace the text in Section B.1.1.6 of the Consistency Document.

B.1.1.6. Sample Quantitation Limit

The sample quantitation limit (SQL) is the MDL adjusted to reflect sample characteristics and sample-specific action(s) performed by the laboratory that are necessary but not prescribed in the analytical method. The SQL takes into account the individual sample matrix characteristics, sample preparation, and/or analytical adjustments and represents the level below which the compound was not detected in that specific sample by the laboratory. Sample-specific actions that affect the SQL might include diluting the sample, concentrating the sample, and/or using a smaller or larger aliquot size than that prescribed in the method. Sample characteristics that affect the SQL may include the moisture content in the sample, the matrix of the sample, and/or the concentration of contaminants in the sample. Because the SQL is sample-specific, the SQL in one sample may be higher than, lower than, or equal to the SQL value for the same contaminant in another sample because the matrix of one sample may require more manipulations by the laboratory than the other. Therefore, SQLs are the most relevant reporting limits for evaluating nondetected compounds in specific samples.

Proper application of the analytical method includes the use of instrument calibration that brackets the values reported. When the concentration of a compound in a sample exceeds the calibration range, the laboratory dilutes the sample. Since the SQL is a function of the MDL, this dilution raises the SQL to a value equal to the MDL multiplied by the dilution factor and multiplied by any other factors associated with the sample characteristics and/or sample-specific action taken by the laboratory.

Dilution of samples is sometime necessary. For a compound that is detected in dilutions of the same sample, the reported result should be from the lowest dilution analysis where the compound was measured within the linear portion of the calibration curve. The laboratory should report the dilution factor for the result and flag the result, e..g, 175D. With each manipulation of the sample, the potential for error to be introduced into the result increases. Therefore, the data user can review the blank data and the results of lower dilutions when conducting an assessment of the data.

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Acenaphthene	83-32-9	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Acenaphthylene	208-96-8	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Acetaldehyde	75-07-0	8.0E-01	default[a]	0.0E+00	default[b]
Acetone	67-64-1	8.3E-01	Bast and Borges, 1998	0.0E+00	default[b]
Acetone cyanohydrin	75-86-5	5.0E-01	default[a]	1.0E-01	default[b]
Acetonitrile	75-05-8	8.0E-01	default[a]	0.0E+00	default[b]
Acetophenone	98-86-2	5.0E-01	default[a]	1.0E-01	default[b]
Acifluorfen, sodium	62476-59-9	5.0E-01	default[a]	1.0E-01	default[b]
Acrolein	107-02-8	8.0E-01	default[a]	0.0E+00	default[b]
Acrylamide	79-06-1	5.0E-01	default[a]	1.0E-01	default[b]
Acrylic acid	79-10-7	8.0E-01	default[a]	0.0E+00	default[b]
Acrylonitrile	107-13-1	8.0E-01	default[a]	0.0E+00	default[b]
Alachlor	15972-60-8	5.0E-01	default[a]	1.0E-01	default[b]
Aldicarb	116-06-3	5.0E-01	default[a]	1.0E-01	default[b]
Aldicarb sulfone	1646-88-4	5.0E-01	default[a]	1.0E-01	default[b]
Aldrin	309-00-2	5.0E-01	Bast and Borges, 1998	1.0E-01	default[b]
Allyl alcohol	107-18-6	8.0E-01	default[a]	0.0E+00	default[b]
Allyl chloride	107-05-1	8.0E-01	default[a]	0.0E+00	default[b]
Aluminum	7429-90-5	1.0E-01	Bast and Borges, 1998	1.0E-02	default[b]
Aminopyridine, 4-	504-24-5	5.0E-01	default[a]	1.0E-01	default[b]
Ammonia	7664-41-7	2.0E-01	default[a]	1.0E-02	default[b]
Aniline	62-53-3	5.0E-01	default[a]	1.0E-01	default[b]
Anthracene	120-12-7	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Antimony	7440-36-0	1.5E-01	Waitz, 1965	1.0E-02	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Aramite	140-57-8	5.0E-01	default[a]	1.0E-01	default[b]
Arsine	7784-42-1	2.0E-01	default[a]	1.0E-02	default[b]
Asbestos	1332-21-4	2.0E-01	default[a]	1.0E-02	default[b]
Atrazine	1912-24-9	5.0E-01	default[a]	1.0E-01	default[b]
Barium	7440-39-3	7.0E-02	Taylor, 1962; Cuddihy and Griffith, 1972	1.0E-02	default[b]
Benzene	71-43-2	9.7E-01	Bast and Borges, 1998	0.0E+00	default[b]
Benzenethiol	108-98-5	8.0E-01	default[a]	0.0E+00	default[b]
Benzidine	92-87-5	8.0E-01	Bast and Borges, 1998	1.0E-01	default[b]
Benz-a-anthracene	56-55-3	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Benzo-a-pyrene	50-32-8	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Benzo-b-fluoranthene	205-99-2	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Benzo-k-fluoranthene	207-08-9	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Benzo-g,h,i-perylene	191-24-2	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Benzoic acid	65-85-0	1.0E+00	Bast and Borges, 1998	1.0E-01	default[b]
Benzotrichloride	98-07-7	5.0E-01	default[a]	1.0E-01	default[b]
Benzyl alcohol	100-51-6	6.6E-01	Bast and Borges, 1998	1.0E-01	default[b]
Benzyl chloride	100-44-7	8.0E-01	default[a]	0.0E+00	default[b]
Beryllium	7440-41-7	7.0E-03	Reeves, 1965	1.0E-02	default[b]
Biphenyl, 1,1-	92-52-4	5.0E-01	default[a]	1.0E-01	default[b]
Bis (2-chloro-ethyl) ether	111-44-4	8.0E-01	default[a]	0.0E+00	default[b]
Bis (2-chloroisopropyl) ether	39638-32-9	5.0E-01	default[a]	1.0E-01	default[b]
Bis (2-chloromethyl) ether	542-88-1	8.0E-01	default[a]	0.0E+00	default[b]
Bis (2-ethyl-hexyl) phthalate	117-81-7	1.9E-01	Bast and Borges, 1998	1.0E-01	default[b]
Bromodichloromethane	75-27-4	9.8E-01	Bast and Borges, 1998	0.0E+00	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Bromoform	75-25-2	6.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Bromomethane	74-83-9	8.0E-01	default[a]	0.0E+00	default[b]
Butadiene, 1,3-	106-99-0	8.0E-01	default[a]	0.0E+00	default[b]
Butanol, n-	71-36-3	8.0E-01	default[a]	0.0E+00	default[b]
Butylate	2008-41-5	5.0E-01	default[a]	1.0E-01	default[b]
Butyl benzyl phthalate	85-68-7	6.1E-01	Bast and Borges, 1998	1.0E-01	default[b]
Cacodylic acid	75-60-5	5.0E-01	default[a]	1.0E-01	default[b]
Cadmium	7440-43-9	2.5E-02	IRIS, 1998	1.0E-02	Wester *et al*., 1992a; USEPA, 1992e
Captan	133-06-2	5.0E-01	default[a]	1.0E-01	default[b]
Carbaryl	63-25-2	5.0E-01	default[a]	1.0E-01	default[b]
Carbazole	86-74-8	7.0E-01	Bast and Borges, 1998	1.0E-01	default[b]
Carbofuran	1563-66-2	5.0E-01	default[a]	1.0E-01	default[b]
Carbon disulfide	75-15-0	6.3E-01	Bast and Borges, 1998	0.0E+00	default[b]
Carbon tetrachloride	56-23-5	6.5E-01	Bast and Borges, 1998	0.0E+00	default[b]
Carbosulfan	55285-14-8	5.0E-01	default[a]	1.0E-01	default[b]
Chloral	75-87-6	8.0E-01	default[a]	0.0E+00	default[b]
Chlordane	57-74-9	8.0E-01	Ohno, 1986; Ewing, 1985	4.0E-02	Wester *et al*., 1992b
Chlorine	7782-50-5	2.0E-01	default[a]	1.0E-02	default[b]
Chloroanaline, p-	106-47-8	5.0E-01	default[a]	1.0E-01	default[b]
Chlorobenzene	108-90-7	3.1E-01	Bast and Borges, 1998	0.0E+00	default[b]
Chlorobenzilate	510-15-6	5.0E-01	default[a]	1.0E-01	default[b]
Chloro-1,3-butadiene, 2-	126-99-8	8.0E-01	default[a]	0.0E+00	default[b]
Chlorodifluoromethane	75-45-6	8.0E-01	default[a]	0.0E+00	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Chloroethane	75-00-3	8.0E-01	default[a]	0.0E+00	default[b]
Chloroform	67-66-3	2.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Chloromethane	74-87-3	8.0E-01	default[a]	0.0E+00	default[b]
Chloronaphthalene, 2-	91-58-7	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Chlorophenol, 2-	95-57-8	8.0E-01	default[a]	0.0E+00	default[b]
Chlorotoluene, o-	95-49-8	8.0E-01	default[a]	0.0E+00	default[b]
Chlorpyrifos	2921-88-2	5.0E-01	default[a]	1.0E-01	default[b]
Chromium (III)	16065-83-1	1.3E-02	Donaldson and Barreras, 1966; Keim,	1.0E-02	default[b]
Chromium (VI)	18540-29-9	2.5E-02	Donaldson and Barreras, 1966; Sayto, 1980; MacKenzie,	1.0E-02	default[b]
Chrysene	218-01-9	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Cobalt	7440-48-4	8.0E-01	Bast and Borges, 1998	1.0E-02	default[b]
Copper	7440-50-8	5.7E-01	Strickland, 1972	1.0E-02	default[b]
Cresol, m-	108-39-4	5.0E-01	default[a]	1.0E-01	default[b]
Cresol, o-	95-48-7	5.0E-01	default[a]	1.0E-01	default[b]
Cresol, p-	106-44-5	6.5E-01	Bast and Borges, 1998	1.0E-01	default[b]
Crotonaldehyde	123-73-9	8.0E-01	default[a]	0.0E+00	default[b]
Cumene	98-82-8	8.0E-01	default[a]	0.0E+00	default[b]
Cyanide	57-12-5	>5.0E-01	Farooqui and Ahmed, 1982	1.0E-02	default[b]
Cyanogen	460-19-5	8.0E-01	default[a]	0.0E+00	default[b]
Cyclohexanone	108-94-1	8.0E-01	default[a]	0.0E+00	default[b]
Cyclotrimethylenetrinitramine	121-82-4	1.0E+00	Bast and Borges, 1998	1.0E-01	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
DDD	72-54-8	7.0E-01	Keller, 1980	3.0E-02	Wester *et al*., 1990
DDE	72-55-9	7.0E-01	Keller, 1980	3.0E-02	Wester *et al*., 1990
DDT	50-29-3	7.0E-01	Keller, 1980	3.0E-02	Wester *et al*., 1990
Di-n-butyl phthalate	84-74-2	1.0E+00	Bast and Borges, 1998	1.0E-01	default[b]
Di-n-octyl phthalate	117-84-0	9.0E-01	Bast and Borges, 1998	1.0E-01	default[b]
Diallate	2303-16-4	5.0E-01	default[a]	1.0E-01	default[b]
Diazinon	333-41-5	5.0E-01	default[a]	1.0E-01	default[b]
Dibenz-a,h-anthracene	53-70-3	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Dibromo-3-chloropropane, 1,2-	96-12-8	5.0E-01	default[a]	1.0E-01	default[b]
Dibromochloromethane	124-48-1	6.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Dicamba	1918-00-9	5.0E-01	default[a]	1.0E-01	default[b]
Dichlorobenzene, 1,2-	95-50-1	8.0E-01	default[a]	0.0E+00	default[b]
Dichlorobenzene, 1,4-	106-46-7	9.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Dichlorobenzidine, 3,3-	91-94-1	5.0E-01	default[a]	1.0E-01	default[b]
Dichloro-2-butene, 1,4-	764-41-0	8.0E-01	default[a]	0.0E+00	default[b]
Dichlorodifluoromethane	75-71-8	2.3E-01	Bast and Borges, 1998	0.0E+00	default[b]
Dichloroethane, 1,1-	75-34-3	1.0E+00	Bast and Borges, 1998	0.0E+00	default[b]
Dichloroethane, 1,2-	107-06-2	1.0E+00	Bast and Borges, 1998	0.0E+00	default[b]
Dichloroethylene, 1,1-	75-35-4	1.0E+00	Bast and Borges, 1998	0.0E+00	default[b]
Dichloroethylene, cis-1,2-	156-59-2	1.0E+00	Bast and Borges, 1998	0.0E+00	default[b]
Dichloroethylene, trans-1,2	156-60-5	1.0E+00	Bast and Borges, 1998	0.0E+00	default[b]
Dichlorophenol, 2,4-	120-83-2	8.2E-01	Bast and Borges, 1998	1.0E-01	default[b]
Dichlorophenoxyacetic acid, 2,4-	94-75-7	>9.0E-01	Pelletier, 1989; Knopp, 1992	5.0E-02	Wester *et al*., 1996
Dichloropropane, 1,2-	78-87-5	7.4E-01	Bast and Borges, 1998	0.0E+00	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Dichloropropanol, 2,3-	616-23-9	5.0E-01	default[a]	1.0E-01	default[b]
Dichloropropene, 1,3-	542-75-6	5.5E-01	Bast and Borges, 1998	0.0E+00	default[b]
Dichlorvos	62-73-7	5.0E-01	default[a]	1.0E-01	default[b]
Dieldrin	60-57-1	5.0E-01	Bast and Borges, 1998	1.0E-01	default[b]
Diethylhexyl adipate	103-23-1	5.0E-01	default[a]	1.0E-01	default[b]
Diethyl phthalate	84-66-2	9.0E-01	Bast and Borges, 1998	1.0E-01	default[b]
Diethylstilbestrol	56-53-1	5.0E-01	default[a]	1.0E-01	default[b]
Dimethoate	60-51-5	5.0E-01	default[a]	1.0E-01	default[b]
Dimethoxybenzidine, 3,3'-	119-90-4	5.0E-01	default[a]	1.0E-01	default[b]
Dimethylbenzidine, 3,3'-	119-93-7	5.0E-01	default[a]	1.0E-01	default[b]
Dimethyl phenol, 2,4-	105-67-9	5.0E-01	default[a]	1.0E-01	default[b]
Dinitrobenzene, 1,3-	99-65-0	6.5E-01	Bast and Borges, 1998	1.0E-01	default[b]
Dinitrobenzene, 1,4-	100-25-4	5.0E-01	default[a]	1.0E-01	default[b]
Dinitrophenol, 2,4-	51-28-5	1.0E+00	Bast and Borges, 1998	1.0E-01	default[b]
Dinitrotoluene, 2,4-	121-14-2	8.5E-01	Bast and Borges, 1998	1.0E-01	default[b]
Dinitrotoluene, 2,6-	606-20-2	8.5E-01	Bast and Borges, 1998	1.0E-01	default[b]
Dinoseb	88-85-7	5.0E-01	default[a]	1.0E-01	default[b]
Dioxane 1,4-	123-91-1	8.0E-01	default[a]	0.0E+00	default[b]
Diphenylamine	122-39-4	5.0E-01	default[a]	1.0E-01	default[b]
Diphenylhydrazine, 1,2-	122-66-7	5.0E-01	default[a]	1.0E-01	default[b]
Diquat	85-00-7	5.0E-01	default[a]	1.0E-01	default[b]
Disulfoton	298-04-4	5.0E-01	default[a]	1.0E-01	default[b]
Diuron	330-54-1	5.0E-01	default[a]	1.0E-01	default[b]
Endosulfan	115-29-7	5.0E-01	default[a]	1.0E-01	default[b]
Endothall	145-73-3	5.0E-01	default[a]	1.0E-01	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Endrin	72-20-8	2.0E-02	Bast and Borges, 1998	1.0E-01	default[b]
Epichlorohydrin	106-89-8	8.0E-01	default[a]	0.0E+00	default[b]
Ethion	563-12-2	5.0E-01	default[a]	1.0E-01	default[b]
Ethoxy ethanol, 2-	110-80-5	8.0E-01	default[a]	0.0E+00	default[b]
Ethyl acetate	141-78-6	8.0E-01	default[a]	0.0E+00	default[b]
Ethyl acrylate	140-88-5	8.0E-01	default[a]	0.0E+00	default[b]
Ethyl benzene	100-41-4	9.7E-01	Bast and Borges, 1998	0.0E+00	default[b]
Ethyl dipropylthiocarbamate, S-	759-94-4	5.0E-01	default[a]	1.0E-01	default[b]
Ethyl ether	60-29-7	8.0E-01	default[a]	0.0E+00	default[b]
Ethyl methacrylate	97-63-2	8.0E-01	default[a]	0.0E+00	default[b]
Ethyl-2-methyl benzene, 1-	611-14-3	9.7E-01	Bast and Borges, 1998	0.0E+00	default[b]
Ethyl-4-methyl benzene, 1-	622-96-8	9.7E-01	Bast and Borges, 1998	0.0E+00	default[b]
Ethylenediamine	107-15-3	8.0E-01	default[a]	0.0E+00	default[b]
Ethylene dibromide	106-93-4	8.0E-01	default[a]	0.0E+00	default[b]
Ethylene glycol	107-21-1	5.0E-01	default[a]	1.0E-01	default[b]
Ethylene oxide	75-21-8	8.0E-01	default[a]	0.0E+00	default[b]
Ethylene thiourea	96-45-7	5.0E-01	default[a]	1.0E-01	default[b]
Fluoranthene	206-44-0	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Fluorene	86-73-7	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Fluorine (soluble fluoride)	7782-41-4	9.7E-01	Bast and Borges, 1998	1.0E-02	default[b]
Formaldehyde	50-00-0	8.0E-01	default[a]	0.0E+00	default[b]
Formic acid	64-18-6	8.0E-01	default[a]	0.0E+00	default[b]
Furan	110-00-9	8.0E-01	default[a]	0.0E+00	default[b]
Furfural	98-01-1	8.0E-01	default[a]	0.0E+00	default[b]
Glycidylaldehyde	765-34-4	8.0E-01	default[a]	0.0E+00	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Heptachlor	76-44-8	7.2E-01	Bast and Borges, 1998	1.0E-01	default[b]
Heptachlor epoxide	1024-57-3	7.2E-01	Bast and Borges, 1998	1.0E-01	default[b]
Hexachlorobenzene	118-74-1	5.0E-01	default[a]	1.0E-01	default[b]
Hexachlorobutadiene	87-68-3	5.0E-01	default[a]	1.0E-01	default[b]
Hexachlorocyclohexane, alpha	319-84-6	9.7E-01	Bast and Borges, 1998	1.0E-01	default[b]
Hexachlorocyclohexane, beta	319-85-7	9.1E-01	Bast and Borges, 1998	1.0E-01	default[b]
Hexachlorocyclohexane, gamma	58-89-9	9.7E-01	Bast and Borges, 1998	4.0E-02	Duff and Kissel, 1996
Hexachlorocyclohexane, techn	608-73-1	9.7E-01	Bast and Borges, 1998	1.0E-01	default[b]
Hexachlorocyclopentadiene	77-47-4	5.0E-01	default[a]	1.0E-01	default[b]
Hexachloroethane	67-72-1	5.0E-01	default[a]	1.0E-01	default[b]
Hexachlorophene	70-30-4	5.0E-01	default[a]	1.0E-01	default[b]
Hexane, n-	110-54-3	8.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Hexazinone	51235-04-2	5.0E-01	default[a]	1.0E-01	default[b]
Hydrazine	302-01-2	8.0E-01	default[a]	0.0E+00	default[b]
Indeno-1,2,3-cd-pyrene	193-39-5	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Isobutyl alcohol	78-83-1	8.0E-01	default[a]	0.0E+00	default[b]
Isophorone	78-59-1	5.0E-01	default[a]	1.0E-01	default[b]
Kepone	143-50-0	5.0E-01	default[a]	1.0E-01	default[b]
Malathion	121-75-5	5.0E-01	default[a]	1.0E-01	default[b]
Maleic anhydride	108-31-6	5.0E-01	default[a]	1.0E-01	default[b]
Maleic hydrazide	123-33-1	5.0E-01	default[a]	1.0E-01	default[b]
Malononitrile	109-77-3	5.0E-01	default[a]	1.0E-01	default[b]
Manganese	7439-96-5	6.0E-02	Ruoff, 1995	1.0E-02	default[b]
Mercury	7439-97-6	7.0E-02	IRIS, 1997	1.0E-02	default[b]
Methacrylonitrile	126-98-7	8.0E-01	default[a]	0.0E+00	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Methanol	67-56-1	8.0E-01	default[a]	0.0E+00	default[b]
Methomyl	16752-77-5	5.0E-01	default[a]	1.0E-01	default[b]
Methoxychlor	72-43-5	5.0E-01	default[a]	1.0E-01	default[b]
Methoxyethanol, 2-	109-86-4	8.0E-01	default[a]	0.0E+00	default[b]
Methyl ethyl ketone	78-93-3	8.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Methyl isobutyl ketone	108-10-1	8.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Methyl mercury	22967-92-6	9.0E-01	Bast and Borges, 1998	1.0E-02	default[b]
Methyl methacrylate	80-62-6	8.0E-01	default[a]	0.0E+00	default[b]
Methylnaphthalene, 2-	91-57-6	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Methyl parathion	298-00-0	5.0E-01	default[a]	1.0E-01	default[b]
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	5.0E-01	default[a]	1.0E-01	default[b]
Methylene chloride	75-09-2	9.5E-01	Bast and Borges, 1998	0.0E+00	default[b]
Molinate	2212-67-1	5.0E-01	default[a]	1.0E-01	default[b]
Molybdenum	7439-98-7	3.8E-01	Bast and Borges, 1998	1.0E-02	default[b]
Naled	300-76-5	5.0E-01	default[a]	1.0E-01	default[b]
Naphthalene	91-20-3	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Nickel and compounds (soluble salts)	7440-02-0	4.0E-02	Elakhovskay, 1972	1.0E-02	default[b]
Nitrate	14797-55-8	5.0E-01	Bast and Borges, 1998	1.0E-02	default[b]
Nitrite	14797-65-0	5.0E-01	Bast and Borges, 1998	1.0E-02	default[b]
Nitroaniline, 2-	88-74-4	5.0E-01	default[a]	1.0E-01	default[b]
Nitrobenzene	98-95-3	9.7E-01	Bast and Borges, 1998	1.0E-01	default[b]
Nitropropane, 2-	79-46-9	8.0E-01	default[a]	0.0E+00	default[b]
Nitroso-n-ethylurea, n-	759-73-9	5.0E-01	default[a]	1.0E-01	default[b]
Nitroso-methyl-ethyl-amine, n-	10595-95-6	8.0E-01	default[a]	0.0E+00	default[b]
Nitrosodi-n-butylamine, n-	924-16-3	5.0E-01	default[a]	1.0E-01	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Nitrosodi-n-propylamine, n-	621-64-7	2.5E-01	Bast and Borges, 1998	1.0E-01	default[b]
Nitrosodiethanolamine	1116-54-7	5.0E-01	default[a]	1.0E-01	default[b]
Nitrosodiethylamine, n-	55-18-5	8.0E-01	default[a]	0.0E+00	default[b]
Nitrosodimethylamine, n-	62-75-9	8.0E-01	default[a]	0.0E+00	default[b]
Nitrosodiphenylamine	86-30-6	2.5E-01	Bast and Borges, 1998	1.0E-01	default[b]
Nitrosopyrrolidine, n-	930-55-2	5.0E-01	default[a]	1.0E-01	default[b]
Nitrotoluene, m-	99-08-1	5.0E-01	default[a]	1.0E-01	default[b]
Nitrotoluene, o-	88-72-2	5.0E-01	default[a]	1.0E-01	default[b]
Nitrotoluene, p-	99-99-0	5.0E-01	default[a]	1.0E-01	default[b]
Octamethylpyrophosphoramide	152-16-9	5.0E-01	default[a]	1.0E-01	default[b]
Oxamyl	23135-22-0	5.0E-01	default[a]	1.0E-01	default[b]
Parathion	56-38-2	5.0E-01	default[a]	1.0E-01	default[b]
Pebulate	1114-71-2	5.0E-01	default[a]	1.0E-01	default[b]
Pentachlorobenzene	608-93-5	5.0E-01	default[a]	1.0E-01	default[b]
Pentachloronitrobenzene	82-68-8	5.0E-01	default[a]	1.0E-01	default[b]
Pentachlorophenol	87-86-5	7.6E-01	Korte, 1978	2.5E-01	Wester *et al*., 1993b
Phenanthrene	85-01-8	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Phenol	108-95-2	9.0E-01	Bast and Borges, 1998	1.0E-01	default[b]
Phenyl mercuric acetate	62-38-4	5.0E-01	default[a]	1.0E-01	default[b]
Phenylene diamine, m-	108-45-2	5.0E-01	default[a]	1.0E-01	default[b]
Phenylene diamine, p-	106-50-3	5.0E-01	default[a]	1.0E-01	default[b]
Phorate	298-02-2	5.0E-01	default[a]	1.0E-01	default[b]
Phosphine	7803-51-2	2.0E-01	default[a]	1.0E-02	default[b]
Phosphorus, white	7723-14-0	2.0E-01	default[a]	1.0E-02	default[b]
Phthalic anhydride	85-44-9	5.0E-01	default[a]	1.0E-01	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Polybrominated biphenyls	67774-32-7	9.3E-01	Bast and Borges, 1998	1.0E-01	default[b]
Pronamide	23950-58-5	5.0E-01	default[a]	1.0E-01	default[b]
Propargite	2312-35-8	5.0E-01	default[a]	1.0E-01	default[b]
Propargyl alcohol	107-19-7	8.0E-01	default[a]	0.0E+00	default[b]
Propham	122-42-9	5.0E-01	default[a]	1.0E-01	default[b]
Propylene oxide	75-56-9	8.0E-01	default[a]	0.0E+00	default[b]
Pyrene	129-00-0	8.9E-01	Hecht, 1979	1.3E-01	Wester *et al*., 1990
Pyridine	110-86-1	8.0E-01	default[a]	0.0E+00	default[b]
Quinoline	91-22-5	5.0E-01	default[a]	1.0E-01	default[b]
Selenium	7782-49-2	>5.0E-01	Young, 1982	1.0E-02	default[b]
Selenourea	630-10-4	---	---	---	default[b]
Silver	7440-22-4	4.0E-02	IRIS, 1998	1.0E-02	default[b]
Sodium diethyldithiocarbamate	148-18-5	---	---	---	default[b]
Strychnine	57-24-9	5.0E-01	default[a]	1.0E-01	default[b]
Styrene	100-42-5	8.0E-01	default[a]	0.0E+00	default[b]
Tetrachlorobenzene, 1,2,4,5-	95-94-3	5.0E-01	default[a]	1.0E-01	default[b]
Tetrachloroethane, 1,1,1,2-	630-20-6	8.0E-01	default[a]	0.0E+00	default[b]
Tetrachloroethane, 1,1,2,2-	79-34-5	7.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Tetrachloroethylene	127-18-4	1.0E+00	Bast and Borges, 1998	0.0E+00	default[b]
Tetrachlorophenol, 2,3,4,6-	58-90-2	5.0E-01	default[a]	1.0E-01	default[b]
Tetraethyl dithiopyrophosphate	3689-24-5	5.0E-01	default[a]	1.0E-01	default[b]
Tetraethyl lead	78-00-2	5.0E-01	default[a]	1.0E-01	default[b]
Thallium and compounds (as thallium chloride)	7791-12-0	1.0E+00	Lie, 1960	1.0E-02	default[b]
Thiofanox	39196-18-4	5.0E-01	default[a]	1.0E-01	default[b]

Attachment C:
Dermal and GI Absorption Factors

COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Thiophanate-methyl	23564-05-8	5.0E-01	default[a]	1.0E-01	default[b]
Thiram	137-26-8	5.0E-01	default[a]	1.0E-01	default[b]
Tin	7440-31-5	1.0E-01	Bast and Borges, 1998	1.0E-02	default[b]
Toluene	108-88-3	8.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Toluenediamine, 2,4-	95-80-7	5.0E-01	default[a]	1.0E-01	default[b]
Toluenediamine, 2,6-	823-40-5	5.0E-01	default[a]	1.0E-01	default[b]
Toluene diisocyanate, 2,4/2,6-	26471-62-5	5.0E-01	default[a]	1.0E-01	default[b]
Toluidine, p-	106-49-0	5.0E-01	default[a]	1.0E-01	default[b]
Toxaphene	8001-35-2	5.0E-01	default[a]	1.0E-01	default[b]
TP Silvex, 2,4,5-	93-72-1	5.0E-01	default[a]	1.0E-01	default[b]
Triallate	2303-17-5	5.0E-01	default[a]	1.0E-01	default[b]
Tributyltin oxide	56-35-9	5.0E-01	default[a]	1.0E-01	default[b]
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	8.0E-01	default[a]	0.0E+00	default[b]
Trichlorobenzene, 1,2,4-	120-82-1	9.7E-01	Bast and Borges, 1998	1.0E-01	default[b]
Trichloroethane, 1,1,1-	71-55-6	9.0E-01	Bast and Borges, 1998	0.0E+00	default[b]
Trichloroethane, 1,1,2-	79-00-5	8.1E-01	Bast and Borges, 1998	0.0E+00	default[b]
Trichloroethylene	79-01-6	1.0E+00	Dekant *et al.*, 1986; Green and Prout, 1985; Lee *et al.*, 1997	0.0E+00	default[b]
Trichlorofluoromethane	75-69-4	2.3E-01	Bast and Borges, 1998	0.0E+00	default[b]
Trichlorophenol, 2,4,5-	95-95-4	5.0E-01	default[a]	1.0E-01	default[b]
Trichlorophenol, 2,4,6-	88-06-2	5.0E-01	default[a]	1.0E-01	default[b]
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	5.0E-01	default[a]	1.0E-01	default[b]
Trichloropropane, 1,1,2-	598-77-6	8.0E-01	default[a]	0.0E+00	default[b]
Trichloropropane, 1,2,3-	96-18-4	8.0E-01	default[a]	0.0E+00	default[b]

Attachment C: Dermal and GI Absorption Factors					
COC	CAS #	ABS.gi (unitless)	Reference	ABS.d (unitless)	Reference
Triethylamine	121-44-8	8.0E-01	default[a]	0.0E+00	default[b]
Trifluralin	1582-09-8	5.0E-01	default[a]	1.0E-01	default[b]
Trimethylbenzene, 1,2,3-	526-73-8	9.7E-01	Bast and Borges, 1998	0.0E+00	default[b]
Trinitrobenzene, 1,3,5-	99-35-4	6.5E-01	Bast and Borges, 1998	1.0E-01	default[b]
Trinitrophenylmethylnitramine	479-45-8	5.0E-01	Bast and Borges, 1998	1.0E-01	default[b]
Trinitrotoluene, 2,4,6-	118-96-7	6.0E-01	Bast and Borges, 1998	1.0E-01	default[b]
Uranium	7440-61-1	8.5E-01	Bast and Borges, 1998	1.0E-02	default[b]
Vanadium	7440-62-2	2.6E-02	Conklin, 1982	1.0E-02	default[b]
Vernam	1929-77-7	5.0E-01	default[a]	1.0E-01	default[b]
Vinyl acetate	108-05-4	6.5E-01	Bast and Borges, 1998	0.0E+00	default[b]
Vinyl chloride	75-01-4	1.0E+00	Bast and Borges, 1998	0.0E+00	default[b]
Warfarin	81-81-2	5.0E-01	default[a]	1.0E-01	default[b]
Xylene, m-	108-38-3	8.0E-01	default[a]	0.0E+00	default[b]
Xylene, o-	95-47-6	8.0E-01	default[a]	0.0E+00	default[b]
Xylene, p-	106-42-3	8.0E-01	default[a]	0.0E+00	default[b]
Xylenes	1330-20-7	9.2E-01	Bast and Borges, 1998	0.0E+00	default[b]
Zinc	7440-66-6	2.0E-01	Bast and Borges, 1998	1.0E-02	default[b]

a: 80% for volatile organics; 50% for semi-volatile organics and non-volatile organics; 20% for inorganics. USEPA, 1995,*Supplemental Guidance to RAGS: Region IV Bulletins, Human Health Assessment* , Waste Management Division, Atlanta, GA, November.

b: 0% for volatile organics; 10% for semi-volatile organics and non-volatile organics; 1% for inorganics. USEPA Dermal Workgroup, 1996.

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Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Acenaphthene	83-32-9	O	154.21	6.44E-03	1.42E+04	7.96E+01	4.21E-02	7.69E-06	4.24E+00	3.75E-03
Acenaphthylene	208-96-8	O	152.20	4.74E-03	8.63E+03	1.38E+02	4.39E-02	7.07E-06	3.93E+00	2.90E-02
Acetaldehyde	75-07-0	O	44.05	2.75E-03	2.69E+00	5.25E-02	1.24E-01	1.23E-05	1.00E+06	9.00E+02
Acetone	67-64-1	O	58.08	1.61E-03	5.82E-01	1.14E-02	1.24E-01	1.14E-05	6.00E+05	2.27E+02
Acetone cyanohydrin	75-86-5	O	85.11	1.34E-04	9.24E-01	1.22E-02	8.12E-02	9.09E-06	1.83E+06	8.00E-01
Acetonitrile	75-05-8	O	41.05	1.21E-03	4.57E-01	9.35E-03	1.28E-01	1.45E-05	2.05E+05	9.00E+01
Acetophenone	98-86-2	O	120.15	4.45E-04	4.72E+01	7.26E-01	6.00E-02	8.73E-06	5.50E+03	3.95E-01
Acifluorfen, sodium	62476-59-9	O	383.64	8.31E-13	2.36E+00	2.26E+00	1.45E-02	4.40E-06	2.50E+05	9.75E-09
Acrolein	107-02-8	O	56.06	1.83E-04	7.94E-01	1.05E-02	1.05E-01	1.12E-05	2.00E+05	2.65E+02
Acrylamide	79-06-1	O	71.08	1.33E-08	1.56E-01	4.38E-03	9.70E-02	1.28E-05	2.20E+06	7.00E-03
Acrylic acid	79-10-7	O	72.06	1.32E-05	2.76E+00	2.27E-02	9.08E-02	1.06E-05	1.00E+06	3.72E+00
Acrylonitrile	107-13-1	O	53.06	4.57E-03	1.62E+00	2.19E-02	1.22E-01	1.34E-05	7.50E+04	1.10E+02
Alachlor	15972-60-8	O	269.77	8.62E-07	2.33E+03	3.80E+00	1.94E-02	5.83E-06	2.40E+02	2.20E-05
Aldicarb	116-06-3	O	190.27	5.82E-08	2.29E+01	3.16E-01	3.05E-02	7.20E-06	6.00E+03	2.90E-05
Aldicarb sulfone	1646-88-4	O	222.27	1.10E-07	2.16E-01	3.40E-02	5.55E-02	5.79E-06	8.00E+03	9.00E-05
Aldrin	309-00-2	O	364.91	7.07E-03	5.61E+06	9.57E+02	1.32E-02	4.86E-06	7.84E-02	1.67E-05
Allyl alcohol	107-18-6	O	58.08	2.08E-04	1.48E+00	6.47E-02	1.14E-01	1.10E-05	3.20E+05	2.63E+01
Allyl chloride	107-5-1	O	76.53	4.57E-01	8.56E+01	5.38E-01	9.80E-02	1.08E-05	3.40E+03	3.60E+02
Aluminum	7429-90-5	M	26.98	0.00E+00	2.13E+00	3.53E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Aminopyridine, 4-	504-24-5	O	94.12	2.44E-07	7.72E-01	9.52E-03	8.02E-02	1.08E-05	7.66E+04	2.00E-03
Ammonia	7664-41-7	I	17.03	1.36E-02	1.69E+00	6.18E-02	2.59E-01	6.93E-05	5.31E+05	7.47E+03
Aniline	62-53-3	O	93.13	5.82E-05	1.19E+01	1.82E-01	7.00E-02	8.30E-06	3.60E+04	6.69E-01
Anthracene	120-12-7	O	178.23	4.61E-03	2.21E+04	4.69E+02	3.24E-02	7.74E-06	4.34E-02	2.55E-05
Antimony	7440-36-0	M	121.75	0.00E+00	1.00E+00	4.50E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Aramite	140-57-8	O	334.86	CE	6.53E+04	1.98E+02	4.23E-02	4.45E-06	CE	1.23E-04
Arsenic	7440-38-2	M	74.92	0.00E+00	4.78E+00	2.50E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsine	7784-42-1	I	77.95	2.41E-01	---	---	CE	CE	2.00E+05	1.13E+04

Attachment E:
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Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Asbestos	1332-21-4	I	varies	0.00E+00	---	1.00E+05	CE	CE	0.00E+00	0.00E+00
Atrazine	1912-24-9	O	215.69	1.09E-07	6.57E+02	3.20E+00	5.64E-02	5.58E-06	3.00E+01	3.00E-07
Barium	7440-39-3	M	137.33	0.00E+00	1.00E+00	1.10E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71-43-2	O	78.11	2.27E-01	9.84E+01	1.32E+00	8.80E-02	9.80E-06	1.77E+03	9.50E+01
Benzenethiol	108-98-5	O	110.18	1.83E-02	4.85E+02	4.18E-01	7.60E-02	8.68E-06	7.60E+02	2.40E+00
Benzidine	92-87-5	O	184.24	1.62E-09	2.19E+01	4.18E-01	3.40E-02	1.50E-05	5.20E+02	8.36E-08
Benzo-a-anthracene	56-55-3	O	228.29	1.39E-04	3.32E+05	7.10E+03	5.10E-02	9.00E-06	1.00E-02	1.54E-07
Benzo-a-pyrene	50-32-8	O	252.32	4.70E-05	1.29E+06	1.91E+04	4.30E-02	9.00E-06	1.62E-03	4.89E-09
Benzo-b-fluoranthene	205-99-2	O	252.32	4.99E-04	1.29E+06	2.40E+04	2.26E-02	5.56E-06	1.50E-03	8.06E-08
Benzo-k-fluoranthene	207-08-9	O	252.32	4.45E-07	1.29E+06	2.46E+04	2.26E-02	5.56E-06	5.50E-04	9.59E-11
Benzo-(g,h,i)-perylene	191-24-2	O	276.34	5.82E-06	4.98E+06	3.17E+04	4.90E-02	5.65E-05	2.60E-04	1.00E-10
Benzoic acid	65-85-0	OA	122.12	1.39E-05	7.49E+01	1.00E-02	5.36E-02	7.97E-06	3.50E+03	6.51E-03
Benzotrichloride	98-07-7	O	195.48	2.03E-02	7.87E+03	2.91E+01	5.91E-02	7.02E-06	1.00E+02	1.90E-01
Benzyl alcohol	100-51-6	O	108.14	1.62E-05	1.19E+01	2.40E-01	8.00E-02	8.00E-06	4.00E+04	1.06E-01
Benzyl chloride	100-44-7	O	126.59	1.66E-02	6.23E+02	3.64E+00	7.50E-02	7.80E-06	4.93E+02	1.20E+00
Beryllium	7440-41-7	M	9.01	0.00E+00	3.72E+00	2.30E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biphenyl, 1,1-	92-52-4	O	154.21	1.25E-02	5.71E+03	1.03E+02	5.73E-02	6.71E-06	7.50E+00	2.94E-02
Bis (2-chloro-ethyl) ether	111-44-4	O	143.01	8.90E-04	3.61E+01	3.10E-01	6.92E-02	7.53E-06	1.02E+04	1.34E+00
Bis (2-chloroisopropyl) ether	108-60-1	O	171.07	4.16E-03	3.80E+02	6.32E+00	6.00E-02	6.40E-06	1.70E+03	8.50E-01
Bis (2-chloromethyl) ether	542-88-1	O	114.96	4.99E-03	3.76E+00	2.40E-02	8.32E-02	9.59E-06	3.80E+04	3.00E+01
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56	4.57E-04	2.46E+08	1.36E+04	3.51E-02	3.66E-06	3.00E-01	6.45E-06
Bromodichloromethane	75-27-4	O	163.83	1.32E-01	4.08E+01	1.10E+00	2.98E-02	1.06E-05	4.50E+03	5.84E+01
Bromoform	75-25-2	O	252.73	2.56E-02	6.16E+01	1.74E+00	1.49E-02	1.03E-05	3.20E+03	5.60E+00
Bromomethane	74-83-9	O	94.94	5.90E-01	1.50E+01	2.09E-01	7.28E-02	1.21E-05	1.52E+04	1.64E+03
Butadiene, 1,3-	106-99-0	O	54.09	2.61E+00	1.08E+02	2.58E+00	1.79E-01	1.02E-05	7.35E+02	2.11E+03
Butanol, n-	71-36-3	O	74.12	3.55E-04	6.93E+00	1.18E-01	8.00E-02	9.30E-06	7.47E+04	6.54E+00
Butylate	2008-41-5	O	217.38	3.50E-03	7.13E+03	2.52E+00	4.89E-02	5.14E-06	4.60E+01	1.30E-02

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Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Butyl benzyl phthalate	85-68-7	O	312.37	7.94E-05	6.99E+04	2.75E+02	1.74E-02	4.83E-06	2.90E+00	1.20E-05
Cacodylic acid	75-60-5	O	138.00	0.00E+00	1.00E+00	4.80E-02	CE	CE	2.00E+06	0.00E+00
Cadmium	7440-43-9	M	112.41	0.00E+00	8.49E-01	1.50E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Captan	133-06-2	O	300.59	2.99E-04	6.98E+01	1.28E+02	1.83E-02	4.90E-06	5.00E-01	7.50E-06
Carbaryl	63-25-2	O	201.22	5.32E-07	2.23E+02	4.69E+00	2.78E-02	5.60E-06	3.00E+01	1.36E-06
Carbazole	86-74-8	O	167.21	3.38E-03	1.70E+03	4.91E+01	3.90E-02	7.03E-06	7.21E-01	2.66E-04
Carbofuran	1563-66-2	O	221.26	1.62E-07	2.00E+02	5.80E-01	5.35E-02	5.40E-06	7.00E+02	8.30E-06
Carbon disulfide	75-15-0	O	76.14	6.13E-01	8.71E+01	1.05E+00	1.04E-01	1.00E-05	2.30E+03	3.40E+02
Carbon tetrachloride	56-23-5	O	153.82	1.20E+00	2.77E+02	3.72E+00	7.80E-02	8.80E-06	8.05E+02	1.12E+02
Carbosulfan	55285-14-8	O	380.55	2.15E-05	3.73E+05	5.14E+02	3.76E-02	3.88E-06	3.00E-01	3.10E-07
Chloral	75-87-6	O	147.39	2.66E-05	1.55E+01	1.27E-01	3.85E-02	9.70E-06	8.30E+06	3.50E+01
Chlordane	57-74-9	O	409.78	2.02E-03	4.00E+06	2.40E+03	1.18E-02	4.37E-06	5.60E-02	1.00E-05
Chlorine	7782-50-5	I	70.91	2.86E+00	7.07E+00	---	1.20E-01	1.48E-05	7.00E+03	5.17E+03
Chloroanaline, p-	106-47-8	O	127.57	4.86E-05	5.25E+01	1.32E+00	4.83E-02	1.01E-05	3.90E+03	2.35E-02
Chlorobenzene	108-90-7	O	112.56	1.82E-01	4.34E+02	4.28E+00	7.30E-02	8.70E-06	5.02E+02	1.21E+01
Chlorobenzilate	510-15-6	O	325.19	3.78E-06	9.84E+03	1.60E+01	8.00E-02	8.00E-06	1.30E+01	2.20E-06
Chloro-1,3-butadiene, 2-	126-99-8	O	88.54	1.33E+00	3.35E+02	2.00E+00	1.00E-01	1.00E-05	6.30E+02	2.12E+02
Chlorodifluoromethane	75-45-6	O	86.47	1.22E+00	7.84E+00	1.22E-01	1.13E-01	1.32E-05	2.90E+03	7.83E+03
Chloroethane	75-00-3	O	64.51	2.12E-01	3.78E+01	3.56E-01	1.50E-01	1.18E-05	2.00E+04	1.20E+03
Chloroform	67-66-3	O	119.38	1.53E-01	3.32E+01	9.35E-01	1.04E-01	1.00E-05	7.92E+03	1.98E+02
Chloromethane	74-87-3	O	50.49	1.44E+00	1.22E+01	1.20E-01	1.26E-01	6.50E-06	7.25E+03	3.77E+03
Chloronaphthalene, 2-	91-58-7	O	162.62	2.54E-02	6.51E+03	1.70E+02	6.18E-02	6.98E-06	6.74E+00	1.70E-02
Chlorophenol, 2-	95-57-8	OA	128.56	7.40E-04	1.44E+02	5.72E+00	5.01E-02	9.46E-06	2.80E+04	1.42E+00
Chlorotoluene	25168-05-2	O	126.59	1.26E-02	6.23E+02	3.81E+00	7.13E-02	8.10E-06	5.00E+02	1.00E+00
Chlorpyrifos	2921-88-2	O	350.59	1.73E-04	4.55E+04	1.00E+02	4.85E-02	5.11E-06	9.00E-01	1.87E-05
Chromium (III)	16065-83-1	M	52.00	0.00E+00	1.00E+00	1.20E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium (VI)	18540-29-9	M	52.00	0.00E+00	1.00E+00	1.40E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Chrysene	218-01-9	O	228.29	5.03E-05	3.32E+05	6.18E+03	2.48E-02	6.21E-06	2.00E-03	7.80E-09
Cobalt	7440-48-4	M	58.93	0.00E+00	1.00E+00	4.50E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Copper	7440-50-8	M	63.55	0.00E+00	2.69E-01	4.00E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cresol, m-	108-39-4	O	108.14	3.62E-05	1.15E+02	1.74E+00	7.40E-02	1.00E-05	2.30E+04	1.40E-01
Cresol, o-	95-48-7	O	108.14	6.65E-05	1.15E+02	1.95E+00	7.40E-02	8.30E-06	2.04E+04	3.20E-01
Cresol, p-	106-44-5	O	108.14	3.99E-05	1.15E+02	1.63E+00	7.40E-02	1.00E-05	2.30E+04	1.30E-01
Crotonaldehyde	123-73-9	O	70.09	8.15E-04	3.99E+00	3.27E-02	9.37E-02	1.02E-05	1.60E+05	1.90E+01
Cumene	98-82-8	O	120.19	6.07E-01	2.81E+03	6.93E+01	6.50E-02	7.10E-06	5.00E+01	4.60E+00
Cyanide	57-12-5	I	26.02	CE	2.03E-01	9.90E+00	5.21E-01	2.28E-05	1.00E+05	1.38E+01
Cyanogen	460-19-5	O	52.04	2.06E-01	1.17E+00	2.72E-02	2.04E-01	1.37E-05	1.00E+04	3.88E+03
Cyclohexanone	108-94-1	O	98.14	4.99E-04	1.34E+01	1.10E-01	7.72E-02	8.73E-06	2.30E+04	4.00E+00
Cyclotrimethylenetrinitramine	121-82-4	O	222.12	4.99E-04	7.41E+00	1.26E+00	6.65E-02	6.39E-06	3.87E+01	1.00E-09
DDD	72-54-8	O	320.05	1.66E-04	7.47E+05	1.70E+03	1.69E-02	4.76E-06	9.00E-02	8.66E-07
DDE	72-55-9	O	241.93	8.73E-04	9.90E+05	2.19E+03	1.44E-02	5.87E-06	6.50E-02	5.66E-06
DDT	50-29-3	O	354.49	2.23E-03	6.23E+06	2.75E+03	1.37E-02	4.95E-06	3.10E-03	3.93E-07
Di-n-butyl phthalate	84-74-2	O	278.35	5.94E-05	4.07E+04	6.78E+02	4.38E-02	7.86E-06	1.12E+01	4.25E-05
Di-n-octyl phthalate	117-84-0	O	390.56	2.78E-03	3.46E+08	1.66E+06	1.51E-02	3.90E-06	2.00E-02	4.47E-06
Diallate	2303-16-4	O	270.22	1.58E-04	1.19E+04	3.80E+01	8.00E-02	8.00E-06	1.40E+01	1.50E-04
Diazinon	333-41-5	O	304.35	4.70E-06	7.31E+03	2.64E+00	1.80E-02	4.90E-06	4.00E+01	8.40E-05
Dibenz-a,h-anthracene	53-70-3	O	278.35	4.66E-07	4.98E+06	3.81E+04	2.00E-02	5.18E-06	5.00E-04	2.10E-11
Dibromo-3-chloropropane, 1,2-	96-12-8	O	236.33	8.31E-03	4.81E+02	3.40E+00	8.00E-02	8.00E-06	1.00E+03	7.60E-01
Dibromochloromethane	124-48-1	O	208.28	3.25E-02	5.01E+01	1.26E+00	1.96E-02	1.05E-05	5.25E+03	1.50E+01
Dicamba	1918-00-9	O	209.03	3.28E-07	1.39E+02	4.40E-02	6.02E-02	6.69E-06	5.60E+03	9.70E-05
Dichlorobenzene, 1,2-	95-50-1	O	147.00	8.73E-02	1.91E+03	1.38E+01	6.90E-02	7.90E-06	1.50E+02	1.36E+00
Dichlorobenzene, 1,4-	106-46-7	O	147.00	1.17E-01	1.91E+03	1.29E+01	6.90E-02	7.90E-06	7.38E+01	1.06E+00
Dichlorobenzidine, 3,3-	91-94-1	O	253.13	8.65E-07	1.63E+03	1.45E+01	1.94E-02	6.74E-06	3.11E+00	2.20E-07
Dichloro-2-butene, 1,4	764-41-0	O	125.00	1.24E-02	3.97E+02	3.64E+00	7.43E-02	8.62E-06	6.91E+03	1.26E+01

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Dichlorodifluoromethane	75-71-8	O	120.91	1.67E+01	6.54E+01	2.58E+00	5.20E-02	1.05E-05	2.80E+02	4.80E+03
Dichloroethane, 1,1-	75-34-3	O	98.96	2.39E-01	5.73E+01	6.32E-01	7.42E-02	1.05E-05	5.50E+03	2.28E+02
Dichloroethane, 1,2-	107-06-2	O	98.96	5.32E-02	6.79E+01	3.48E-01	1.04E-01	9.90E-06	8.70E+03	8.13E+01
Dichloroethylene, 1,1-	75-35-4	O	96.94	1.06E+00	1.30E+02	1.29E+00	9.00E-02	1.04E-05	2.40E+03	5.91E+02
Dichloroethylene, cis-1,2-	156-59-2	O	96.94	1.87E-01	7.24E+01	5.80E-01	7.35E-02	1.13E-05	4.93E+03	1.75E+02
Dichloroethylene, trans-1,2	156-60-5	O	96.94	3.90E-01	1.17E+02	1.00E+00	7.07E-02	1.19E-05	6.30E+03	3.52E+02
Dichlorophenol, 2,4-	120-83-2	OA	163.00	1.31E-04	6.34E+02	1.44E+00	3.46E-02	8.77E-06	4.50E+03	7.15E-02
Dichlorophenoxyacetic acid, 2,4-	94-75-7	O	221.04	5.82E-09	4.14E+02	1.78E+01	5.90E-02	6.50E-06	8.90E+02	2.40E-05
Dichloropropane, 1,2	78-87-5	O	112.99	1.17E-01	1.78E+02	1.18E+00	7.82E-02	8.73E-06	2.80E+03	5.00E+01
Dichloro-1-propanol, 2,3-	616-23-9	O	128.99	3.97E-05	6.09E+00	6.78E-01	4.84E-02	9.84E-06	2.95E+05	5.82E-01
Dichloropropene, 1,3-	542-75-6	O	110.97	1.23E-01	5.62E+01	1.05E+00	6.26E-02	1.00E-05	1.55E+03	3.12E+01
Dichlorvos	62-73-7	O	220.98	3.98E-05	2.51E+01	7.78E+07	2.32E-02	7.80E-06	1.60E+04	5.27E-02
Dieldrin	60-57-1	O	380.91	1.11E-04	2.80E+05	4.28E+02	1.25E-02	4.74E-06	1.95E-01	9.96E-07
Diethylhexyl adipate	103-23-1	O	370.57	9.78E-01	1.30E+08	7.60E+03	3.56E-02	3.72E-06	1.71E-03	8.25E-05
Diethyl phthalate	84-66-2	O	222.24	1.87E-05	4.42E+02	3.03E+00	2.56E-02	6.35E-06	1.08E+03	1.65E-03
Diethylstilbestrol	56-53-1	O	268.36	2.62E-13	4.37E+05	1.50E+03	4.43E-02	8.00E-06	1.30E+04	1.06E-09
Dimethoate	60-51-5	O	229.26	2.58E-09	1.90E+00	8.53E-02	8.00E-02	8.00E-06	2.50E+04	5.09E-06
Dimethoxybenzidine, 3,3'-	119-90-4	O	244.29	1.66E-08	1.22E+02	1.21E+00	2.42E-02	5.50E-06	2.40E+02	2.50E-07
Dimethylbenzidine, 3,3'-	119-93-7	O	212.29	5.40E-09	1.04E+03	3.99E+00	5.10E-02	8.00E-06	2.40E+02	3.70E-07
Dimethyl phenol, 2,4-	105-67-9	O	122.17	8.31E-05	4.05E+02	2.35E+00	5.84E-02	8.69E-06	6.20E+03	1.26E-01
Dinitrobenzene, 1,3-	99-65-0	O	168.11	4.57E-06	4.25E+01	6.00E-01	2.80E-01	7.60E-06	5.40E+02	2.49E-04
Dinitrobenzene, 1,4-	100-25-4	O	168.11	4.44E-06	4.25E+01	5.24E-01	6.15E-02	7.18E-06	1.00E+02	4.83E-05
Dinitrophenol, 2,4-	51-28-5	OA	184.11	2.01E-07	5.32E+01	2.00E-04	2.73E-02	9.06E-06	5.80E+03	1.14E-04
Dinitrotoluene, 2,4-	121-14-2	O	182.14	3.60E-05	1.50E+02	1.03E+00	2.03E-01	7.06E-06	2.85E+02	1.74E-04
Dinitrotoluene, 2,6-	606-20-2	O	182.14	3.11E-05	1.50E+02	8.34E-01	3.27E-02	7.26E-06	1.82E+02	5.70E-04
Dinoseb	88-85-7	O	240.22	2.08E-02	4.71E+03	2.40E+01	2.25E-02	6.25E-06	5.20E+01	7.52E-02
Dioxane, 1,4-	123-91-1	O	88.11	2.04E-04	4.79E-01	1.08E-02	2.30E-01	1.00E-05	9.00E+05	3.80E+01

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Diphenylamine	122-39-4	O	169.23	1.83E-04	1.96E+03	6.93E+00	6.80E-02	6.30E-06	3.00E+02	4.26E-03
Diphenylhydrazine, 1,2-	122-66-7	O	184.24	1.42E-07	1.14E+03	1.32E+01	5.62E-02	5.70E-06	1.84E+03	2.60E-05
Diquat dibromide	85-00-7	O	344.05	2.69E-12	1.50E-03	4.10E+00	5.52E-02	5.52E-06	7.00E+05	1.00E-07
Disulfoton	298-04-4	O	274.41	2.58E-04	7.21E+03	1.78E+02	8.00E-02	8.00E-06	1.60E+01	2.30E-04
Diuron	330-54-1	O	233.10	3.04E-08	4.71E+02	8.53E+00	5.40E-02	5.30E-06	4.20E+01	1.00E-07
Endosulfan	115-29-7	O	406.93	4.66E-04	6.90E+03	1.48E+01	1.15E-02	4.55E-06	5.10E-01	9.96E-06
Endothall	145-73-3	O	230.13	1.08E-08	7.81E+01	1.70E+00	CE	CE	1.00E+05	1.80E-04
Endrin	72-20-8	O	380.91	4.95E-05	2.80E+05	1.87E+02	1.25E-02	4.74E-06	2.50E-01	5.84E-07
Epichlorohydrin	106-89-8	O	92.53	1.37E-03	4.23E+00	3.99E-02	8.60E-02	9.80E-06	6.60E+04	1.67E+01
Ethion	563-12-2	O	384.48	2.87E-05	5.57E+04	3.08E+02	CE	CE	1.20E+00	1.50E-06
Ethoxy ethanol, 2-	110-80-5	O	90.12	2.13E+00	3.84E-01	1.60E-02	9.47E-02	9.75E-06	1.20E+01	4.56E+00
Ethyl acetate	141-78-6	O	88.11	5.57E-03	7.31E+00	1.05E-01	7.30E-02	9.70E-06	7.90E+04	9.41E+01
Ethyl acrylate	140-88-5	O	100.12	1.06E-02	1.66E+01	2.14E+00	7.40E-02	8.68E-06	2.00E+04	2.95E+01
Ethyl benzene	100-41-4	O	106.17	3.28E-01	1.07E+03	4.08E+00	7.50E-02	7.80E-06	1.69E+02	9.60E+00
S-Ethyl dipropylthiocarbamate	759-94-4	O	189.32	4.57E-03	1.04E+03	4.80E+00	5.35E-02	5.65E-06	3.70E+02	1.60E-01
Ethyl ether	60-29-7	O	74.12	2.70E-02	1.12E+01	1.52E-01	7.40E-02	9.30E-06	6.10E+04	5.40E+02
Ethyl methacrylate	97-63-2	O	114.14	6.65E-03	5.84E+01	7.40E-01	8.00E-02	8.00E-06	1.90E+04	1.75E+01
Ethyl-2-methylbenzene, 1-	611-14-3	O	120.19	2.19E-01	3.39E+03	2.15E+01	6.76E-02	7.29E-06	7.46E+01	2.48E+00
Ethyl-4-methylbenzene, 1-	622-96-8	O	120.19	3.27E-01	3.80E+03	2.34E+01	6.70E-02	7.18E-06	9.49E+01	2.95E+00
Ethylenediamine	107-15-3	O	60.10	7.19E-08	2.41E-02	9.42E-02	1.53E-01	1.12E-05	7.95E+06	1.10E+01
Ethylene dibromide	106-93-4	O	187.86	2.93E-02	1.02E+02	1.07E+00	2.17E-02	1.90E-05	4.32E+03	1.10E+01
Ethylene glycol	107-21-1	O	62.07	2.49E-06	6.32E-02	2.52E-03	1.08E-01	1.22E-05	1.00E+06	7.00E-02
Ethylene oxide	75-21-8	O	44.05	4.92E-03	9.01E-01	4.40E-02	1.04E-01	1.45E-05	3.83E+05	1.32E+03
Ethylene thiourea	96-45-7	O	102.16	4.99E-05	3.23E-01	4.38E-03	7.15E-02	1.02E-05	1.20E+04	8.36E-02
Fluoranthene	206-44-0	O	202.26	3.88E-04	8.57E+04	9.80E+02	3.02E-02	6.35E-06	2.60E-01	8.13E-06
Fluorene	86-73-7	O	166.22	2.64E-03	1.04E+04	1.52E+02	3.63E-02	7.88E-06	1.98E+00	3.24E-03
Fluorine (soluble Fluoride)	7782-41-4	I	38.00	CE	1.67E+00	1.50E+02	CE	CE	NA/reacts	7.60E+02

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Formaldehyde	50-00-0	O	30.03	1.37E-05	2.24E+00	4.38E-02	1.80E-01	2.00E-05	5.50E+05	3.88E+03
Formic acid	64-18-6	O	46.03	1.79E-04	3.46E-01	5.77E-03	7.90E-02	1.40E-06	1.00E+06	4.10E+01
Furan	110-00-9	O	68.08	2.24E-01	2.31E+01	4.18E-01	1.04E-01	1.20E-05	1.00E+04	6.00E+02
Fufural	98-01-1	O	96.09	1.25E-04	6.80E+00	5.57E-02	8.72E-02	1.12E-05	8.60E+04	2.00E+00
Glycidylaldehyde	765-34-4	O	72.06	1.08E-05	7.63E-01	1.84E-01	9.64E-02	1.16E-05	8.55E+07	2.70E+01
Heptachlor	76-44-8	O	373.32	2.44E-02	1.61E+06	2.35E+02	1.12E-02	5.69E-06	1.80E-01	3.26E-04
Heptachlor epoxide	1024-57-3	O	389.32	3.45E-04	8.04E+04	1.45E+02	1.32E-02	4.23E-06	2.75E-01	4.34E-06
Hexachlorobenzene	118-74-1	O	284.78	2.22E-02	7.24E+05	5.64E+02	5.42E-02	5.91E-06	6.00E-03	1.23E-05
Hexachloro-1,3-butadiene	87-68-3	O	260.76	9.94E-01	5.21E+04	1.38E+02	5.61E-02	6.16E-06	2.55E+00	1.77E-01
Hexachlorocyclohexane, alpha	319-84-6	O	290.83	2.82E-04	1.81E+04	2.64E+01	1.42E-02	7.34E-06	2.00E+00	4.26E-05
Hexachlorocyclohexane, beta	319-85-7	O	290.83	1.44E-05	1.81E+04	2.76E+01	1.42E-02	7.34E-06	5.42E-01	4.90E-07
Hexachlorocyclohexane, gamma	58-89-9	O	290.83	1.41E-04	1.81E+04	2.19E+01	1.42E-02	7.34E-06	5.75E+00	3.72E-05
Hexachlorocyclohexane, techn	608-73-1	O	290.83	5.99E-05	1.81E+04	4.80E+01	1.42E-02	7.34E-06	4.35E+01	1.64E-04
Hexachlorocyclopentadiene	77-47-4	O	273.78	7.15E-01	4.22E+04	1.91E+02	1.61E-02	7.21E-06	1.80E+00	7.32E-02
Hexachloroethane	67-72-1	O	236.74	1.62E-01	1.08E+04	3.64E+01	2.50E-03	6.80E-06	5.00E+01	4.72E-01
Hexachlorophene	70-30-4	O	406.91	2.54E-09	8.36E+06	4.00E+05	8.00E-02	8.00E-06	3.00E-03	2.74E-12
Hexane, n-	110-54-3	O	86.18	4.66E+01	1.94E+03	9.57E+00	2.00E-01	7.77E-06	1.30E+01	1.52E+02
Hexazinone	51235-04-2	O	252.32	8.62E-11	1.42E+02	7.40E-01	5.08E-02	5.11E-06	3.30E+04	2.03E-07
Hydrazine	302-01-2	O	32.05	7.20E-08	3.41E-02	2.00E-03	4.16E-01	1.90E-05	3.41E+08	1.40E+01
Indeno-(1,2,3-cd)-pyrene	193-39-5	O	276.34	2.85E-06	4.98E+06	6.93E+04	1.90E-02	5.66E-06	3.75E-03	1.40E-10
Isobutyl alcohol	78-83-1	O	74.12	4.99E-04	5.85E+00	1.12E-01	8.60E-02	8.00E-06	9.49E+04	1.00E+01
Isophorone	78-59-1	O	138.21	2.57E-04	4.15E+02	6.04E-01	6.23E-02	6.76E-06	1.20E+04	4.10E-01
Kepone	143-50-0	O	490.64	1.04E-06	8.05E+04	5.40E+02	4.22E-02	4.30E-06	7.60E+00	2.25E-07
Lead	7439-92-1	M	207.20	0.00E+00	5.36E+00	1.00E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Malathion	121-75-5	O	330.36	9.98E-07	1.94E+02	5.77E+00	1.50E-02	4.40E-06	1.45E+02	7.90E-06
Maleic anhydride	108-31-6	O	98.06	8.31E-06	4.16E+01	5.14E-01	9.50E-02	1.11E-05	8.65E+02	1.34E-03
Maleic hydrazide	123-33-1	O	112.09	1.03E-10	1.30E-01	5.00E-01	8.75E-02	8.75E-06	6.00E+03	7.50E-08

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Malononitrile	109-77-3	O	66.06	1.97E-07	6.63E-01	9.80E-02	9.97E-02	1.09E-05	6.96E+06	3.79E-01
Manganese	7439-96-5	M	54.94	0.00E+00	1.00E+00	5.01E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mercury	7439-97-6	M	200.59	4.74E-01	3.38E-01	5.20E+01	3.07E-02	6.30E-06	3.00E-02	1.30E-03
Methacrylonitrile	126-98-7	O	67.09	3.03E-03	5.71E+00	6.78E-02	8.00E-02	8.00E-06	2.50E+04	6.80E+01
Methanol	67-56-1	O	32.04	1.94E-04	2.33E-01	3.64E-03	1.50E-01	1.64E-05	1.00E+06	1.22E+02
Methomyl	16752-77-5	O	162.21	7.48E-09	4.07E+00	3.20E+00	4.07E-02	7.20E-06	5.80E+04	5.00E-05
Methoxychlor	72-43-5	O	345.65	6.57E-04	4.65E+05	1.55E+03	1.56E-02	4.46E-06	4.50E-02	1.23E-06
Methoxyethanol	109-86-4	O	76.10	1.28E+00	1.24E-01	1.71E-01	9.15E-02	1.02E-05	2.01E+01	6.20E+00
Methyl ethyl ketone	78-93-3	O	72.11	1.94E-03	1.80E+00	3.80E-02	8.08E-02	9.80E-06	2.40E+05	9.10E+01
Methyl isobutyl ketone	108-10-1	O	100.16	5.82E-03	1.46E+01	3.00E-01	7.50E-02	7.80E-06	1.90E+04	1.45E+01
Methyl mercury	22967-92-6	I	215.62	CE	1.19E+00	---	CE	CE	CE	CE
Methyl methacrylate	80-62-6	O	100.12	1.33E-02	1.88E+01	4.60E-01	7.70E-02	8.60E-06	1.60E+04	3.80E+01
Methyl naphthalene, 2-	91-57-6	O	142.20	1.85E-02	5.20E+03	8.63E+01	6.29E-02	7.20E-06	2.54E+01	6.75E-02
Methyl parathion	298-00-0	O	263.21	5.82E-06	5.61E+02	1.30E+01	8.00E-02	8.00E-06	5.00E+01	1.52E-05
Methylene-bis (2-chloroaniline), 4,4'-	101-14-4	O	267.16	1.40E-05	2.95E+03	1.58E+02	1.99E-02	5.80E-06	7.24E+01	6.94E-05
Methylene chloride	75-09-2	O	84.93	9.10E-02	2.19E+01	2.35E-01	1.01E-01	1.17E-05	1.54E+04	4.55E+02
Molinate	2212-67-1	O	187.31	5.25E-05	8.05E+02	1.00E+00	5.65E-02	6.00E-06	9.00E+02	5.60E-03
Molybdenum	7439-98-7	M	95.94	0.00E+00	1.00E+00	2.00E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MTBE	1634-04-4	O	88.15	2.44E-02	2.69E+01	2.83E-01	7.92E-02	9.41E-05	4.80E+04	2.49E+02
Naled	300-76-5	O	380.78	2.71E-03	4.02E+01	2.66E+00	CE	6.80E-06	1.50E+00	2.00E-04
Naphthalene	91-20-3	O	128.17	2.00E-02	1.48E+03	3.10E+01	5.90E-02	7.50E-06	3.14E+01	8.89E-02
Nickel and compounds (soluble salts)	7440-02-0	M	58.69	0.00E+00	2.69E-01	1.60E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nitrate	14797-55-8	I	62.00	CE	1.62E+00	---	CE	CE	CE	CE
Nitrite	14797-65-0	I	46.01	CE	1.14E+00	---	CE	CE	CE	CE
Nitroaniline 2-	88-74-4	O	138.13	2.08E-05	1.04E+02	5.38E-01	5.99E-02	7.18E-06	1.26E+03	4.75E-03
Nitrobenzene	98-95-3	O	123.11	8.56E-04	6.47E+01	2.64E+00	7.60E-02	8.60E-06	1.90E+03	2.44E-01
Nitropropane, 2-	79-46-9	O	89.09	5.15E-03	7.44E+00	7.00E-02	9.23E-02	1.01E-05	1.70E+04	1.82E+01

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Nitroso-n-ethylurea, n-	759-73-9	O	117.11	1.05E-04	9.45E-01	6.47E-01	8.08E-02	8.25E-06	4.85E+04	7.97E-01
Nitroso-methyl-ethyl-amine, n-	10595-95-6	O	88.11	3.70E-05	7.12E-01	4.20E-01	8.00E-02	8.00E-06	3.00E+05	2.28E+00
Nitrosodi-n-butylamine, n-	924-16-3	O	158.24	3.58E-03	2.03E+02	4.60E+00	8.00E-02	8.00E-06	1.20E+03	2.89E-01
Nitrosodi-n-propylamine, n-	621-64-7	O	130.19	9.35E-05	2.25E+01	3.94E-01	5.45E-02	8.17E-06	9.89E+03	4.00E-01
Nitrosodiethanolamine	1116-54-7	O	134.14	2.05E-09	5.25E-02	5.98E-02	7.27E-02	7.70E-06	7.33E+07	5.00E-04
Nitrosodiethylamine, N-	55-18-5	O	102.14	3.60E-05	2.21E+00	6.00E-02	8.00E-02	8.00E-06	1.47E+05	1.42E+00
Nitrosodimethylamine, N-	62-75-9	O	74.08	2.16E-05	2.30E-01	7.20E-02	1.34E-01	9.72E-06	1.00E+06	5.37E+00
Nitrosodiphenylamine	86-30-6	O	198.22	2.08E-04	1.45E+03	6.62E+00	3.12E-02	6.35E-06	3.51E+01	9.88E-02
Nitrosopyrrolidine, n-	930-55-2	O	100.12	7.48E-07	1.70E+00	1.30E-02	8.00E-02	8.00E-06	7.80E+05	1.75E-01
Nitrotoluene, m	99-08-1	O	137.14	2.24E-03	2.28E+02	2.81E+00	6.42E-02	7.69E-06	4.98E+02	1.50E-01
Nitrotoluene, o	88-72-2	O	137.14	1.87E-03	2.28E+02	2.81E+00	6.47E-02	7.73E-06	6.00E+02	1.50E-01
Nitrotoluene, p	99-99-0	O	137.14	2.29E-03	2.28E+02	2.81E+00	6.40E-02	7.70E-06	4.00E+02	1.20E-01
Octamethylpryrophosphoramide	152-16-9	O	286.25	1.16E-08	9.84E-02	6.20E-03	8.00E-02	8.00E-06	1.00E+06	9.88E-04
Oxamyl	23135-22-0	O	219.26	1.60E-11	6.32E-02	1.00E-01	5.57E-02	5.75E-06	2.80E+05	3.83E-07
Parathion	56-38-2	O	291.26	2.37E-05	5.38E+03	1.12E+02	1.70E-02	5.80E-06	1.18E+01	1.73E-05
Pebulate	1114-71-2	O	203.35	9.85E-04	3.23E+03	8.60E+00	5.10E-02	5.38E-06	9.20E+01	8.85E-03
Pentachlorobenzene	608-93-5	O	250.34	3.16E-02	1.64E+05	6.32E+02	6.70E-02	6.30E-06	6.50E-01	1.67E-03
Pentachloronitrobenzene	82-68-8	O	295.34	2.57E-02	1.08E+05	2.60E+02	1.59E-02	6.10E-06	7.11E-02	1.13E-04
Pentachlorophenol	87-86-5	OA	266.34	1.16E-05	5.44E+04	8.20E+00	5.60E-02	6.10E-06	1.40E+01	1.70E-05
Phenanthrene	85-01-8	O	178.23	5.40E-03	2.21E+04	2.83E+02	3.33E-02	7.47E-06	9.94E-01	6.80E-04
Phenol	108-95-2	O	94.11	2.47E-05	3.26E+01	3.48E-01	8.20E-02	9.10E-06	8.70E+04	4.63E-01
Phenyl mercuric acetate	62-38-4	O	336.74	3.41E-09	7.76E+00	3.20E+00	8.00E-02	8.00E-06	4.37E+03	3.04E-06
Phenylene diamine, m-	108-45-2	O	108.14	9.56E-07	4.06E-01	2.20E-02	6.63E-02	9.90E-06	3.51E+05	2.28E-02
Phenylene diamine, p-	106-50-3	O	108.14	5.24E-08	4.06E-01	2.20E-02	7.15E-02	8.92E-06	3.80E+04	4.60E-03
Phorate	298-02-2	O	260.38	4.99E-04	2.33E+03	1.10E+02	8.00E-02	8.00E-06	4.40E+01	1.30E-03
Phosphine	7803-51-2	I	34.00	1.46E+02	5.36E-01	---	3.81E-01	1.82E-05	4.00E+02	3.14E+04
Phosphorus, white	7723-14-0	I	123.90	5.65E-02	1.20E+03	2.24E+01	CE	CE	3.00E+00	2.50E-02

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Phthalic anhydride	85-44-9	O	148.12	2.54E-07	1.17E+02	1.59E+00	6.36E-02	7.90E-06	6.20E+03	2.00E-04
Polybrominated biphenyls	67774-32-7	O	627.59	1.62E-04	2.45E+06	4.28E+01	CE	4.63E-06	1.10E-02	5.20E-08
Polychlorinated biphenyls	1336-36-3	O	290.00	1.75E-02	2.00E+06	1.06E+04	1.04E-01	1.00E-05	5.55E-02	7.60E-05
Pronamide	23950-58-5	O	256.13	3.74E-04	3.76E+03	4.00E+00	8.00E-02	8.00E-06	1.50E+01	4.00E-04
Propargite	2312-35-8	O	350.48	1.44E-06	5.37E+03	1.12E+02	3.94E-02	4.20E-06	5.00E-01	4.48E-08
Propargyl alcohol	107-19-7	O	56.06	1.34E-05	3.79E-01	1.08E-01	1.04E-01	1.24E-05	5.57E+06	1.20E+01
Propham	122-42-9	O	179.22	5.30E-06	4.57E+02	1.02E+00	5.71E-02	6.28E-06	2.50E+02	1.35E-04
Propylene oxide	75-56-9	O	58.08	3.47E-03	1.07E+00	2.53E-02	1.04E-01	1.16E-05	4.76E+05	5.32E+02
Pyrene	129-00-0	O	202.26	4.57E-04	8.57E+04	7.60E+02	2.72E-02	7.24E-06	1.35E-01	4.25E-06
Pyridine	110-86-1	O	79.10	2.91E-01	6.38E+00	8.80E-02	9.10E-02	7.60E-06	3.00E+02	2.00E+01
Quinoline	91-22-5	O	129.16	1.15E-04	1.39E+02	1.14E+01	5.46E-02	8.31E-06	6.78E+03	9.60E-02
Selenium	7782-49-2	M	78.96	0.00E+00	1.73E+00	2.20E+00	CE	CE	0.00E+00	0.00E+00
Selenourea	630-10-4	O	118.98	CE	2.35E-03	---	CE	CE	CE	CE
Silver	7440-22-4	M	107.87	0.00E+00	1.00E+00	1.00E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sodium diethyldithiocarbamate	148-18-5	O	171.26	CE	1.86E+00	---	CE	CE	CE	CE
Strychnine	57-24-9	O	334.42	6.65E-12	7.04E+01	1.58E+00	8.00E-02	8.00E-06	1.43E+02	1.67E-10
Styrene	100-42-5	O	104.15	1.14E-01	7.85E+02	1.52E+01	7.10E-02	8.00E-06	3.10E+02	6.24E+00
TCDDioxins, 2,3,7,8-	1746-01-6	O	321.97	1.47E-03	1.05E+07	2.83E+05	4.70E-02	8.00E-06	1.93E-05	7.40E-10
Tetrachlorobenzene, 1,2,4,5-	95-94-3	O	215.89	4.99E-02	3.72E+04	3.20E+01	2.11E-02	8.80E-06	3.00E-01	5.40E-03
Tetrachloroethane, 1,1,1,2-	630-20-6	O	167.85	9.98E-02	8.57E+02	1.91E+01	7.10E-02	7.90E-06	1.10E+03	1.22E+01
Tetrachloroethane, 1,1,2,2-	79-34-5	O	167.85	1.55E-02	1.56E+02	1.55E+00	7.10E-02	7.90E-06	2.97E+03	5.17E+00
Tetrachloroethylene	127-18-4	O	165.83	7.65E-01	9.23E+02	3.10E+00	7.20E-02	8.20E-06	2.00E+02	1.84E+01
Tetrachlorophenol, 2,3,4,6-	58-90-2	OA	231.89	2.54E-04	1.23E+04	2.10E+00	2.17E-02	7.10E-06	1.00E+02	5.02E-03
Tetraethyl dithiopyrophosphate	3689-24-5	O	322.32	1.75E-04	9.56E+03	1.48E+01	1.50E-02	5.50E-06	2.50E+01	1.70E-04
Tetraethyl lead	78-00-2	O	323.45	3.31E+00	7.63E+04	9.80E+01	1.32E-02	6.40E-06	8.00E-01	1.50E-01
Thallium chloride	7791-12-0	I	239.84	0.00E+00	---	---	CE	CE	2.90E+03	0.00E+00
Thiofanox	39196-18-4	O	218.32	3.90E-07	1.44E+02	1.18E+00	2.55E-02	6.62E-06	5.20E+03	3.10E-04

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Thiophanatemethyl	23564-05-8	O	342.40	3.82E-07	3.16E+01	1.80E-01	4.55E-02	4.68E-06	3.50E+00	7.50E-08
Thiram	137-26-8	O	240.44	3.28E-06	5.05E+01	1.34E+01	2.25E-02	6.24E-06	3.00E+01	7.50E-06
Tin	7440-31-5	M	118.71	0.00E+00	1.95E+01	---	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108-88-3	O	92.14	2.76E-01	3.47E+02	2.80E+00	8.70E-02	8.60E-06	5.30E+02	2.82E+01
Toluenediamine, 2,4-	95-80-7	O	122.17	7.48E-08	1.43E+00	2.58E+01	8.00E-02	8.00E-06	7.47E+03	8.36E-05
Toluenediamine, 2,6-	823-40-5	O	122.17	5.15E-10	1.43E+00	---	6.87E-02	7.97E-06	4.80E+04	1.98E-05
Toluene diisocyanate, 2,4/2,6-	26471-62-5	O	174.16	6.86E-06	5.50E+03	4.51E+01	6.09E-02	6.80E-06	1.11E+05	8.00E-02
Toluidine, p-	106-49-0	O	107.16	3.82E-04	4.20E+01	5.00E-01	8.00E-02	8.00E-06	7.20E+03	3.30E-01
Toxaphene	8001-35-2	O	413.81	1.40E-04	6.24E+06	1.92E+03	1.16E-02	4.34E-06	7.40E-01	4.19E-06
TP Silvex, 2,4,5-	93-72-1	O	269.51	5.45E-07	4.78E+03	5.20E+01	1.94E-02	5.80E-06	1.40E+02	5.20E-06
Triallate	2303-17-5	O	304.67	4.53E-04	3.70E+04	2.88E+01	4.58E-02	4.84E-06	4.00E+00	1.20E-04
Bis (tri-n-butyltin) oxide	56-35-9	O	596.11	2.08E-03	6.25E+05	---	CE	CE	1.80E+01	6.91E-05
Trichloro-1,2,2-trifluoroethane, 1,1,2	76-13-1	O	187.38	2.20E+01	1.24E+03	2.58E+01	7.80E-02	8.20E-06	2.00E+02	3.60E+02
Trichlorobenzene, 1,2,4-	120-82-1	O	181.45	5.90E-02	8.44E+03	3.32E+01	3.00E-02	8.23E-06	4.88E+01	3.36E-01
Trichloroethane, 1,1,1-	71-55-6	O	133.40	7.15E-01	4.78E+02	2.19E+00	7.80E-02	8.80E-06	1.33E+03	1.24E+02
Trichloroethane, 1,1,2-	79-00-5	O	133.40	3.80E-02	1.03E+02	1.00E+00	7.92E-02	8.80E-06	4.42E+03	2.52E+01
Trichloroethylene	79-01-6	O	131.39	4.28E-01	2.97E+02	1.87E+00	7.90E-02	9.10E-06	1.10E+03	7.20E+01
Trichlorofluoromethane	75-69-4	O	137.37	4.03E+00	1.35E+02	2.70E+00	8.70E-02	9.70E-06	1.10E+03	6.87E+02
Trichlorophenol, 2,4,5-	95-95-4	OA	197.45	1.78E-04	2.79E+03	5.96E+00	2.91E-02	7.03E-06	1.20E+03	1.63E-02
Trichlorophenol, 2,4,6-	88-06-2	OA	197.45	3.19E-04	2.79E+03	2.62E+00	3.18E-02	6.25E-06	9.82E+02	1.18E-02
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	O	255.48	3.62E-07	1.83E+03	1.06E+00	8.00E-02	8.00E-06	2.78E+02	3.61E-06
Trichloropropane, 1,1,2-	598-77-6	O	147.43	1.21E+00	2.69E+02	3.47E+00	3.96E-02	9.30E-06	4.44E+01	6.64E+00
Trichloropropane, 1,2,3-	96-18-4	O	147.43	1.58E-02	3.19E+02	7.78E+00	7.10E-02	7.90E-06	1.90E+03	3.70E+00
Triethylamine	121-44-8	O	101.19	1.99E-02	3.25E+01	2.67E-01	7.54E-02	7.51E-06	1.50E+04	5.00E+01
Trifluralin	1582-09-8	O	335.28	2.01E-03	2.05E+05	2.74E+02	1.49E-02	4.70E-06	6.00E-01	1.10E-04
Trimethylbenzene, 1,2,3-	526-73-8	O	120.19	1.33E-01	3.55E+03	1.18E+01	6.77E-02	7.41E-06	7.52E+01	1.49E+00
Trinitrobenzene, 1,3,5-	99-35-4	O	213.11	2.87E-06	2.79E+01	2.83E-01	8.00E-02	8.00E-06	3.53E+02	9.90E-05

Attachment E:
Chemical/Physical Properties

Chemical of Concern	CAS	Type	MW *(g/mole)*	H ' *(unitless)*	K_{ow} *(unitless)*	K_d *(unitless)*	D_{air} *(cm^2/s)*	D_{wat} *(cm^2/s)*	Solubility *(mg/l)*	Vapor Pressure *(mm Hg)*
Trinitrophenylmethylnitramine, 2,4,6-	479-45-8	O	287.15	8.31E-11	1.10E+02	4.69E+00	5.69E-02	6.40E-06	7.50E+01	4.00E-10
Trinitrotoluene, 2,4,6-	118-96-7	O	227.13	1.90E-05	9.85E+01	6.04E+00	5.41E-02	6.57E-06	1.30E+02	1.24E-04
Uranium	7440-61-1	M	238.03	0.00E+00	1.00E+00	2.96E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Vanadium	7440-62-2	M	50.94	0.00E+00	1.00E+00	1.00E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Vernam	1929-77-7	O	203.35	7.36E-04	3.23E+03	5.51E+01	5.10E-02	5.39E-06	9.85E+01	1.04E-02
Vinyl acetate	108-05-4	O	86.09	2.29E-02	5.34E+00	1.05E-01	8.50E-02	9.20E-06	2.00E+04	1.09E+02
Vinyl chloride	75-01-4	O	62.50	3.49E+00	4.20E+01	2.19E-01	1.06E-01	1.23E-05	2.76E+03	2.80E+03
Warfarin	81-81-2	O	308.33	1.15E-07	1.58E+03	1.82E+01	1.63E-02	4.40E-06	1.70E+01	1.16E-07
Xylene, m-	108-38-3	O	106.17	3.05E-01	1.58E+03	3.92E+00	7.00E-02	7.80E-06	1.60E+02	8.00E+00
Xylene, o-	95-47-6	O	106.17	7.36E-04	1.35E+03	2.58E+00	8.70E-02	1.00E-05	1.78E+02	6.75E+00
Xylene, p-	106-38-3	O	106.17	3.18E-01	1.48E+03	6.18E+00	7.69E-02	8.44E-06	1.85E+02	8.76E+00
Xylenes	1330-20-7	O	106.17	2.93E-01	1.22E+03	4.80E+00	7.40E-02	8.50E-06	1.98E+02	8.06E+00
Zinc	7440-66-6	M	65.39	0.00E+00	3.38E-01	1.60E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Type - O: Organic, I: Inorganic, M: Metal, OA: Organic Acid
MW - Molecular Weight (g/mole)
H' - Dimensionless Henry's Law Constant H' = H x 41.57 @ 20ºC (cm^3-H_2O/cm^3-air)
K_{ow} - Octanol-water partition coefficient (cm^3-H_2O/cm^3-Octanol)
K_d - Soil-water partition coefficient (cm^3-H_2O/g-Soil)
D_{air} - Diffusion coefficient in air (cm^2/s)
D_{wat} - Diffusion coefficient in water (cm^2/s)

CE - Not found; cannot estimate
NA/reacts - Not applicable because reacts with water
Values in italics - Estimated by TNRCC