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The following document was too large to scan as one unit; therefore, it has been broken down into sections.

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TITLE	River Protection Project Waste Treatment Plant Dangerous Waste Permit Application (5 volumes)
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BNFL Inc.

BNFL-5193-RCRA-01, Rev. 2

RIVER PROTECTION PROJECT
WASTE TREATMENT PLANT

RPP-WTP DANGEROUS WASTE PERMIT APPLICATION

Volume IV

April 28, 2000

Prepared for:

U.S. Department of Energy
Richland Operations Office
Contract DE-AC06-96RL13308

Prepared By:

BNFL Inc.
3000 George Washington Way
Richland, Washington 99352

Appendix A
Constituents of Potential Concern Lists

Table A-1. Organic Constituents of Potential Concern Retained by the Regulatory Data Quality Objective Process

CAS #	Constituent	CAS #	Constituent
50-32-8	Benzo(a)pyrene	106-93-4	Ethylene dibromide
53-70-3	Dibenz(a,h)anthracene	106-97-8	Butane
56-23-5	Carbon tetrachloride	106-99-0	1,3-Butadiene
57-14-7	1,1-Dimethylhydrazine	107-02-8	Acrolein
58-89-9	gamma-BHC (Lindane)	107-05-1	3-Chloropropene (Allyl chloride)
60-34-4	Methylhydrazine	107-06-2	1,2-Dichloroethane
60-57-1	Dieldrin	107-12-0	Propionitrile
62-75-9	N-Nitroso-N,N-dimethylamine	107-13-1	Acrylonitrile
64-17-5	Ethyl alcohol	107-87-9	2-Pentanone
64-18-6	Formic acid	108-10-1	4-Methyl-2-pentanone
64-19-7	Acetic acid	108-38-3	m-Xylene
67-56-1	Methyl alcohol	108-87-2	Methylcyclohexane
67-63-0	2-Propyl alcohol	108-88-3	Toluene
67-64-1	2-Propanone (Acetone)	108-90-7	Chlorobenzene
67-66-3	Chloroform	108-94-1	Cyclohexanone
71-23-8	n-Propyl alcohol	108-95-2	Phenol
71-36-3	n-Butyl alcohol	109-66-0	n-Pentane
71-43-2	Benzene	109-99-9	Tetrahydrofuran
71-55-6	1,1,1-Trichloroethane	110-12-3	5-Methyl-2-hexanone
72-20-8	Endrin	110-43-0	2-Heptanone
74-83-9	Bromomethane	110-54-3	n-Hexane
74-87-3	Chloromethane	110-82-7	Cyclohexane
75-00-3	Chloroethane	110-83-8	Cyclohexene
75-01-4	1-Chloroethene	110-86-1	Pyridine
75-05-8	Acetonitrile	111-65-9	n-Octane
75-09-2	Dichloromethane	111-84-2	n-Nonane
75-15-0	Carbon disulfide	118-74-1	Hexachlorobenzene
75-21-8	Oxirane	120-82-1	1,2,4-Trichlorobenzene
75-34-3	1,1-Dichloroethane	121-44-8	Triethylamine
75-35-4	1,1-Dichloroethene	122-39-4	N,N-Diphenylamine
75-43-4	Dichlorofluoromethane	123-19-3	4-Heptanone
75-45-6	Chlorodifluoromethane	123-38-6	n-Propionaldehyde
75-65-0	2-Methyl-2-propanol	123-86-4	Acetic acid n-butyl ester
75-69-4	Trichlorofluoromethane	123-91-1	1,4-Dioxane
75-71-8	Dichlorodifluoromethane	126-73-8	Tributyl phosphate
76-13-1	1,2,2-Trichloro-1,1,2-trifluoroethane	126-98-7	2-Methyl-2-propenenitrile
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	127-18-4	1,1,2,2-Tetrachloroethene
76-44-8	Heptachlor	128-37-0	2,6-Bis(tert-butyl)-4-methylphenol
78-87-5	1,2-Dichloropropane	141-78-6	Acetic acid ethyl ester
78-92-2	1-Methylpropyl alcohol	142-82-5	n-Heptane
78-93-3	2-Butanone	144-62-7	Oxalic acid
79-00-5	1,1,2-Trichloroethane	287-92-3	Cyclopentane
79-01-6	1,1,2-Trichloroethylene	309-00-2	Aldrin
79-10-7	2-Propenoic acid	319-84-6	alpha-BHC
79-34-5	1,1,2,2-Tetrachloroethane	319-85-7	beta-BHC
82-68-8	Pentachloronitrobenzene	465-73-6	Isodrin

Table A-1. Organic Constituents of Potential Concern Retained by the Regulatory Data Quality Objective Process

CAS #	Constituent	CAS #	Constituent
87-68-3	Hexachlorobutadiene	541-73-1	1,3-Dichlorobenzene
87-86-5	Pentachlorophenol	563-80-4	3-Methyl-2-butanone
88-85-7	2-sec-Butyl-4,6-dinitrophenol	591-78-6	2-Hexanone
88-89-1	Picric acid	624-83-9	Methyl isocyanate
92-52-4	1,1-Biphenyl	627-13-4	Nitric acid, propyl ester
95-47-6	o-Xylene	684-16-2	Hexafluoroacetone
95-50-1	1,2-Dichlorobenzene	1321-64-8	Pentachloronaphthalene
96-22-0	3-Pentanone	1335-87-1	Hexachloronaphthalene
98-86-2	Acetophenone	1335-88-2	Tetrachloronaphthalene
98-95-3	Nitrobenzene	1336-36-3	Polychlorinated biphenyls (PCBs)
100-00-5	p-Nitrochlorobenzene	2234-13-1	Octachloronaphthalene
100-25-4	1,4-Dinitrobenzene	3825-26-1	Ammonium perfluorooctanoate
100-41-4	Ethyl benzene	4170-30-3	2-Butenaldehyde (2-Butenal)
100-42-5	Styrene	8001-35-2	Toxaphene
106-35-4	3-Heptanone	10061-01-5	cis-1,3-Dichloropropene
106-42-3	p-Xylene	10061-02-6	trans-1,3-Dichloropropene
106-46-7	1,4-Dichlorobenzene		
PCBs			
31508-00-6	2,3',4,4',5- Pentachlorobiphenyl	69782-90-7	2,3,3',4,4',5'- Hexachlorobiphenyl
32598-13-3	3,3',4,4'-Tetrachlorobiphenyl	70362-50-4	3,4,4',5-Tetrachlorobiphenyl
32598-14-4	2,3,3',4,4'-Pentachlorobiphenyl	74472-37-0	2,3,4,4',5- Pentachlorobiphenyl
32774-16-6	3,3',4,4',5,5'- Hexachlorobiphenyl	no cas #	2,3,3',4,4',5,5'- Heptachlorobiphenyl
35065-29-3	2,2',3,4,4',5,5'- Heptachlorobiphenyl	no cas #	2',3,4,4',5- Pentachlorobiphenyl
35065-30-6	2,2',3,3',4,4',5- Heptachlorobiphenyl	no cas #	2,3',4,4',5,5'- Hexachlorobiphenyl
38380-08-4	2,3,3',4,4',5- Hexachlorobiphenyl	no cas #	3,3',4,4',5- Pentachlorobiphenyl

Table A-2. Inorganic Constituents of Potential Concern Retained by the Regulatory Data Quality Objective Process

CAS #	Metals	Constituent	CAS #	Ions	Constituent
7440-22-4	Ag	Silver	24959-67-9	Br	Bromide
7429-90-5	Al	Aluminum	16887-00-6	Cl	Chloride
7440-38-2	As	Arsenic	57-12-5	CN	Cyanide
7440-42-8	B	Boron	16984-48-8	F	Fluoride
7440-39-3	Ba	Barium	7553-56-2	I	Iodine
7440-41-7	Be	Beryllium	7664-41-7	NH4/NH3	Ammonia/Ammonium
7440-69-9	Bi	Bismuth	14797-65-0	NO2	Nitrite
7440-70-2	Ca	Calcium	14797-55-8	NO3	Nitrate
7440-43-9	Cd	Cadmium	14280-30-9	OH	Hydroxide
7440-48-4	Co	Cobalt	14265-44-2	PO4	Phosphate
18540-29-9	Cr	Chromium (and VI)	14808-79-8	SO4	Sulfate
7440-50-8	Cu	Copper	7440-36-0	Sb	Antimony
7439-89-6	Fe	Iron	7782-49-2	Se	Selenium
7439-97-6	Hg	Mercury	7440-21-3	Si	Silicon
7440-09-7	K	Potassium	7440-24-6	Sr	Strontium
7439-93-2	Li	Lithium	7440-31-5	Sn	Tin
7439-95-4	Mg	Magnesium	7440-25-7	Ta	Tantalum
7439-96-5	Mn	Manganese	7440-28-0	Tl	Thallium
7439-98-7	Mo	Molybdenum	7440-61-1	U	Uranium
7440-23-5	Na	Sodium	7440-62-2	V	Vanadium
7440-02-0	Ni	Nickel	7440-33-7	W	Tungsten
7723-14-0	P	Phosphorus	7440-65-5	Y	Yttrium
7439-92-1	Pb	Lead	7440-66-6	Zn	Zinc
7440-16-6	Rh	Rhodium	7440-67-7	Zr	Zirconium
63705-05-5	S	Total Sulfur			

Table A-3. Constituents of Potential Concern from the Environmental Protection Agency's Recommended Products of Incomplete Combustion List

CAS #	Constituent	CAS #	Constituent	CAS #	Constituent
			Organics		
50-00-0	Formaldehyde	99-35-4	1,3,5-Trinitrobenzene	218-01-9	Chrysene
51-28-5	2,4-Dinitrophenol	99-65-0	1,3-Dinitrobenzene	460-19-5	Cyanogen
51-79-6	Ethyl Carbamate (Urethane)	100-02-7	4-Nitrophenol	506-68-3	Cyanogen bromide
56-55-3	Benzo(a)anthracene	100-44-7	Benzyl chloride	506-77-4	Cyanogen chloride
57-24-9	Strychnine	100-52-7	Benzaldehyde	510-15-6	Chlorobenzilate
57-74-9	Chlordane	101-77-9	4,4-Methylenedianiline	528-29-0	o-Dinitrobenzene
60-11-7	Dimethyl aminoazobenzene	103-33-3	Azobenzene	532-27-4	2-Chloroacetophenone
62-50-0	Ethyl methanesulfonate	105-67-9	2,4-Dimethylphenol	534-52-1	4,6-Dinitro-o-cresol
62-53-3	Aniline	106-44-5	p-Cresol	540-73-8	1,2-Dimethylhydrazine
65-85-0	Benzoic acid	106-47-8	p-Chloroaniline	540-84-1	2,2,4-Trimethylpentane
67-72-1	Hexachloroethane	106-49-0	p-Toluidine	542-75-6	1,3-Dichloropropene
70-30-4	Hexachlorophene	106-51-4	Quinone	542-88-1	Dichloromethyl ether
72-43-5	Methoxychlor	106-89-8	Epichlorohydrin	584-84-9	2,4-Toluene diisocyanate
72-55-9	DDE	107-19-7	Propargyl alcohol	593-60-2	Bromoethene
74-95-3	Methylene bromide	107-21-1	Ethylene glycol	606-20-2	2,6-Dinitrotoluene
74-97-5	Bromochloromethane	107-98-2	Propylene gylcol monomethyl ether	608-93-5	Pentachlorobenzene
75-07-0	Acetaldehyde	108-05-4	Vinyl acetate	621-64-7	di-n-Propylnitrosamine
75-25-2	Bromoform	108-39-4	m-Cresol	630-20-6	1,1,1,2-Tetrachloroethane
75-27-4	Bromodichloromethane	108-60-1	Dichloroisopropyl ether	764-41-0	1,4-Dichloro-2-butene
75-29-6	2-Chloropropane	108-67-8	1,3,5-Trimethyl benzene	765-34-4	Glycidylaldehyde
75-44-5	Phosgene	109-77-3	Malononitrile	822-06-0	Hexamethylene-1,5-diisocyanate
76-01-7	Pentachloroethane	109-86-4	2-Methoxyethanol	823-40-5	Toluene-2,6-diamine
77-47-4	Hexachlorocyclopentadiene	110-80-5	2-Ethoxyethanol	924-16-3	N-Nitrosodi-n-butylamine
77-78-1	Dimethyl sulfate	111-15-9	Ethylene glycol monoethyl ether acetate	1120-71-4	1,3-Propane sultone
84-66-2	Diethyl phthalate	111-44-4	Bis(2-chloroethyl) ether	1634-04-4	Methyl tert-butyl ether
84-74-2	Dibutyl phthalate	111-76-2	Ethylene glycol monobutyl ether	1746-01-6	2,3,7,8-Tetrachlorodibenzo(p)dioxin
85-44-9	Phthalic anhydride	111-91-1	Bis(2-chloroethoxy)methane	3268-87-9	Octachlorodibenzo(p)dioxin
85-68-7	Butylbenzyl phthalate	117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	5385-75-1	Dibenzo(a,e)fluoranthene

Table A-3. Constituents of Potential Concern from the Environmental Protection Agency's Recommended Products of Incomplete Combustion List

CAS #	Constituent	CAS #	Constituent	CAS #	Constituent
88-06-2	2,4,6-Trichlorophenol	117-84-0	n-Dioctyl phthalate	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin
88-74-4	o-Nitroaniline	119-90-4	3,3'-Dimethoxybenzidine	23950-58-5	Pronamide
88-75-5	2-Nitrophenol	120-12-7	Anthracene	25013-15-4	Methyl styrene (mixed isomers)
90-04-0	o-Anisidine	120-83-2	2,4-Dichlorophenol	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin
91-20-3	Naphthalene	121-14-2	2,4-Dinitrotoluene	39001-02-0	Octachlorodibenzofuran
91-22-5	Quinoline	122-66-7	1,2-Diphenylhydrazine	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin
91-58-7	2-Chloronapthalene	123-33-1	Maleic hydrazide	40321-76-4	1,2,3,7,8-Pentachlorodibenzo(p)dioxin
91-94-1	3,3-Dichlorobenzidine	124-48-1	Chlorodibromomethane	41851-50-7	Chlorocyclopentadiene
94-59-7	Safrole	129-00-0	Pyrene	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran
94-75-7	2,4-D and esters	131-11-3	Dimethylphthalate	55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran
95-48-7	o-Cresol	131-89-5	2-Cyclohexyl-4,6-dinitrophenol	57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran
95-53-4	o-Toluidine	132-64-9	Dibenzofuran	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran
95-57-8	2-Chlorophenol	133-06-2	Captan	57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran
95-94-3	1,2,4,5-Tetrachlorobenzene	145-73-3	Endothall	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin
95-95-4	2,4,5-Trichlorophenol	156-60-5	trans-1,2-Dichloroethylene	60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran
96-12-8	1,2-Dibromo-3-chloropropane	191-24-2	Benzo(g,h,i)perylene	67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran
96-18-4	1,2,3-Trichloropropane	192-97-2	Benzo(e)pyrene	70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran
96-45-7	Ethylene thiourea	193-39-5	Indeno(1,2,3-cd)pyrene	72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran
97-63-2	Ethyl methacrylate	205-82-3	Benzo(j)fluoranthene	no CAS #	Dichloropentadiene
98-01-1	Furfural	205-99-2	Benzo(b)fluoranthene	no CAS#	Dibenzo(a,h)fluoranthene
98-07-7	Benzotrichloride	206-44-0	Fluoranthene		
98-82-8	Cumene	207-08-9	Benzo(k)fluoranthene		

Table A-4. Constituents of Potential Concern Identified During Bench-Scale Testing

CAS #	Constituent
74-88-4	Iodomethane
80-62-6	Methyl methacrylate
85-01-8	Phenanthrene
87-61-6	1,2,3-Trichlorobenzene
91-57-6	2-Methyl naphthalene
95-49-8	2-Chlorotoluene
95-63-6	1,2,4-Trimethyl benzene
98-06-6	tert-Butyl benzene
99-87-6	p-Cymene
100-51-6	Benzyl alcohol
103-65-1	n-Propyl benzene
104-51-8	n-Butyl benzene
106-43-4	4-Chlorotoluene
108-86-1	Bromobenzene
135-98-8	sec-Butyl benzene
156-59-2	cis-1,2-Dichloroethene

Table A-5. Organic Constituents of Potential Concern

Cas #	Constituent	Cas #	Constituent
Detected chemicals previously eliminated due to low toxicity		**Non-detected chemicals previously eliminated due to low toxicity (continued)**	
59-50-7	4-Chloro-3-methylphenol	75-99-0	2,2-Dichloropropionic acid
59-89-2	N-Nitrosomorpholine	76-03-9	Trichloroacetic acid
60-35-5	Acetamide	76-11-9	1,1,1,2-Tetrachloro-2,2-difluoroethane
74-99-7	Methylacetylene	76-12-0	1,1,2,2-Tetrachloro-1,2-difluoroethane
75-12-7	Formamide	76-15-3	Chloropentafluoroethane
75-50-3	Trimethylamine	88-72-2	2-Nitrotoluene
75-52-5	Nitromethane	92-93-3	4-Nitrobiphenyl
75-55-8	2-Methylaziridine	93-72-1	Silvex (2,4,5-TP)
78-83-1	2-Methylpropyl alcohol	93-76-5	2,4,5-T
79-09-4	Propionic acid	95-13-6	Indene
79-20-9	Methyl acetate	98-51-1	p-tert-Butyltoluene
83-32-9	Acenaphthene	100-21-0	p-Phthalic acid
86-73-7	Fluorene	101-55-3	4-Bromophenyl phenyl ether
96-69-5	Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	107-66-4	Dibutylphosphate
98-83-9	alpha-Methylstyrene	121-69-7	Dimethylaniline
101-84-8	Diphenyl ether	189-55-9	Dibenzo[a,i]pyrene
106-88-7	1,2-Epoxybutane	189-64-0	Dibenzo[a,h]pyrene
107-18-6	2-Propene-1-ol	191-30-0	Benzo[a,i]pyrene
107-31-3	Formic acid, methyl ester	192-65-4	Dibenzo[a,e]pyrene
108-03-2	1-Nitropropane	208-96-8	Acenaphthylene
108-20-3	Bis(isopropyl)ether	224-42-0	Dibenz[a,j]acridine
108-93-0	Cyclohexanol	226-36-8	Dibenz[a,h]acridine
110-62-3	n-Valeraldehyde	319-86-8	Delta-BHC
123-51-3	3-Methyl-1-butanol	540-59-0	1,2-Dichloroethylene
127-19-5	N,N-Dimethylacetamide	602-87-9	5-Nitroacenaphthene
141-79-7	4-Methyl-3-penten-2-one	603-34-9	Triphenylamine
Non-detected chemicals previously eliminated due to low toxicity		1321-65-9	Trichloronaphthalene
50-29-3	4,4-DDT	1582-09-8	Trifluralin
56-49-5	3-Methylcholanthrene	1836-75-5	Nitrofen
58-90-2	2,3,4,6-Tetrachlorophenol	3697-24-3	5-Methylchrysene
60-29-7	Ethyl ether	2385-85-5	Mirex
72-54-8	4,4-DDD	25551-13-7	Trimethyl benzene
75-61-6	Difluorodibromomethane	26140-60-3	Terphenyls
75-63-8	Trifluorobromomethane	27154-33-2	Trichlorofluoroethane

Table A-6. Radionuclide Constituents of Potential Concern

CAS #	Symbol	Constituent	CAS #	Symbol	Constituent
14952-40-0	^{227}Am	Actinium-227	14119-33-6	^{240}Pu	Plutonium-240
14596-10-2	^{241}Am	Americium-241	14119-32-5	^{241}Pu	Plutonium-241
14993-75-0	^{243}Am	Americium-243	13982-10-0	^{242}Pu	Plutonium-242
14234-35-6	^{125}Sb	Antimony-125	14331-85-2	^{231}Pa	Protactinium-231
13981-97-0	^{137m}Ba	Barium-137	13982-63-3	^{226}Ra	Radium-226
no CAS #	^{113m}Cd	Cadmium-113	15262-20-1	^{228}Ra	Radium-228
14762-75-5	^{14}C	Carbon-14	13967-48-1	^{106}Ru	Ruthenium-106
13967-70-9	^{134}Cs	Cesium-134	15715-94-3	^{151}Sm	Samarium-151
10045-97-3	^{137}Cs	Cesium-137	no CAS #	^{79}Se	Selenium-79
10198-40-0	^{60}Co	Cobalt-60	10098-97-2	^{90}Sr	Strontium-90
15510-73-3	^{242}Cm	Curium-242	14133-76-7	^{99}Tc	Technetium-99
15757-87-6	^{243}Cm	Curium-243	15594-54-4	^{229}Th	Thorium-229
13981-15-2	^{244}Cm	Curium-244	7440-29-1	^{232}Th	Thorium-232
14683-23-9	^{152}Eu	Europium-152	15832-50-5	^{126}Sn	Tin-126
15585-10-1	^{154}Eu	Europium-154	10028-17-8	^{3}H	Tritium
14391-16-3	^{155}Eu	Europium-155	14158-29-3	^{232}U	Uranium-232
15046-84-1	^{129}I	Iodine-129	13968-55-3	^{233}U	Uranium-233
13994-20-2	^{237}Np	Neptunium-237	13966-29-5	^{234}U	Uranium-234
14336-70-0	^{59}Ni	Nickel-59	15117-96-1	^{235}U	Uranium-235
13981-37-8	^{63}Ni	Nickel-63	13982-70-2	^{236}U	Uranium-236
7440-03-1	^{93m}Nb	Niobium-93	7440-61-1	^{238}U	Uranium-238
13981-16-3	^{238}Pu	Plutonium-238	10098-91-6	^{90}Y	Yttrium-90
15117-48-3	^{239}Pu	Plutonium-239	15751-77-6	^{93}Zr	Zirconium-93

Appendix B

Appendix B
Chemical-Specific Parameters and Supporting Equations for Human Health Risk Assessment

Appendix B1

Constituents of Potential Concern-Specific Parameters

Appendix B1
Constituents of Potential Concern-Specific Parameters

Database

A database will be developed for chemical-specific parameters that are used in the process of modeling concentrations for the screening level risk assessment. Values will be presented for the constituents of potential concern (COPCs), as identified in section 4 of this Work Plan, for the following parameters:

- MW: Molecular weight of COPC (g/mole)
- H: Henry's Law Constant (atm-m^3/mol)
- D_a: Diffusivity of COPC in air (cm^2/s)
- D_w: Diffusivity of COPC in water (cm^2/s)
- K_{ow}: Octanol/water partitioning coefficient (unitless)
- K_{oc}: Soil organic carbon-water partitioning coefficient (mL water/g soil)
- Kd_s: Soil-water partitioning coefficient (mL water/g soil)
- Kd_{sw}: Suspended sediment/surface water partitioning coefficient (L water/kg suspended sediment)
- Kd_{bs}: Bed sediment/sediment pore water partitioning coefficient (L COPC/kg water body)
- ksg: COPC soil loss due to biotic and abiotic degradation ($year^{-1}$)
- $t_{1/2}$: Half time of COPC in soil (days)
- F_v: Fraction of COPC air concetration in vapor phase (unitless)
- RCF: Root concentration factor (ug COPC/g DW plant)/(ug COPC/ml soil water) - (unitless)
- $Br_{rootveg}$: Plant-soil bioconcentration factor for belowground produce (ug COPC/g DW plant)/(ugCOPC/ml soil) - (unitless)
- Br_{forage}: Plant-soil bioconcentration factor in forage and silage (ug COPC/g DW plant)/(ug COPC/ml soil) - (unitless)
- Br_{grain}: Plant-soil bioconcentration factor in grain (ug COPC/g DW plant)/(ug COPC/ml soil) - (unitless)
- Bv_{ag}: COPC air-to-plant biotransfer factor for aboveground produce ((ug COPC/g DW plant)/(ug COPC/ml air) - (unitless)

- Bv_{forage}: COPC air-to-plant biotransfer factor for forage and silage ((ug COPC/g DW plant)/(ug COPC/ml air) - (unitless)
- Ba_{milk}: Biotransfer factor for milk (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
- Ba_{beef}: Biotransfer factor for beef (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
- Ba_{pork}: Biotransfer factor for pork (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
- Ba_{egg}: Biotransfer factor for eggs (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
- $Ba_{chicken}$: Biotransfer factor for chicken (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
- BCF_{fish}: Bioconcentration factor in fish (L/kg FW) OR (unitless)
- BAF_{fish}: Bioaccumulati0n factor in fish (mg COPC/kg FW tissue)/(mg COPC/L total water column)
- $BSAF_{fish}$: Biota-sediment accumulation factor in fish (mg COPC/kg lipid tissue)/(mg COPC/kg sediment) - (unitless)

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
Aromatic Halogenated Hydrocarbons									
2,3,4,6-Tetrachlorophenol	58-90-2	231.9	NA	3.55E-01	3.51E-06	Properties a	2.17E-02	RAIS b	7.10E-06
4-Chloro-3-methylphenol	59-50-7	142.58	NA	2.53E-01	2.50E-06	Properties a	6.96E-02	EPA6 calc c	8.06E-06
Aromatic Nonhalogenated Hydrocarbons									
2-Nitrotoluene	88-72-2	137.13	NA	5.81E+00	5.75E-05	Properties a	4.75E-02	RAIS b	8.67E-06
4-Nitrobiphenyl	92-93-3	199.21	NA	NA	NA	NA	5.57E-02	EPA6 calc c	6.45E-06
Benzaldehyde	100-52-7	106.12	NA	4.18E-05	4.18E-05	EPA6 e	7.07E-02	EPA6 e	9.48E-06
Benzene	71-43-2	78.11	NA	5.49E-03	5.49E-03	EPA6 e	1.17E-01	EPA6 e	1.02E-05
Benzyl alcohol	100-51-6	108.13	NA	3.78E-07	3.78E-07	EPA6 e	6.89E-02	EPA6 e	9.38E-06
Ethyl Benzene	100-41-4	106.16	NA	7.73E-03	7.73E-03	EPA6 e	7.65E-02	EPA6 e	8.49E-06
m-Xylene	108-38-3	106.16	NA	9.26E-06	9.26E-06	EPA6 e	7.69E-02	EPA6 e	8.49E-06
o-Xylene	95-47-6	106.16	NA	6.73E-06	6.73E-06	EPA6 e	7.69E-02	EPA6 e	8.44E-06
p-Xylene	106-42-3	106.16	NA	6.89E-06	6.89E-06	EPA6 e	7.61E+02	EPA6 e	8.50E-06
Styrene	100-42-5	104.14	NA	3.33E-03	3.33E-03	EPA6 e	7.73E-02	EPA6 e	8.77E-06
Toluene	108-88-3	92.13	NA	6.13E-03	6.13E-03	EPA6 e	9.72E-02	EPA6 e	9.23E-06
Non-aromatic Nonhalogenated Hydrocarbons									
1,2-Epoxybutane	106-88-7	72.12	NA	1.89E-02	4.61E-04	RAIS b	1.34E-01	RAIS b	1.03E-05
1,3-Butadiene	106-99-0	54.091	NA	7.46E+00	7.39E-02	Henry's f	1.33E-01	EPA6 calc c	1.54E-05
1,4-Dioxane	123-91-1	88.1	NA	4.89E-06	4.89E-06	EPA6 e	9.20E-02	EPA6 e	1.05E-05
1-Methylpropyl alcohol	78-92-2	74.122	NA	1.03E+00	1.02E-05	Properties a	1.08E-01	EPA6 calc c	1.25E-05
1-Nitropropane	108-03-2	89.09	NA	NA	NA	NA	9.53E-02	EPA6 calc c	1.10E-05
2,2,4-Trimethlylpentane	540-84-1	114.23	NA	3.05E+05	3.02E+00	Properties a	8.07E-02	EPA6 calc c	9.34E-06
2-Butanone	78-93-3	72.1	NA	3.61E-05	3.61E-05	EPA6 e	1.35E-01	EPA6 e	1.03E-05
2-Butenaldehyde (2-Butenal)	4170-30-3	70.091	NA	NA	NA	NA	1.12E-01	EPA6 calc c	1.29E-05
2-Ethoxyethanol	110-80-5	90.12	NA	5.13E-02	5.13E-02	Organics g	9.32E-02	RAIS b	9.76E-06
2-Heptanone	110-43-0	114.19	NA	1.46E+01	1.45E-04	Properties a	8.07E-02	EPA6 calc c	9.35E-06
2-Hexanone	591-78-6	100.16	NA	9.70E+00	9.60E-05	Properties a	8.81E-02	EPA6 calc c	1.02E-05
2-Methoxyethanol	109-86-4	76	NA	3.38E-05	8.24E-07	RAIS b	1.29E-01	RAIS b	9.57E-06
2-Methyl-2-propanol	75-65-0	74.122	NA	1.21E+00	1.20E-05	Properties a	1.08E-01	EPA6 calc c	1.25E-05

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
2-Methyl-2-propenenitrile	126-98-7	67.09	NA	2.39E-04	2.39E-04	EPA6 e	1.15E-01	EPA6 e	1.33E-05
2-Methylaziridine	75-55-8	57.1	NA	NA	NA	NA	1.28E-01	EPA6 calc c	1.48E-05
2-Methylpropyl alcohol	78-83-1	74.12	NA	1.21E+00	1.20E-05	Properties a	8.60E-02	RAIS b	9.30E-06
2-Pentanone	107-87-9	86.133	NA	6.52E+00	6.46E-05	Properties a	9.74E-02	EPA6 calc c	1.13E-05
2-Propanone (Acetone)	67-64-1	58.08	NA	2.88E-05	2.88E-05	EPA6 e	1.87E-01	EPA6 e	1.15E-05
2-Propene-1-ol	107-18-6	58.08	NA	5.06E-01	5.01E-06	Properties a	1.14E-01	RAIS b	1.14E-05
2-Propyl alcohol	67-63-0	60.096	NA	8.20E-01	8.12E-06	Properties a	1.24E-01	EPA6 calc c	1.43E-05
3-Heptanone	106-35-4	114.19	NA	NA	NA	NA	8.07E-02	EPA6 calc c	9.35E-06
3-Methyl-1-butanol	123-51-3	88.15	NA	NA	NA	NA	9.59E-02	EPA6 calc c	1.11E-05
3-Methyl-2-butanone	563-80-4	86.133	NA	NA	NA	NA	9.74E-02	EPA6 calc c	1.13E-05
3-Pentanone	96-22-0	86.133	NA	8.13E+00	8.05E-05	Properties a	9.74E-02	EPA6 calc c	1.13E-05
4-Heptanone	123-19-3	114.19	NA	NA	NA	NA	8.07E-02	EPA6 calc c	9.35E-06
4-Methyl-2-pentanone	108-10-1	100.16	NA	1.25E-04	1.25E-04	EPA6 e	8.59E-02	EPA6 e	8.36E-06
4-Methyl-3-penten-2-one	141-79-7	98.14	NA	NA	NA	NA	8.93E-02	EPA6 calc c	1.03E-05
5-Methyl-2-hexanone	110-12-3	114.19	NA	NA	NA	NA	8.07E-02	EPA6 calc c	9.35E-06
Acetaldehyde	75-07-0	44.05	NA	7.89E-05	7.89E-05	Chemfate i	2.72E-01	EPA6 e	1.33E-05
Acetamide	60-35-5	59.07	NA	3.53E-04	3.50E-09	Properties a	1.25E-01	EPA6 calc c	1.45E-05
Acetic acid	64-19-7	60.052	NA	3.05E-02	3.02E-07	Properties a	1.24E-01	EPA6 calc c	1.43E-05
Acetic acid ethyl ester	141-78-6	88.1	NA	1.36E+01	1.35E-04	Properties a	7.32E-02	RAIS b	9.66E-06
Acetic acid n-butyl ester	123-86-4	116.16	NA	3.34E+01	3.31E-04	Properties a	7.98E-02	EPA6 calc c	9.24E-06
Acetonitrile	75-05-8	41.05	NA	3.79E+01	3.79E+01	EPA6 e	3.14E-01	EPA6 e	1.40E-05
Acrolein	107-02-8	56.06	NA	9.34E-05	9.34E-05	EPA6 e	1.92E-01	EPA6 e	1.22E-05
Acrylonitrile	107-13-1	53.06	NA	9.90E-05	9.90E-05	EPA6 e	2.11E-01	EPA6 e	1.23E-05
Bis(isopropyl)ether	108-20-3	102.18	NA	NA	NA	NA	8.69E-02	EPA6 calc c	1.01E-05
Butane	106-97-8	58.123	NA	9.59E+01	9.50E-01	Henry's f	1.27E-01	EPA6 calc c	1.47E-05
Carbon disulfide	75-15-0	76.14	NA	1.27E-02	1.27E-02	EPA6 e	1.04E-01	EPA6 e	1.29E-05
Cyanogen	460-19-5	52.04	NA	2.03E-01	4.96E-03	RAIS b	2.04E-01	RAIS b	1.37E-05
Cyclohexane	110-82-7	84.161	NA	1.97E+04	1.95E-01	Properties a	9.89E-02	EPA6 calc c	1.15E-05
Cyclohexanone	108-94-1	98.2	NA	1.22E+00	1.20E-05	Properties a	7.84E-02	RAIS b	8.62E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
Cyclohexene	110-83-8	82.145	NA	4.02E+03	3.98E-02	Properties a	1.01E-01	EPA6 calc c	1.16E-05
Cyclopentane	287-92-3	70.134	NA	1.88E+04	1.86E-01	Properties a	1.12E-01	EPA6 calc c	1.29E-05
Ethyl alcohol	64-17-5	46.069	NA	6.29E-06	6.29E-06	Organics g	1.48E-01	EPA6 calc c	1.71E-05
Ethyl ether	60-29-7	74.12	NA	1.30E+02	1.29E-03	Properties a	7.40E-02	RAIS b	9.30E-06
Ethyl methacrylate	97-63-2	114.14	NA	1.38E-04	1.38E-04	EPA6 e	8.07E-02	EPA6 e	9.35E-06
Formaldehyde	50-00-0	30.03	NA	2.78E-04	2.78E-04	EPA6 e	5.00E-01	EPA6 e	1.74E-05
Formamide	75-12-7	45.04	NA	NA	NA	NA	1.50E-01	EPA6 calc c	1.74E-05
Formic acid	64-18-6	46.03	NA	2.49E-06	2.49E-06	EPA6 e	2.22E-01	EPA6 e	1.71E-05
Formic acid, methyl ester	107-31-3	60.05	NA	NA	NA	NA	1.24E-01	EPA6 calc c	1.43E-05
Glycidylaldehyde	765-34-4	72.07	NA	2.10E-05	5.11E-07	RAIS b	1.10E-01	EPA6 calc c	1.27E-05
Methyl acetate	79-20-9	74.08	NA	8.80E+00	8.71E-05	Properties a	1.04E-01	RAIS b	1.00E-05
Methyl alcohol	67-56-1	32.04	NA	1.44E-04	1.44E-04	EPA6 e	4.58E-01	EPA6 e	1.64E-05
Methyl isocyanate	624-83-9	57.052	NA	NA	NA	NA	1.28E-01	EPA6 calc c	1.48E-05
Methyl methacrylate	80-62-6	100.13	NA	3.21E+01	3.18E-04	Properties a	7.70E-02	RAIS b	8.60E-06
Methyl tert-butyl ether	1634-04-4	88.15	NA	5.95E+01	5.89E-04	Properties a	1.02E-01	RAIS b	1.05E-05
Methylacetylene	74-99-7	40.07	NA	NA	NA	NA	1.62E-01	EPA6 calc c	1.88E-05
Methylcyclohexane	108-87-2	98.188	NA	4.41E+04	4.36E-01	Properties a	8.93E-02	EPA6 calc c	1.03E-05
N,N-Dimethylacetamide	127-19-5	87.12	NA	NA	NA	NA	9.67E-02	EPA6 calc c	1.12E-05
n-Butyl alcohol	71-36-3	74.1	NA	8.60E-01	8.51E-06	Properties a	8.00E-02	RAIS b	9.30E-06
n-Heptane	142-82-5	100.2	NA	2.30E+05	2.28E+00	Properties a	8.81E-02	EPA6 calc c	1.02E-05
n-Hexane	110-54-3	86.177	NA	1.84E+05	1.82E+00	Properties a	9.74E-02	EPA6 calc c	1.13E-05
Nitromethane	75-52-5	61.04	NA	NA	NA	NA	1.23E-01	EPA6 calc c	1.42E-05
n-Nonane	111-84-2	128.26	NA	5.00E+05	4.95E+00	Properties a	7.47E-02	EPA6 calc c	8.65E-06
n-Octane	111-65-9	114.23	NA	3.27E+05	3.24E+00	Properties a	8.07E-02	EPA6 calc c	9.34E-06
n-Pentane	109-66-0	72.15	NA	1.27E+05	1.26E+00	Properties a	1.10E-01	EPA6 calc c	1.27E-05
n-Propionaldehyde	123-38-6	58.08	NA	7.49E+00	7.41E-05	Properties a	1.27E-01	EPA6 calc c	1.47E-05
n-Propyl alcohol	71-23-8	60.096	NA	NA	NA	NA	1.24E-01	EPA6 calc c	1.43E-05
n-Valeraldehyde	110-62-3	86.13	NA	NA	NA	NA	9.74E-02	EPA6 calc c	1.13E-05
Oxirane	75-21-8	44.05	NA	1.67E-04	1.67E-04	EPA6 e	2.71E-01	EPA6 e	1.44E-05

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
p-Cymene	99-87-6	134.22	NA	8.00E-01	7.92E-03	Henry's f	7.25E-02	EPA6 calc c	8.39E-06
Phosgene	75-44-5	98.916	NA	NA	NA	NA	8.88E-02	EPA6 calc c	1.03E-05
Propargyl alcohol	107-19-7	56.06	NA	3.51E-04	8.56E-06	RAIS b	1.81E-01	RAIS b	1.33E-05
Propionic acid	79-09-4	74.08	NA	4.50E-02	4.46E-07	Properties a	1.08E-01	EPA6 calc c	1.25E-05
Propionitrile	107-12-0	55.079	NA	3.75E+00	3.71E-05	Properties a	1.31E-01	EPA6 calc c	1.52E-05
Propylene glycol monomethyl ether	107-98-2	90	NA	4.26E-05	1.04E-06	RAIS b	7.17E-02	RAIS b	9.73E-06
p-tert-Butyltoluene	98-51-1	148.25	NA	NA	NA	NA	6.78E-02	EPA6 calc c	7.85E-06
Triethylamine	121-44-8	101.19	NA	NA	NA	NA	8.81E-02	RAIS b	7.88E-06
Trimethylamine	75-50-3	59.11	NA	1.05E+01	1.04E-04	Properties a	1.25E-01	EPA6 calc c	1.45E-05
Vinyl acetate	108-05-4	86.09	NA	5.50E-04	5.50E-04	EPA6 e	9.94E-02	EPA6 e	1.00E-05
Non-aromatic Halogenated Hydrocarbons									
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	203.83	NA	NA	NA	NA	5.49E-02	EPA6 calc c	6.35E-06
1,1,1,2-Tetrachloroethane	630-20-6	167.85	NA	2.44E-03	2.44E-03	EPA6 e	3.15E-02	EPA6 e	9.30E-06
1,1,1-Trichloroethane	71-55-6	133.42	NA	1.86E-02	1.86E-02	EPA6 e	4.66E-02	EPA6 e	9.56E-06
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	203.83	NA	9.87E+03	9.77E-02	Properties a	5.49E-02	EPA6 calc c	6.35E-06
1,1,2,2-Tetrachloroethane	79-34-5	167.86	NA	3.72E-04	3.72E-04	EPA6 e	3.16E-02	EPA6 e	9.26E-06
1,1,2,2-Tetrachloroethene	127-18-4	165.85	NA	1.73E-02	1.73E-02	EPA6 e	7.20E-02	EPA6 e	8.20E-06
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	187.38	NA	5.33E+04	5.28E-01	Properties a	2.88E-02	RAIS b	8.07E-06
1,1,2-Trichloroethane	79-00-5	133.42	NA	1.00E-03	1.00E-03	EPA6 e	4.51E-02	EPA6 e	1.00E-05
1,1,2-Trichloroethylene	79-01-6	131.4	NA	1.06E-02	1.06E-02	EPA6 e	4.65E-02	EPA6 e	9.94E-06
1,1-Dichloroethane	75-34-3	98.97	NA	5.75E-03	5.75E-03	EPA6 e	7.42E-02	EPA6 e	1.05E-05
1,1-Dichloroethene	75-35-4	96.95	NA	2.55E-02	2.55E-02	EPA6 e	7.53E-02	EPA6 e	1.09E-05
1,2,3-Trichloropropane	96-18-4	147.43	NA	3.80E-04	3.80E-04	EPA6 e	3.99E-02	EPA6 e	9.24E-06
1,2-dibromo-3-chloropropane	96-12-8	236.36	NA	1.97E-04	1.97E-04	EPA6 e	1.79E-02	EPA6 e	8.79E-06
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	170.92	NA	NA	NA	NA	6.17E-02	EPA6 calc c	7.14E-06
1,2-Dichloroethane	107-06-2	98.96	NA	1.27E-03	1.27E-03	EPA6 e	7.19E-02	EPA6 e	1.10E-05
1,2-Dichloroethylene	540-59-0	96.94	NA	7.61E-01	7.53E-03	Henry's f	9.00E-02	EPA6 calc c	1.04E-05
1,2-Dichloropropane	78-87-5	112.99	NA	2.81E-03	2.81E-03	EPA6 e	6.21E-02	EPA6 e	9.71E-06
1,3-Dichloropropene	542-75-6	110.98	NA	2.94E-03	2.94E-03	EPA6 e	6.26E-02	EPA6 e	1.00E-05

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H ($atm*m^3/mol$)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
1,4-Dichloro-2-butene	764-41-0	125	NA	1.06E-02	2.59E-04	RAIS b	7.60E-02	EPA6 calc c	8.80E-06
1-Chloroethene	75-01-4	62.5	NA	3.15E-01	3.15E-01	EPA6 e	1.58E-01	EPA6 e	1.19E-05
2,2-Dichloropropionic acid	75-99-0	142.97	NA	6.43E-08	6.43E-08	Chemfate i	6.95E-02	EPA6 calc c	8.05E-06
2-Chloropropane	75-29-6	78.541	NA	1.65E+03	1.64E-02	Properties a	1.04E-01	EPA6 calc c	1.20E-05
3-Chloropropene (allyl chloride)	107-05-1	76.526	NA	1.10E+00	1.09E-02	Henry's f	1.05E-01	EPA6 calc c	1.22E-05
Bromochloromethane	74-97-5	129.39	NA	1.06E+03	2.59E+01	RAIS b	4.74E-02	RAIS b	1.00E-05
Bromodichloromethane	75-27-4	163.83	NA	3.17E-03	3.17E-03	EPA6 e	2.98E-02	EPA6 e	1.06E-05
Bromoethene	593-60-2	106.95	NA	2.76E-01	6.74E-03	RAIS b	8.43E-02	EPA6 calc c	9.76E-06
Bromoform	75-25-2	252.77	NA	6.16E-04	6.16E-04	EPA6 e	1.41E-02	EPA6 e	1.03E-05
Bromomethane	74-83-9	94.95	NA	1.41E-02	1.41E-02	EPA6 e	7.28E-02	EPA6 e	1.21E-05
Carbon tetrachloride	56-23-5	153.84	NA	2.87E-02	2.87E-02	EPA6 e	3.56E-02	EPA6 e	9.77E-06
Chlordibromomethane	124-48-1	208.3	NA	1.21E-03	1.21E-03	EPA6 e	1.96E-02	EPA6 e	1.05E-05
Chlorodifluoromethane	75-45-6	86.47	NA	1.68E-01	1.68E-01	EPA6 e	9.72E-02	EPA6 e	1.13E-05
Chloroethane	75-00-3	64.52	NA	1.80E+00	1.80E+00	EPA6 e	1.27E-01	EPA6 e	1.53E-06
Chloroform	67-66-3	119.39	NA	4.03E-03	4.03E-03	EPA6 e	5.17E-02	EPA6 e	1.09E-05
Chloromethane	74-87-3	50.49	NA	4.52E-02	4.52E-02	EPA6 e	2.13E-01	EPA6 e	1.39E-05
Chloropentafluoroethane	76-15-3	154.47	NA	NA	NA	NA	6.60E-02	EPA6 calc c	7.64E-06
cis-1,2-Dichloroethene	156-59-2	96.94	NA	4.51E-03	4.51E-03	EPA6 e	7.36E-02	EPA6 e	1.13E-05
cis-1,3-Dichloropropene	10061-01-5	110.97	NA	NA	NA	NA	8.23E-02	EPA6 calc c	9.53E-06
Cyanogen bromide	506-68-3	105.92	NA	NA	NA	NA	8.49E-02	EPA6 calc c	9.83E-06
Cyanogen chloride	506-77-4	61.471	NA	NA	NA	NA	1.22E-01	EPA6 calc c	1.41E-05
Dichlorodifluoromethane	75-71-8	120.92	NA	2.58E+00	2.58E+00	EPA6 e	7.77E-02	EPA6 e	9.00E-06
Dichlorofluoromethane	75-43-4	102.92	NA	NA	NA	NA	8.65E-02	EPA6 calc c	1.00E-05
Dichloromethane	75-09-2	84.94	NA	2.38E-03	2.38E-03	EPA6 e	8.69E-02	EPA6 e	1.25E-05
Difluorodibromomethane	75-61-6	209.82	NA	NA	NA	NA	5.38E-02	EPA6 calc c	6.23E-06
Hexafluoroacetone	684-16-2	166.02	NA	NA	NA	NA	6.29E-02	EPA6 calc c	7.28E-06
Iodomethane	74-88-4	141.939	NA	5.55E+02	5.49E-03	Properties a	6.98E-02	EPA6 calc c	8.09E-06
Methylene bromide	74-95-3	173.86	NA	2.64E-02	2.64E-02	EPA6 e	6.10E-02	EPA6 e	7.06E-06
Pentachloroethane	76-01-7	202.29	NA	2.48E+02	2.45E-03	Properties a	5.51E-02	EPA6 calc c	6.38E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
trans-1,2-Dichloroethene	156-60-5	96.95	NA	7.44E-03	7.44E-03	EPA6 e	8.16E-02	EPA6 e	9.75E-06
trans-1,3-Dichloropropene	10061-02-6	110.97	NA	NA	NA	NA	8.23E-02	EPA6 calc c	9.53E-06
Trichloroacetic acid	76-03-9	163.39	NA	1.80E-07	1.80E-07	EPA6 calc c	6.36E-02	EPA6 calc c	7.36E-06
Trichlorofluoroethane	27154-33-2	151.4	NA	NA	NA	NA	6.69E-02	EPA6 calc c	7.74E-06
Trichlorofluoromethane	75-69-4	137.38	NA	1.37E-01	1.37E-01	EPA6 e	4.27E-02	EPA6 e	1.00E-05
Trifluorobromomethane	75-63-8	148.91	NA	NA	NA	NA	6.76E-02	EPA6 calc c	7.83E-06
Dioxin and Furan Compounds									
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	425.31	NA	7.50E-06	7.50E-06	EPA6 e	1.11E-02	EPA6 e	3.89E-06
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	409.31	NA	5.30E-05	5.30E-05	EPA6 e	1.55E-02	EPA6 e	3.99E-06
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	409.31	NA	5.30E-05	5.30E-05	EPA6 e	1.55E-02	EPA6 e	3.99E-06
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	390.87	NA	1.20E-05	1.20E-05	EPA6 e	1.15E-02	EPA6 e	4.12E-06
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	374.87	NA	1.40E-05	1.40E-05	EPA6 e	1.62E-02	EPA6 e	4.23E-06
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	390.87	NA	1.20E-05	1.20E-05	EPA6 e	1.15E-02	EPA6 e	4.12E-06
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	374.87	NA	6.10E-06	6.10E-06	EPA6 e	1.62E-02	EPA6 e	4.23E-06
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	390.87	NA	1.20E-05	1.20E-05	EPA6 e	1.15E-02	EPA6 e	4.12E-06
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	374.87	NA	1.00E-05	1.00E-05	EPA6 e	1.62E-02	EPA6 e	4.23E-06
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	356.42	NA	2.60E-06	2.60E-06	EPA6 e	1.21E-02	EPA6 e	4.38E-06
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	340.42	NA	6.20E-06	6.20E-06	EPA6 e	1.70E-02	EPA6 e	4.51E-06
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	374.87	NA	1.00E-05	1.00E-05	EPA6 e	1.62E-02	EPA6 e	4.23E-06
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	340.42	NA	6.20E-06	6.20E-06	EPA6 e	1.70E-02	EPA6 e	4.51E-06
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	321.98	NA	1.60E-05	1.60E-05	EPA6 e	1.27E-02	EPA6 e	6.81E-06
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	305.98	NA	8.60E-06	8.60E-06	EPA6 e	1.79E-02	EPA6 e	4.85E-06
Dibenzofuran	132-64-9	168.19	NA	1.30E-05	1.30E-05	EPA9 h	6.24E-02	EPA6 calc c	7.22E-06
Octachlorodibenzo(p)dioxin	3268-87-9	459.75	NA	7.00E-09	7.00E-09	EPA6 e	1.06E-02	EPA6 e	3.69E-07
Octachlorodibenzofuran	39001-02-0	444.76	NA	1.90E-06	1.90E-06	EPA6 e	1.48E-02	EPA6 e	3.78E-06
PCBs									
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	395.33	NA	1.93E+01	1.91E-04	Properties a	3.53E-02	EPA6 calc c	4.08E-06
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	395.33	NA	3.04E+01	3.01E-04	Properties a	3.53E-02	EPA6 calc c	4.08E-06
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	360.88	NA	NA	NA	NA	3.75E-02	EPA6 calc c	4.34E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m³/mol)	Source	D_a (cm²/s)	Source	D_w (cm²/s)
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	395.33	NA	NA	NA	NA	3.53E-02	EPA6 calc c	4.08E-06
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	360.88	NA	NA	NA	NA	3.75E-02	EPA6 calc c	4.34E-06
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	326.44	NA	NA	NA	NA	4.01E-02	EPA6 calc c	4.64E-06
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	360.88	NA	NA	NA	NA	3.75E-02	EPA6 calc c	4.34E-06
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	326.44	NA	NA	NA	NA	4.01E-02	EPA6 calc c	4.64E-06
2',3,4,4',5-Pentachlorobiphenyl	no cas #	326.44	NA	NA	NA	NA	4.01E-02	EPA6 calc c	4.64E-06
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	326.44	NA	NA	NA	NA	4.01E-02	EPA6 calc c	4.64E-06
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	360.88	NA	5.98E+00	5.92E-05	Properties a	3.75E-02	EPA6 calc c	4.34E-06
3,3',4,4',5-Pentachlorobiphenyl	no cas #	326.44	NA	NA	NA	NA	4.01E-02	EPA6 calc c	4.64E-06
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	291.99	NA	NA	NA	NA	4.32E-02	EPA6 calc c	5.00E-06
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	291.99	NA	NA	NA		4.32E-02	EPA6 calc c	5.00E-06
Polychlorinated biphenyls (PCBs)**	1336-36-3	NA	NA	3.54E-02	8.64E-04	RAIS b	1.75E-02	RAIS b	8.00E-06
Phthalates									
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	390.54	NA	1.10E-08	1.10E-08	EPA6 e	1.32E-02	EPA6 e	4.22E-06
Butylbenzyl phthalate	85-68-7	312.39	NA	1.91E-06	1.91E-06	EPA6 e	1.65E-02	EPA6 e	5.17E-06
Dibutyl phthalate	84-74-2	278.34	NA	1.43E-06	1.43E-06	EPA6 e	4.38E-02	EPA6 e	7.86E-06
Diethyl phthalate	84-66-2	222.24	NA	5.48E-07	5.48E-07	EPA6 e	2.56E-02	EPA6 e	6.35E-06
Dimethyl phthalate	131-11-3	194.19	NA	1.01E-07	1.01E-07	EPA6 e	2.96E-02	EPA6 e	7.13E-06
n-Dioctyl phthalate	117-84-0	390.56	NA	7.68E-07	7.68E-07	EPA6 e	1.32E-02	EPA6 e	4.20E-06
Light Polycyclic Aromatic Hydrocarbons									
2-Chloronaphthalene	91-58-7	162.61	NA	1.43E-04	1.43E-04	EPA6 e	3.64E-02	EPA6 e	8.24E-06
2-Methyl naphthalene	91-57-6	142.2	NA	4.05E+01	4.01E-04	Properties a	6.97E-02	EPA6 calc c	8.08E-06
5-Nitroacenaphthene	602-87-9	199.21	NA	NA	NA	NA	5.57E-02	EPA6 calc c	6.45E-06
Acenaphthene	83-32-9	154.21	NA	2.00E-04	2.00E-04	EPA6 e	4.21E-02	EPA6 e	7.19E-06
Acenaphthylene	208-96-8	152.21	NA	1.19E+01	1.18E-04	Properties a	4.39E-02	RAIS b	7.53E-06
Anthracene	120-12-7	178.22	NA	1.11E-04	1.11E-04	EPA6 e	3.24E-02	EPA6 e	7.74E-06
Fluorene	86-73-7	166.22	NA	8.50E+00	8.42E-05	Properties a	3.63E-02	RAIS b	7.88E-06
Indene	95-13-6	116.16	NA	NA	NA	NA	7.98E-02	EPA6 calc c	9.24E-06
Napthalene	91-20-3	128.16	NA	4.82E-04	4.82E-04	EPA6 e	5.26E-02	EPA6 e	8.92E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
Phenanthrene	85-01-8	178.22	NA	1.88E-01	1.88E-01	EPA6 e	3.33E-02	EPA6 e	7.47E-06
Pyrene	129-00-0	202.24	NA	1.14E-08	1.14E-08	EPA6 e	2.72E-02	EPA6 e	7.14E-06
Heavy Polycyclic Aromatic Hydrocarbons									
3-Methylcholanthrene	56-49-5	268.36	NA	1.24E-07	1.24E-07	EPA6 calc c	4.57E-02	EPA6 calc c	5.29E-06
5-Methylchrysene	3697-24-3	242.32	NA	NA	NA	NA	4.89E-02	EPA6 calc c	5.66E-06
Benzo(a)anthracene	56-55-3	228.28	NA	3.62E-06	3.62E-06	EPA6 e	2.47E-02	EPA6 e	6.21E-06
Benzo(a)pyrene	50-32-8	252.3	NA	8.36E-07	8.36E-07	EPA6 e	2.18E-02	EPA6 e	5.85E-06
Benzo(b)fluoranthene	205-99-2	252.32	NA	6.18E-06	6.18E-06	EPA6 e	2.28E-02	EPA6 e	5.49E-06
Benzo(e)pyrene	192-97-2	252.31	NA	4.62E-07	4.62E-07	EPA6 calc c	4.76E-02	EPA6 calc c	5.51E-06
Benzo(g,h,i)perylene	191-24-2	276.34	NA	7.09E-01	7.02E-06	Properties a	4.48E-02	EPA6 calc c	5.19E-06
Benzo(j)fluoranthene	205-82-3	252.31	NA	NA	NA	NA	4.76E-02	EPA6 calc c	5.51E-06
Benzo(k)fluoranthene	207-08-9	252.32	NA	4.15E-07	4.15E-07	EPA6 e	2.28E-02	EPA6 e	5.49E-06
Benzo[a,i]pyrene	191-30-0	302.37	NA	NA	NA	NA	4.22E-02	EPA6 calc c	4.88E-06
Chrysene	218-01-9	228.28	NA	1.21E-06	1.21E-06	EPA6 e	2.48E-02	EPA6 e	6.21E-06
Dibenz(a,h)anthracene	53-70-3	278.33	NA	1.12E-08	1.12E-08	EPA6 e	1.80E-02	EPA6 e	6.01E-06
Dibenz[a,h]acridine	226-36-8	279.34	NA	NA	NA	NA	4.45E-02	EPA6 calc c	5.15E-06
Dibenz[a,j]acridine	224-42-0	279.34	NA	NA	NA	NA	4.45E-02	EPA6 calc c	5.15E-06
Dibenzo(a,e)fluoranthene	5385-75-1	302.37	NA	NA	NA	NA	4.22E-02	EPA6 calc c	4.88E-06
Dibenzo(a,h)fluoranthene	no cas #	302.37	NA	NA	NA	NA	4.22E-02	EPA6 calc c	4.88E-06
Dibenzo[a,e]pyrene	192-65-4	302.37	NA	NA	NA	NA	4.22E-02	EPA6 calc c	4.88E-06
Dibenzo[a,h]pyrene	189-64-0	302.37	NA	NA	NA	NA	4.22E-02	EPA6 calc c	4.88E-06
Dibenzo[a,i]pyrene	189-55-9	302.37	NA	NA	NA	NA	4.22E-02	EPA6 calc c	4.88E-06
Fluoranthene	206-44-0	202.26	NA	9.33E-06	9.33E-06	EPA6 e	2.75E-02	EPA6 e	7.18E-06
Hexachloronaphthalene	1335-87-1	334.84	NA	NA	NA	NA	3.94E-02	EPA6 calc c	4.56E-06
Indeno(1,2,3-cd)pyrene	193-39-5	276.34	NA	4.86E-09	4.86E-09	EPA6 e	1.90E-02	EPA6 e	5.66E-06
Octachloronaphthalene	2234-13-1	403.73	NA	NA	NA	NA	3.48E-02	EPA6 calc c	4.03E-06
Pentachloronaphthalene	1321-64-8	300.4	NA	NA	NA	NA	4.24E-02	EPA6 calc c	4.90E-06
Tetrachloronaphthalene	1335-88-2	265.95	NA	NA	NA	NA	4.59E-02	EPA6 calc c	5.32E-06
Trichloronaphthalene	1321-65-9	231.51	NA	NA	NA	NA	5.04E-02	EPA6 calc c	5.84E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
Light Substituted Benzene Compounds									
1,2,3-Trichlorobenzene	87-61-6	181.46	NA	2.84E-03	2.84E-03	EPA6 e	3.02E-02	EPA6 e	8.15E-06
1,2,4-Trichlorobenzene	120-82-1	181.46	NA	2.61E-03	2.61E-03	EPA6 e	3.00E-02	EPA6 e	8.23E-06
1,2,4-Trimethlyl benzene	25551-13-7	120.19	NA	NA	NA	NA	7.80E-02	EPA6 calc c	9.03E-06
1,2,4-Trimethyl benzene	95-63-6	120.19	NA	5.81E+02	5.75E-03	Properties a	7.80E-02	EPA6 calc c	9.03E-06
1,2-Dichlorobenzene	95-50-1	147.01	NA	2.11E-03	2.11E-03	EPA6 e	4.11E-02	EPA6 e	8.93E-06
1,3,5-Trimethyl benzene	108-67-8	120.19	NA	7.81E-03	7.81E-03	EPA6 e	6.48E-02	EPA6 e	7.86E-06
1,3-Dichlorobenzene	541-73-1	147.01	NA	1.11E+02	1.11E+02	EPA6 e	4.14E-02	EPA6 e	8.85E-06
1,3-Dinitrobenzene	99-65-0	168.11	NA	1.25E-07	1.25E-07	EPA6 e	3.18E-02	EPA6 e	9.15E-06
1,4-Dichlorobenzene	106-46-7	147.01	NA	2.80E-03	2.80E-03	EPA6 e	4.14E-02	EPA6 e	8.85E-06
1,4-Dinitrobenzene	100-25-4	168.11	NA	NA	NA	NA	6.24E-02	EPA6 calc c	7.22E-06
2,4,5-Trichorophenol	95-95-4	197.46	7	5.64E-06	5.64E-06	EPA6 e	2.91E-02	EPA6 e	7.03E-06
2,4,6-Trichlorophenol	88-06-2	197.46	7	4.06E-06	4.06E-06	EPA6 e	2.62E-02	EPA6 e	8.08E-06
2,4-Dichlorophenol	120-83-2	163.01	7	2.38E-07	2.38E-07	EPA6 e	2.69E-02	EPA6 e	7.79E-06
2,4-Dimethylphenol	105-67-9	122.17	7	4.27E-09	4.27E-09	EPA6 e	5.84E-02	EPA6 e	8.69E-06
2,4-Dinitrophenol	51-28-5	184.11	7	4.82E-09	4.82E-09	EPA6 e	2.73E-02	EPA6 e	9.06E-06
2,4-Dinitrotoluene	121-14-2	182.14	NA	1.46E-07	1.46E-07	EPA6 e	3.09E-02	EPA6 e	7.86E-06
2,6-Dinitrotoluene	606-20-2	182.15	NA	1.30E-07	1.30E-07	EPA6 e	3.11E-02	EPA6 e	7.76E-06
2-Chlorotoluene	95-49-8	126.59	NA	6.41E-02	6.35E-04	Henry's f	7.54E-02	EPA6 calc c	8.73E-06
2-Chorophenol	95-57-8	128.56	NA	1.66E-05	1.66E-05	EPA6 e	5.01E-02	EPA6 e	9.46E-06
2-Nitrophenol	88-75-5	139.11	NA	1.46E-05	1.46E-05	EPA6 e	4.44E-02	EPA6 e	9.19E-06
4,6-Dinitro-o-cresol	534-52-1	198.13	NA	5.76E-05	1.40E-06	RAIS b	2.93E-02	RAIS b	6.91E-06
4-Chlorotoluene	106-43-4	126.59	NA	NA	NA	NA	7.54E-02	EPA6 calc c	8.73E-06
4-Nitrophenol	100-02-7	139.11	NA	7.32E-09	7.32E-09	EPA6 e	4.30E-02	EPA6 e	9.61E-06
alpha-Methylstyrene	98-83-9	118.18	NA	2.42E-01	5.91E-03	RAIS b	2.64E-01	RAIS b	1.14E-05
Aniline	62-53-3	93.12	NA	2.28E-06	2.28E-06	EPA6 e	8.56E-01	EPA6 e	1.01E-05
Benzotrichloride	98-07-7	195.47	NA	4.02E-02	9.81E-04	RAIS b	2.75E-02	RAIS b	7.77E-06
Benzyl Chloride	100-44-7	126.58	NA	4.13E-04	4.13E-04	EPA6 e	5.43E-02	EPA6 e	8.80E-06
Bromobenzene	108-86-1	157.01	NA	2.11E+02	2.09E-03	Properties a	6.53E-02	EPA6 calc c	7.56E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m³/mol)	Source	D_a (cm²/s)	Source	D_w (cm²/s)
Chlorobenzene	108-90-7	112.56	NA	4.38E-03	4.38E-03	EPA6 e	6.35E-02	EPA6 e	9.49E-06
Cumene	98-82-8	120.19	NA	1.29E-02	1.29E-02	EPA6 e	6.50E-02	EPA6 e	7.83E-06
m-Cresol	108-39-4	108.13	NA	8.93E-07	8.93E-07	EPA6 e	6.93E-02	EPA6 e	9.30E-06
n-Butyl benzene	104-51-8	134.22	NA	1.30E+03	1.29E-02	Properties a	7.25E-02	EPA6 calc c	8.39E-06
Nitrobenzene	98-95-3	123.11	NA	2.06E-05	2.06E-05	EPA6 e	5.43E-02	EPA6 e	9.43E-06
n-Propyl benzene	103-65-1	120.19	NA	1.11E+03	1.10E-02	Properties a	7.80E-02	EPA6 calc c	9.03E-06
o-Cresol	95-48-7	108.13	NA	1.62E-06	1.62E-06	EPA6 e	6.88E-02	EPA6 e	9.41E-06
o-Dinitrobenzene	528-29-0	168.11	NA	NA	NA	NA	6.24E-02	EPA6 calc c	7.22E-06
o-Nitroaniline	88-74-4	138.12	NA	1.17E-06	1.17E-06	EPA6 e	4.29E-02	EPA6 e	9.81E-06
o-Toluidine	95-53-4	107.15	NA	2.43E-06	2.43E-06	EPA6 e	7.14E-02	EPA6 e	9.12E-06
p-Chloroaniline	106-47-8	127.57	NA	1.17E-06	1.17E-06	EPA6 e	4.80E-02	EPA6 e	1.02E-05
p-Cresol	106-44-5	108.13	NA	7.99E-07	7.99E-07	EPA6 e	6.93E-02	EPA6 e	9.30E-06
Phenol	108-95-2	94.11	NA**	5.95E-07	5.95E-07	EPA6 e	8.27E-02	EPA6 e	1.03E-05
p-Nitrochlorobenzene	100-00-5	157.56	7	NA	NA	NA	6.51E-02	EPA6 calc c	7.54E-06
p-Toluidine	106-49-0	107.17	NA	6.56E-01	6.50E-06	Properties a	6.98E-02	RAIS b	9.43E-06
sec-Butyl benzene	135-98-8	134.22	NA	1.40E+03	1.39E-02	Properties a	7.25E-02	EPA6 calc c	8.39E-06
tert-Butyl benzene	98-06-6	134.22	NA	1.20E+03	1.19E-02	Properties a	7.25E-02	EPA6 calc c	8.39E-06
Toluene-2,6-diamine	823-40-5	122.17	NA	5.08E-10	1.24E-11	RAIS b	5.59E-02	RAIS b	9.23E-06
Other Light Semivolatile Compounds									
1,1 Dimethyl hydrazine	57-14-7	60.099	NA	6.72E-05	1.64E-06	RAIS b	1.06E-01	RAIS b	1.09E-05
1,1-Biphenyl	92-52-4	154.21	NA	2.80E+01	2.77E-04	Properties a	6.61E-02	EPA6 calc c	7.65E-06
1,2 Diphenylhydrazine	122-66-7	184.24	NA	1.28E-07	1.28E-07	EPA6 e	2.95E-02	EPA6 e	7.24E-06
1,2-Dimethylhydrazine	540-73-8	60.099	NA	NA	NA	NA	1.24E-01	EPA6 calc c	1.43E-05
1,3-Propane sultone	1120-71-4	122.1	NA	NA	NA	NA	7.72E-02	EPA6 calc c	8.94E-06
2,4-Toluene diisocyanate	584-84-9	174.16	NA	NA	NA	NA	6.09E-02	EPA6 calc c	7.05E-06
2-Chloroacetophenone	532-27-4	154.6	NA	3.57E-05	8.71E-07	RAIS b	3.83E-02	RAIS b	8.71E-06
2-Propenoic acid	79-10-7	72.06	NA	4.20E-02	4.16E-07	Properties a	9.80E-02	RAIS b	1.06E-05
4,4-Methylenedianiline	101-77-9	198.27	NA	1.15E-06	2.81E-08	RAIS b	3.56E-02	RAIS b	5.39E-06
Acetophenone	98-86-2	120.5	NA	1.03E-05	1.03E-05	EPA6 e	6.00E-02	EPA6 e	8.73E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
Benzoic acid	65-85-0	122.13	7	6.31E-05	1.54E-06	RAIS b	5.36E-02	RAIS b	7.97E-06
bis(2-Chloroethoxy)methane	111-91-1	173.04	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	111-44-4	143.02	NA	2.13E-05	2.13E-05	EPA6 e	4.40E-02	EPA6 e	8.70E-06
Chlorocyclopentadiene	41851-50-7	100.55	NA	9.18E-01	2.24E-02	RAIS b	8.79E-02	EPA6 calc c	1.02E-05
Cyclohexanol	108-93-0	100.16	NA	5.81E-01	5.75E-06	Properties a	8.81E-02	EPA6 calc c	1.02E-05
Dichloroisopropyl ether	108-60-1	171.07	NA	1.14E+01	1.13E-04	Properties a	3.50E-02	RAIS b	7.36E-06
Dichloromethyl ether	542-88-1	114.96	NA	3.70E-03	9.03E-05	RAIS b	5.73E-02	EPA6 calc c	9.38E-06
Dichloropentadiene	no cas #	137.01	NA	NA	NA	NA	7.15E-02	EPA6 calc c	8.28E-06
Dimethyl sulfate	77-78-1	126.14	NA	1.65E-04	4.01E-06	RAIS b	5.14E-02	RAIS b	9.57E-06
Dimethylaniline	121-69-7	121.18	NA	5.68E-04	1.39E-05	RAIS b	1.53E-01	RAIS b	1.41E-05
di-n-propylnitrosamine	621-64-7	130.19	NA	5.43E-08	5.43E-08	EPA6 e	5.67E-02	EPA6 e	7.75E-06
Diphenyl ether	101-84-8	170.21	NA	2.51E+01	2.49E-04	Properties a	6.19E-02	EPA6 calc c	7.16E-06
Epichlorohydrin	106-89-8	92.53	NA	3.08E-05	3.08E-05	EPA6 e	8.13E-02	EPA6 e	1.10E-05
Ethyl carbomate (urethane)	51-79-6	89.094	NA	NA	NA	NA	9.52E-02	EPA6 calc c	1.10E-05
Ethyl methane sulfanate	62-50-0	124.15	NA	8.87E-08	8.87E-08	EPA6 e	7.63E-02	EPA6 e	8.84E-06
Ethylene dibromide	106-93-4	187.88	NA	4.47E-04	4.47E-04	EPA6 e	2.17E-02	EPA6 e	1.19E-05
Ethylene glycol	107-21-1	62.08	NA	7.38E-08	1.80E-09	RAIS b	1.08E-01	RAIS b	1.22E-05
Ethylene glycol monobutyl ether	111-76-2	118	NA	2.15E-05	5.26E-07	RAIS b	6.51E-02	RAIS b	8.15E-06
Ethylene glycol monoethyl ether acetate	111-15-9	148.17	NA	7.28E-05	1.77E-06	RAIS b	4.58E-02	RAIS b	7.56E-06
Ethylene thiourea	96-45-7	102.17	NA	6.23E-09	1.52E-10	RAIS b	7.15E-02	RAIS b	1.02E-05
Furfural	98-01-1	96.08	NA	3.75E-01	3.71E-06	Properties a	8.72E-02	RAIS b	1.04E-05
Maleic hydrazide	123-33-1	112.09	NA	2.70E-01	6.59E-03	RAIS b	8.17E-02	EPA6 calc c	9.46E-06
Malononitrile	109-77-3	66.062	NA	NA	NA	NA	1.16E-01	EPA6 calc c	1.35E-05
Methyl styrene (mixed isomers)	25013-15-4	118.18	NA	NA	NA	NA	5.46E-02	RAIS b	8.08E-06
Methylhydrazine	60-34-4	46.072	NA	NA	NA	NA	1.48E-01	EPA6 calc c	1.71E-05
N,N-Diphenylamine	122-39-4	169.23	NA	3.50E-02	3.47E-07	Properties a	6.21E-02	EPA6 calc c	7.19E-06
Nitric acid, propyl ester	627-13-4	105.09	NA	NA	NA	NA	8.53E-02	EPA6 calc c	9.88E-06
N-Nitrosodi-n-butylamine	924-16-3	158.2	NA	5.47E-05	5.47E-05	EPA6 e	6.50E-02	EPA6 e	7.52E-06
N-Nitrosomorpholine	59-89-2	116.12	NA	NA	NA	NA	7.98E-02	EPA6 calc c	9.24E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m³/mol)	Source	D_a (cm²/s)	Source	D_w (cm²/s)
N-Nitroso-N,N-dimethylamine	62-75-9	74.1	NA	3.20E-05	7.80E-07	RAIS b	1.13E-01	RAIS b	1.24E-05
o-Anisidine	90-04-0	123.15	NA	NA	NA	NA	7.68E-02	EPA6 calc c	8.89E-06
Oxalic acid	144-62-7	90.035	NA	NA	NA	NA	9.46E-02	EPA6 calc c	1.10E-05
Phthalic Anhydride	85-44-9	148.11	NA	6.28E-09	6.28E-09	EPA6 e	4.04E-02	EPA6 e	8.97E-06
p-Phthalic acid	100-21-0	166.13	NA	4.26E-07	1.04E-08	RAIS b	3.90E-02	RAIS b	7.14E-06
Pyridine	110-86-1	79.1	NA	6.86E-03	6.86E-03	EPA6 e	1.10E-01	EPA6 e	1.08E-05
Quinoline	91-22-5	129.16	NA	1.11E-05	2.70E-07	RAIS b	5.46E-02	RAIS b	8.31E-06
Quinone	106-51-4	108.1	NA	NA	NA	NA	8.37E-02	EPA6 calc c	9.69E-06
Safrole	94-59-7	162.18	NA	1.19E-05	1.19E-05	EPA6 e	4.06E-02	EPA6 e	7.16E-06
Tetrahydrofuran	109-99-9	72.1	NA	NA	NA	EPA6 e	1.31E-01	EPA6 e	1.07E-05
Other Heavy Semivolatile Compounds									
1,2,4,5-Tetrachlorobenzene	95-94-3	215.89	NA	1.18E-03	1.18E-03	EPA6 e	2.11E-02	EPA6 e	8.75E-06
1,3,5-Trinitrobenzene	99-35-4	213.11	NA	8.66E-08	8.66E-08	EPA6 e	2.84E-02	EPA6 e	6.08E-06
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	220.35	NA	NA	NA	NA	5.21E-02	EPA6 calc c	6.03E-06
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	266.25	NA	NA	NA	NA	4.59E-02	EPA6 calc c	5.32E-06
2-sec-Butyl-4,6-dinitrophenol	88-85-7	240.22	NA	1.87E-05	4.56E-07	RAIS b	4.92E-02	EPA6 calc c	5.69E-06
3,3-Dichlorobenzidine	91-94-1	253.13	NA	2.08E-08	2.08E-08	EPA6 e	2.28E-02	EPA6 e	5.48E-06
3,3'-Dimethoxybenzidine	119-90-4	244.28	NA	3.36E-10	3.36E-10	EPA6 e	2.38E-02	EPA6 e	5.60E-06
4-Bromophenylphenyl ether	101-55-3	249.11	NA	4.80E-03	1.17E-04	RAIS b	4.80E-02	EPA6 calc c	5.56E-06
Ammonium perfluorooctanoate	3825-26-1	431.1	NA	NA	NA	NA	3.33E-02	EPA6 calc c	3.86E-06
Azobenzene	103-33-3	182.22	NA	2.04E-04	4.98E-06	RAIS b	3.15E-02	RAIS b	7.45E-06
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	358.54	NA	NA	NA	NA	3.76E-02	EPA6 calc c	4.36E-06
Captan	133-06-2	300.57	NA	6.00E-01	5.94E-06	Properties a	1.81E-02	RAIS b	5.00E-06
Chlorobenzilate	510-15-6	325.2	NA	7.24E-08	7.24E-08	EPA6 e	1.65E-02	EPA6 e	4.72E-06
Dibutylphosphate	107-66-4	210.21	NA	NA	NA	NA	5.37E-02	EPA6 calc c	6.22E-06
Dimethyl aminoazobenzene	60-11-7	225.29	NA	NA	NA	NA	5.13E-02	EPA6 calc c	5.94E-06
Hexachlorobenzene	118-74-1	284.8	NA	5.35E-04	5.35E-04	EPA6 e	1.41E-02	EPA6 e	7.84E-06
Hexachlorobutadiene	87-68-3	260.76	NA	2.39E-02	2.39E-02	EPA6 e	1.73E-02	EPA6 e	7.33E-06
Hexachlorocyclopentadiene	77-47-4	272.77	NA	1.72E-02	1.72E-02	EPA6 e	1.61E-02	EPA6 e	7.21E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
Hexachloroethane	67-72-1	236.74	NA	3.60E-03	3.60E-03	EPA6 e	1.77E-02	EPA6 e	8.88E-06
Hexachlorophene	70-30-4	406.92	NA	4.88E-10	4.88E-10	EPA6 e	3.46E-02	EPA6 e	4.01E-06
Hexamethylene-1,5-diisocyanate	822-06-0	168.22	NA	1.09E-05	2.66E-07	RAIS b	3.80E-02	RAIS b	7.17E-06
Mirex	2385-85-5	545.55	NA	5.32E+01	5.27E-04	Properties a	2.85E-02	EPA6 calc c	3.30E-06
Nitrofen	1836-75-5	284.1	NA	NA	NA	NA	4.40E-02	EPA6 calc c	5.09E-06
Pentachlorobenzene	608-93-5	250.34	NA	2.43E-02	2.43E-02	EPA6 e	1.86E-02	EPA6 e	7.34E-06
Pentachloronitrobenzene	82-68-8	295.36	NA	2.86E-02	2.86E-02	EPA6 e	1.87E-02	EPA6 e	5.00E-06
Pentachlorophenol*	87-86-5	266.34	2	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	3	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	4	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	5	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	6	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	7	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	8	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	9	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	10	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	11	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	12	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	13	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Pentachlorophenol*	87-86-5	266.34	14	1.41E-05	1.41E-05	EPA6 e	1.56E-02	EPA6 e	8.01E-06
Picric acid	88-89-1	229.11	NA	3.79E-13	3.79E-13	Chemfate i	5.07E-02	EPA6 calc c	5.88E-06
Pronamide	23950-58-5	256.13	NA	9.05E-06	9.05E-06	EPA6 e	4.71E-02	EPA6 e	5.45E-06
Strychnine	57-24-9	334.4	NA	4.90E-13	4.90E-13	EPA6 e	1.38E-02	EPA6 e	5.58E-06
Terphenyls	26140-60-3	230.31	NA	NA	NA	NA	5.06E-02	EPA6 calc c	5.86E-06
Tributyl phosphate	126-73-8	266.32	NA	1.50E-07	1.50E-07	Chemfate i	4.59E-02	EPA6 calc c	5.31E-06
Trifluralin	1582-09-8	335.29	NA	4.03E+00	3.99E-05	Properties a	1.49E-02	RAIS b	5.04E-06
Triphenylamine	603-34-9	245.32	NA	NA	NA	NA	4.85E-02	EPA6 calc c	5.61E-06
Herbicides and Organopesticides									
2,4,5-T	93-76-5	255.48	NA	8.79E-04	8.70E-09	Properties a	1.92E-02	RAIS b	6.70E-06

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)
2,4-D and esters	94-75-7	221.04	NA	1.38E-05	1.37E-10	Properties a	2.31E-02	RAIS b	7.31E-06
4,4-DDD	72-54-8	320.05	NA	8.51E+00	8.43E-05	Properties a	1.69E-02	RAIS b	4.76E-06
4,4-DDT	50-29-3	354.5	NA	1.31E+00	1.30E-05	Properties a	1.37E-02	RAIS b	4.95E-06
Aldrin	309-00-2	364.93	NA	1.35E-07	1.35E-07	EPA6 e	1.43E-02	EPA6 e	4.40E-06
alpha-BHC	319-84-6	290	NA	6.78E-06	6.78E-06	EPA6 e	1.91E-02	EPA6 e	5.04E-06
beta-BHC	319-85-7	290.83	NA	3.46E-07	3.46E-07	EPA6 e	1.90E-02	EPA6 e	5.40E-06
Chlordane	57-74-9	409.8	NA	2.64E-05	2.64E-05	EPA6 e	1.18E-02	EPA6 e	4.37E-06
DDE	72-55-9	319.03	NA	1.24E-04	1.24E-04	EPA6 e	1.70E-02	EPA6 e	4.78E-06
Delta-BHC	319-86-8	290.85	NA	8.25E-02	8.17E-07	Properties a	4.33E-02	EPA6 calc c	5.01E-06
Dieldrin	60-57-1	380.93	NA	3.51E-09	3.51E-09	EPA6 e	1.36E-02	EPA6 e	4.29E-06
Endothall	145-73-3	186.16	NA	1.06E-08	2.59E-10	RAIS b	5.83E-02	EPA6 calc c	6.75E-06
Endrin	72-20-8	380.93	NA	1.19E-06	1.19E-06	EPA6 e	1.07E-02	EPA6 e	5.76E-06
gamma-BHC(Lindane)	58-89-9	290.83	NA	1.58E-01	1.56E-06	Properties a	4.33E-02	EPA6 calc c	5.01E-06
Heptachlor	76-44-8	373.35	NA	5.87E-06	5.87E-06	EPA6 e	1.12E-02	EPA6 e	5.69E-06
Isodrin	465-73-6	364.91	NA	NA	NA	NA	3.72E-02	EPA6 calc c	4.31E-06
Methoxychlor	72-43-5	345.65	NA	6.33E-06	6.33E-06	EPA6 e	1.30E-02	EPA6 e	5.59E-06
Silvex (2,4,5-TP)	93-72-1	269.51	NA	2.55E-01	6.23E-03	RAIS b	1.94E-02	RAIS b	5.83E-06
Toxaphene	8001-35-2	414	NA	4.56E+01	4.51E-04	Properties a	1.16E-02	RAIS b	4.34E-06

NA = Value not available
** = Varies with pH; values given for a pH of 7.0.
a = Illustrated Handbook of Physical - Chemical Properties and Environmental Fate for Organic Chemicals, 1992.
b = RAIS database: http://risk.lsd.ornl.gov/rap_hp.shtml
c = Equations derived from EPA Region 6 Guidance Appendix A-3
d = Handbook of Environmental degradation Rates. 1991.
e = EPA Region 6 Hazardous Waste Combustion Guidance
f = "A Critical Review of Henry's Law Constants for Chemicals of Environmental Interest", J. Phys. Chem. Ref. Data, Vol. 10, No. 4, 1981.
g = Handbook of Environmental Fate and Exposure Data for Organic Chemicals
h = http://www.epa.gov/region09/waste/sfund/prg/.
i = http://esc.syrres.com/efdb/Chemfate.htm
j = Hansch and Leo 1985 in Syracuse 1996

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Mol. Wt.		Henry's Constant			Diffusivity		
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	H (Published Value)	H (atm*m^3/mol)	Source	D_a (cm^2/s)	Source	D_w (cm^2/s)

k = Schwarzenbach et al. 1993

l = Tomlin 1994 in Syracuse 1996

m = http://www.speclab.com/compound/c959988.htm

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
Aromatic Halogenated Hydrocarbons								
2,3,4,6-Tetrachlorophenol	58-90-2	RAIS b	4.42E+00	2.63E+04	Properties a	3.82E+00	6.61E+03	Properties a
4-Chloro-3-methylphenol	59-50-7	EPA6 calc c	3.10E+00	1.26E+03	Properties a	2.78E+00	6.03E+02	Properties a
Aromatic Nonhalogenated Hydrocarbons								
2-Nitrotoluene	88-72-2	RAIS b	2.30E+00	2.00E+02	Properties a	2.63E+00	4.27E+02	Properties a
4-Nitrobiphenyl	92-93-3	EPA6 calc c	3.77E+00	5.89E+03	Chemfate i	NA	NA	NA
Benzaldehyde	100-52-7	EPA6 e	3.00E+01	3.00E+01	EPA6 e	2.01E-01	2.01E-01	EPA6 e
Benzene	71-43-2	EPA6 e	1.37E+02	1.37E+02	EPA6 e	6.20E+01	6.20E+01	EPA6 e
Benzyl alcohol	100-51-6	EPA6 e	1.26E+01	1.26E+01	EPA6 e	1.02E+01	1.02E+01	EPA6 e
Ethyl Benzene	100-41-4	EPA6 e	1.33E+03	1.33E+03	EPA6 e	2.04E+02	2.04E+02	EPA6 e
m-Xylene	108-38-3	EPA6 e	1.59E+03	1.59E+03	EPA6 e	1.96E+02	1.96E+02	EPA6 e
o-Xylene	95-47-6	EPA6 e	1.35E+03	1.35E+03	EPA6 e	2.41E+02	2.41E+02	EPA6 e
p-Xylene	106-42-3	EPA6 e	1.48E+03	1.48E+03	EPA6 e	3.11E+02	3.11E+02	EPA6 e
Styrene	100-42-5	EPA6 e	8.49E+02	8.49E+02	EPA6 e	9.12E+02	9.12E+02	EPA6 e
Toluene	108-88-3	EPA6 e	4.65E+02	4.65E+02	EPA6 e	1.40E+02	1.40E+02	EPA6 e
Non-aromatic Nonhalogenated Hydrocarbons								
1,2-Epoxybutane	106-88-7	RAIS b	1.44E+00	2.76E+01	RAIS b	7.94E+00	7.94E+00	RAIS b
1,3-Butadiene	106-99-0	EPA6 calc c	1.99E+00	9.77E+01	Organics g	NA	9.04E+01	EPA6 calc c
1,4-Dioxane	123-91-1	EPA6 e	5.40E-01	5.40E-01	EPA6 e	8.76E-01	8.76E-01	EPA6 e
1-Methylpropyl alcohol	78-92-2	EPA6 calc c	6.10E-01	4.07E+00	Properties a	NA	3.98E+00	EPA6 calc c
1-Nitropropane	108-03-2	EPA6 calc c	8.70E-01	7.41E+00	Hansch j	NA	7.17E+00	EPA6 calc c
2,2,4-Trimethylpentane	540-84-1	EPA6 calc c	5.02E+00	1.05E+05	Properties a	NA	8.61E+04	EPA6 calc c
2-Butanone	78-93-3	EPA6 e	1.91E+00	1.91E+00	EPA6 e	2.34E+00	2.34E+00	EPA6 e
2-Butenaldehyde (2-Butenal)	4170-30-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
2-Ethoxyethanol	110-80-5	RAIS b	-1.00E-01	7.94E-01	Organics g	1.32E+00	2.09E+01	Organics g
2-Heptanone	110-43-0	EPA6 calc c	1.98E+00	9.55E+01	Properties a	NA	8.84E+01	EPA6 calc c
2-Hexanone	591-78-6	EPA6 calc c	1.38E+00	2.40E+01	Properties a	2.13E+00	1.34E+02	Properties a
2-Methoxyethanol	109-86-4	RAIS b	2.52E-01	1.79E+00	RAIS b	8.53E+00	8.53E+00	RAIS b
2-Methyl-2-propanol	75-65-0	EPA6 calc c	3.50E-01	2.24E+00	Properties a	1.57E+00	3.72E+01	Properties a

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
2-Methyl-2-propenenitrile	126-98-7	EPA6 e	3.47E+00	3.47E+00	EPA6 e	3.74E+00	3.74E+00	EPA6 e
2-Methylaziridine	75-55-8	EPA6 calc c	NA	NA	NA	NA	NA	NA
2-Methylpropyl alcohol	78-83-1	RAIS b	7.60E-01	5.75E+00	Properties a	NA	5.59E+00	EPA6 calc c
2-Pentanone	107-87-9	EPA6 calc c	9.10E-01	8.13E+00	Properties a	1.87E+00	7.40E+01	Properties a
2-Propanone (Acetone)	67-64-1	EPA6 e	6.00E-01	6.00E-01	EPA6 e	9.51E-01	9.51E-01	EPA6 e
2-Propene-1-ol	107-18-6	RAIS b	1.70E-01	1.48E+00	Properties a	NA	1.47E+00	EPA6 calc c
2-Propyl alcohol	67-63-0	EPA6 calc c	5.00E-02	1.12E+00	Properties a	NA	1.12E+00	EPA6 calc c
3-Heptanone	106-35-4	EPA6 calc c	NA	NA	NA	NA	NA	NA
3-Methyl-1-butanol	123-51-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
3-Methyl-2-butanone	563-80-4	EPA6 calc c	NA	NA	NA	NA	NA	NA
3-Pentanone	96-22-0	EPA6 calc c	9.90E-01	9.77E+00	Properties a	1.08E+00	1.20E+01	Properties a
4-Heptanone	123-19-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	108-10-1	EPA6 e	1.55E+01	1.55E+01	EPA6 e	1.20E+01	1.20E+01	EPA6 e
4-Methyl-3-penten-2-one	141-79-7	EPA6 calc c	NA	NA	NA	NA	NA	NA
5-Methyl-2-hexanone	110-12-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
Acetaldehyde	75-07-0	EPA6 e	6.02E-01	6.02E-01	EPA6 e	9.53E-01	9.53E-01	EPA6 e
Acetamide	60-35-5	EPA6 calc c	-1.26E+00	5.50E-02	Properties a	-1.55E+00	2.82E-02	Properties a
Acetic acid	64-19-7	EPA6 calc c	-1.70E-01	6.76E-01	Properties a	0.00E+00	1.00E+00	Properties a
Acetic acid ethyl ester	141-78-6	RAIS b	7.30E-01	5.37E+00	Properties a	3.61E-01	2.30E+00	Properties a
Acetic acid n-butyl ester	123-86-4	EPA6 calc c	1.73E+00	5.37E+01	Properties a	NA	5.02E+01	EPA6 calc c
Acetonitrile	75-05-8	EPA6 e	4.57E-01	4.57E-01	EPA6 e	7.69E-01	7.69E-01	EPA6 e
Acrolein	107-02-8	EPA6 e	9.80E-01	9.80E-01	EPA6 e	1.39E+00	1.39E+00	EPA6 e
Acrylonitrile	107-13-1	EPA6 e	1.78E+00	1.78E+00	EPA6 e	2.22E+00	2.22E+00	EPA6 e
Bis(isopropyl)ether	108-20-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
Butane	106-97-8	EPA6 calc c	2.89E+00	7.76E+02	k	NA	6.94E+02	EPA6 calc c
Carbon disulfide	75-15-0	EPA6 e	1.00E+02	1.00E+02	EPA6 e	5.14E+01	5.14E+01	EPA6 e
Cyanogen	460-19-5	RAIS b	8.08E-01	6.42E+00	RAIS b	5.22E+00	5.22E+00	RAIS b
Cyclohexane	110-82-7	EPA6 calc c	3.44E+00	2.75E+03	Properties a	2.68E+00	4.79E+02	Properties a
Cyclohexanone	108-94-1	RAIS b	8.10E-01	6.46E+00	Properties a	NA	6.26E+00	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
Cyclohexene	110-83-8	EPA6 calc c	2.86E+00	7.24E+02	Properties a	NA	6.48E+02	EPA6 calc c
Cyclopentane	287-92-3	EPA6 calc c	3.00E+00	1.00E+03	Properties a	NA	8.90E+02	EPA6 calc c
Ethyl alcohol	64-17-5	EPA6 calc c	-3.10E-01	4.90E-01	Organics g	NA	4.96E-01	EPA6 calc c
Ethyl ether	60-29-7	RAIS b	8.90E-01	7.76E+00	Properties a	NA	7.50E+00	EPA6 calc c
Ethyl methacrylate	97-63-2	EPA6 e	3.89E+01	3.89E+01	EPA6 e	2.46E+01	2.46E+01	EPA6 e
Formaldehyde	50-00-0	EPA6 e	2.20E+00	2.20E+00	EPA6 e	2.62E+00	2.62E+00	EPA6 e
Formamide	75-12-7	EPA6 calc c	-1.51E+00	3.09E-02	Chemfate i	NA	3.28E-02	EPA6 calc c
Formic acid	64-18-6	EPA6 e	2.90E-01	2.90E-01	EPA6 e	5.39E+00	5.39E+00	EPA6 e
Formic acid, methyl ester	107-31-3	EPA6 calc c	2.64E-01	5.45E-01	Chemfate i	NA	5.50E-01	EPA6 calc c
Glycidylaldehyde	765-34-4	EPA6 calc c	-7.30E-01	1.86E-01	RAIS b	1.00E-01	1.00E-01	RAIS b
Methyl acetate	79-20-9	RAIS b	1.80E-01	1.51E+00	Properties a	6.81E-01	4.80E+00	Properties a
Methyl alcohol	67-56-1	EPA6 e	1.95E-01	1.95E-01	EPA6 e	3.96E-01	3.96E-01	EPA6 e
Methyl isocyanate	624-83-9	EPA6 calc c	NA	NA	NA	NA	NA	NA
Methyl methacrylate	80-62-6	RAIS b	7.90E-01	6.17E+00	Properties a	1.80E+00	6.31E+01	Properties a
Methyl tert-butyl ether	1634-04-4	RAIS b	9.40E-01	8.71E+00	Properties a	NA	8.40E+00	EPA6 calc c
Methylacetylene	74-99-7	EPA6 calc c	9.40E-01	8.71E+00	Chemfate i	NA	8.40E+00	EPA6 calc c
Methylcyclohexane	108-87-2	EPA6 calc c	4.10E+00	1.26E+04	Properties a	NA	1.07E+04	EPA6 calc c
N,N-Dimethylacetamide	127-19-5	EPA6 calc c	NA	NA	NA	NA	NA	NA
n-Butyl alcohol	71-36-3	RAIS b	8.80E-01	7.59E+00	Properties a	NA	7.33E+00	EPA6 calc c
n-Heptane	142-82-5	EPA6 calc c	4.66E+00	4.57E+04	Properties a	NA	3.81E+04	EPA6 calc c
n-Hexane	110-54-3	EPA6 calc c	4.11E+00	1.29E+04	Properties a	NA	1.10E+04	EPA6 calc c
Nitromethane	75-52-5	EPA6 calc c	-3.50E-01	4.47E-01	Hansch j	NA	4.53E-01	EPA6 calc c
n-Nonane	111-84-2	EPA6 calc c	5.65E+00	4.47E+05	Properties a	NA	3.58E+05	EPA6 calc c
n-Octane	111-65-9	EPA6 calc c	4.00E+00	1.00E+04	Properties a	NA	8.55E+03	EPA6 calc c
n-Pentane	109-66-0	EPA6 calc c	3.21E+00	1.62E+03	Properties a	NA	1.43E+03	EPA6 calc c
n-Propionaldehyde	123-38-6	EPA6 calc c	5.90E-01	3.89E+00	Properties a	NA	3.80E+00	EPA6 calc c
n-Propyl alcohol	71-23-8	EPA6 calc c	2.50E-01	1.78E+00	Chemfate i	NA	1.76E+00	EPA6 calc c
n-Valeraldehyde	110-62-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
Oxirane	75-21-8	EPA6 e	5.01E-01	5.01E-01	EPA6 e	8.26E-01	8.26E-01	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
p-Cymene	99-87-6	EPA6 calc c	4.10E+00	1.26E+04	Chemfate i	NA	1.07E+04	EPA6 calc c
Phosgene	75-44-5	EPA6 calc c	NA	NA	NA	NA	NA	NA
Propargyl alcohol	107-19-7	RAIS b	2.60E-01	1.82E+00	RAIS b	1.93E+00	1.93E+00	RAIS b
Propionic acid	79-09-4	EPA6 calc c	3.30E-01	2.14E+00	Properties a	NA	2.11E+00	EPA6 calc c
Propionitrile	107-12-0	EPA6 calc c	1.60E-01	1.45E+00	Properties a	NA	1.44E+00	EPA6 calc c
Propylene glycol monomethyl ether	107-98-2	RAIS b	-1.80E-01	6.61E-01	RAIS b	1.26E+01	1.26E+01	RAIS b
p-tert-Butyltoluene	98-51-1	EPA6 calc c	NA	NA	NA	NA	NA	NA
Triethylamine	121-44-8	RAIS b	NA	NA	NA	NA	NA	NA
Trimethylamine	75-50-3	EPA6 calc c	1.60E-01	1.45E+00	Properties a	6.02E-01	4.00E+00	Properties a
Vinyl acetate	108-05-4	EPA6 e	5.00E+00	5.00E+00	EPA6 e	4.97E+00	4.97E+00	EPA6 e
Non-aromatic Halogenated Hydrocarbons								
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	EPA6 calc c	NA	NA	NA	NA	NA	NA
1,1,1,2-Tetrachloroethane	630-20-6	EPA6 e	4.27E+02	4.27E+02	EPA6 e	1.59E+02	1.59E+02	EPA6 e
1,1,1-Trichloroethane	71-55-6	EPA6 e	2.64E+02	2.64E+02	EPA6 e	1.35E+05	1.35E+05	EPA6 e
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	EPA6 calc c	3.73E+00	5.37E+03	Properties a	2.50E+00	3.16E+02	Properties a
1,1,2,2-Tetrachloroethane	79-34-5	EPA6 e	4.40E+04	4.40E+04	EPA6 e	7.90E+01	7.90E+01	EPA6 e
1,1,2,2-Tetrachloroethene	127-18-4	EPA6 e	3.51E+02	3.51E+02	EPA6 e	2.65E+02	2.65E+02	EPA6 e
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	RAIS b	3.16E+00	1.45E+03	Properties a	2.41E+00	2.57E+02	Properties a
1,1,2-Trichloroethane	79-00-5	EPA6 e	1.25E+02	1.25E+02	EPA6 e	7.50E+01	7.50E+01	EPA6 e
1,1,2-Trichloroethylene	79-01-6	EPA6 e	2.71E+02	2.71E+02	EPA6 e	9.40E+01	9.40E+01	EPA6 e
1,1-Dichloroethane	75-34-3	EPA6 e	6.20E+01	6.20E+01	EPA6 e	5.30E+01	5.30E+01	EPA6 e
1,1-Dichloroethene	75-35-4	EPA6 e	1.32E+02	1.32E+02	EPA6 e	6.50E+01	6.50E+01	EPA6 e
1,2,3-Trichloropropane	96-18-4	EPA6 e	1.78E+02	1.78E+02	EPA6 e	8.05E+01	8.05E+01	EPA6 e
1,2-dibromo-3-chloropropane	96-12-8	EPA6 e	2.19E+02	2.19E+02	EPA6 e	9.47E+01	9.47E+01	EPA6 e
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	EPA6 calc c	2.82E+00	6.61E+02	Chemfate i	NA	NA	NA
1,2-Dichloroethane	107-06-2	EPA6 e	2.90E+01	2.90E+01	EPA6 e	1.96E+01	1.96E+01	EPA6 e
1,2-Dichloroethylene	540-59-0	EPA6 calc c	4.80E-01	3.02E+00	RAIS b	2.87E+00	2.87E+00	RAIS b
1,2-Dichloropropane	78-87-5	EPA6 e	1.78E+02	1.78E+02	EPA6 e	4.70E+01	4.70E+01	EPA6 e
1,3-Dichloropropene	542-75-6	EPA6 e	5.60E+01	5.60E+01	EPA6 e	2.70E+01	2.70E+01	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
1,4-Dichloro-2-butene	764-41-0	EPA6 calc c	8.73E-01	7.46E+00	RAIS b	1.82E+02	1.82E+02	RAIS b
1-Chloroethene	75-01-4	EPA6 e	1.40E+01	1.40E+01	EPA6 e	1.11E+02	1.11E+02	EPA6 e
2,2-Dichloropropionic acid	75-99-0	EPA6 calc c	7.78E-01	6.00E+00	RAIS b	5.82E+00	5.82E+00	RAIS b
2-Chloropropane	75-29-6	EPA6 calc c	1.90E+00	7.94E+01	Properties a	NA	7.38E+01	EPA6 calc c
3-Chloropropene (allyl chloride)	107-05-1	EPA6 calc c	9.55E-01	9.01E+00	RAIS b	4.79E+01	4.79E+01	RAIS b
Bromochloromethane	74-97-5	RAIS b	1.41E+00	2.57E+01	Properties a	NA	2.43E+01	EPA6 calc c
Bromodichloromethane	75-27-4	EPA6 e	1.06E+02	1.06E+02	EPA6 e	5.38E+01	5.38E+01	EPA6 e
Bromoethene	593-60-2	EPA6 calc c	1.07E+00	1.17E+01	RAIS b	1.51E+02	1.51E+02	RAIS b
Bromoform	75-25-2	EPA6 e	2.24E+02	2.24E+02	EPA6 e	1.26E+02	1.26E+02	EPA6 e
Bromomethane	74-83-9	EPA6 e	1.30E+01	1.30E+01	EPA6 e	9.00E+00	9.00E+00	EPA6 e
Carbon tetrachloride	56-23-5	EPA6 e	5.21E+02	5.21E+02	EPA6 e	1.52E+02	1.52E+02	EPA6 e
Chlordibromomethane	124-48-1	EPA6 e	1.50E+02	1.50E+02	EPA6 e	7.05E+01	7.05E+01	EPA6 e
Chlorodifluoromethane	75-45-6	EPA6 e	1.20E+01	1.20E+01	EPA6 e	9.83E+00	9.83E+00	EPA6 e
Chloroethane	75-00-3	EPA6 e	1.26E+03	1.26E+03	EPA6 e	3.71E+02	3.71E+02	EPA6 e
Chloroform	67-66-3	EPA6 e	8.90E+01	8.90E+01	EPA6 e	5.30E+01	5.30E+01	EPA6 e
Chloromethane	74-87-3	EPA6 e	8.00E+00	8.00E+00	EPA6 e	6.00E+00	6.00E+00	EPA6 e
Chloropentafluoroethane	76-15-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	EPA6 e	9.60E+01	9.60E+01	EPA6 e	4.98E+02	4.98E+02	EPA6 e
cis-1,3-Dichloropropene	10061-01-5	EPA6 calc c	NA	NA	NA	NA	NA	NA
Cyanogen bromide	506-68-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
Cyanogen chloride	506-77-4	EPA6 calc c	2.00E-01	1.58E+00	RAIS b	1.72E+00	1.72E+00	RAIS b
Dichlorodifluoromethane	75-71-8	EPA6 e	1.44E+02	1.44E+02	EPA6 e	6.85E+00	6.85E+00	EPA6 e
Dichlorofluoromethane	75-43-4	EPA6 calc c	NA	NA	NA	NA	NA	NA
Dichloromethane	75-09-2	EPA6 e	1.80E+01	1.80E+01	EPA6 e	1.00E+01	1.00E+01	EPA6 e
Difluorodibromomethane	75-61-6	EPA6 calc c	NA	NA	NA	NA	NA	NA
Hexafluoroacetone	684-16-2	EPA6 calc c	NA	NA	NA	NA	NA	NA
Iodomethane	74-88-4	EPA6 calc c	1.69E+00	4.90E+01	Properties a	NA	4.59E+01	EPA6 calc c
Methylene bromide	74-95-3	EPA6 e	4.17E+01	4.17E+01	EPA6 e	2.60E-01	2.60E-01	EPA6 e
Pentachloroethane	76-01-7	EPA6 calc c	3.05E+00	1.12E+03	Properties a	NA	9.96E+02	EPA6 calc c

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			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
trans-1,2-Dichloroethene	156-60-5	EPA6 e	9.60E+01	9.60E+01	EPA6 e	3.80E+01	3.80E+01	EPA6 e
trans-1,3-Dichloropropene	10061-02-6	EPA6 calc c	2.06E+00	1.15E+02	m	NA	1.06E+02	EPA6 calc c
Trichloroacetic acid	76-03-9	EPA6 calc c	1.33E+00	2.14E+01	Properties a	NA	2.03E+01	EPA6 calc c
Trichlorofluoroethane	27154-33-2	EPA6 calc c	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	75-69-4	EPA6 e	3.40E+02	3.40E+02	EPA6 e	NA	3.08E+02	EPA6 e
Trifluorobromomethane	75-63-8	EPA6 calc c	1.86E+00	7.24E+01	Hansch j	NA	6.74E+01	EPA6 calc c
Dioxin and Furan Compounds								
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	EPA6 e	1.58E+08	1.58E+08	EPA6 e	9.77E+07	9.77E+07	EPA6 e
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	EPA6 e	8.32E+07	8.32E+07	EPA6 e	5.13E+07	5.13E+07	EPA6 e
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	EPA6 e	8.32E+07	8.32E+07	EPA6 e	5.13E+07	5.13E+07	EPA6 e
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	EPA6 e	6.17E+07	6.17E+07	EPA6 e	3.80E+07	3.80E+07	EPA6 e
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	EPA6 e	1.78E+07	1.78E+07	EPA6 e	1.10E+07	1.10E+07	EPA6 e
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	EPA6 e	1.78E+07	1.78E+07	EPA6 e	1.10E+07	1.10E+07	EPA6 e
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	EPA6 e	1.78E+07	1.78E+07	EPA6 e	1.10E+07	1.10E+07	EPA6 e
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	EPA6 e	1.78E+07	1.78E+07	EPA6 e	1.10E+07	1.10E+07	EPA6 e
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	EPA6 e	1.78E+07	1.78E+07	EPA6 e	1.10E+07	1.10E+07	EPA6 e
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	EPA6 e	4.37E+06	4.37E+06	EPA6 e	2.69E+06	2.69E+06	EPA6 e
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	EPA6 e	6.17E+06	6.17E+06	EPA6 e	3.80E+06	3.80E+06	EPA6 e
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	EPA6 e	1.78E+07	1.78E+07	EPA6 e	1.10E+07	1.10E+07	EPA6 e
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	EPA6 e	8.32E+06	8.32E+06	EPA6 e	5.13E+06	5.13E+06	EPA6 e
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	EPA6 e	4.37E+06	4.37E+06	EPA6 e	2.69E+04	2.69E+04	EPA6 e
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	EPA6 e	3.39E+06	3.39E+06	EPA6 e	2.09E+06	2.09E+06	EPA6 e
Dibenzofuran	132-64-9	EPA6 calc c	4.33E+00	2.14E+04	Properties a	NA	1.81E+04	EPA6 calc c
Octachlorodibenzo(p)dioxin	3268-87-9	EPA6 e	3.89E+07	3.89E+07	EPA6 e	2.40E+07	2.40E+07	EPA6 e
Octachlorodibenzofuran	39001-02-0	EPA6 e	6.03E+08	6.03E+08	EPA6 e	3.72E+08	3.72E+08	EPA6 e
PCBs								
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	EPA6 calc c	7.08E+00	1.20E+07	Properties a	6.85E+00	7.08E+06	Properties a
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	EPA6 calc c	7.12E+00	1.32E+07	Properties a	6.92E+00	8.32E+06	Properties a
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	EPA6 calc c	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	EPA6 calc c	NA	NA	NA	NA	NA	NA
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	EPA6 calc c	NA	NA	NA	NA	NA	NA
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	EPA6 calc c	NA	NA	NA	NA	NA	NA
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	EPA6 calc c	NA	NA	NA	NA	NA	NA
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	EPA6 calc c	NA	NA	NA	NA	NA	NA
2',3,4,4',5-Pentachlorobiphenyl	no cas #	EPA6 calc c	NA	NA	NA	NA	NA	NA
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	EPA6 calc c	7.12E+00	1.32E+07	Chemfate i	NA	9.98E+06	EPA calc c
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	EPA6 calc c	7.41E+00	2.56E+07	Properties a	6.60E+00	3.98E+06	Properties a
3,3',4,4',5-Pentachlorobiphenyl	no cas #	EPA6 calc c	NA	NA	NA	NA	NA	NA
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	EPA6 calc c	NA	NA	NA	NA	NA	NA
Polychlorinated biphenyls (PCBs)**	1336-36-3	RAIS b	7.31E+00	2.03E+07	RAIS b	3.09E+05	3.09E+05	RAIS b
Phthalates								
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	EPA6 e	1.60E+05	1.60E+05	EPA6 e	1.11E+09	1.11E+09	EPA6 e
Butylbenzyl phthalate	85-68-7	EPA6 e	2.59E+04	2.59E+04	EPA6 e	1.37E+04	1.37E+04	EPA6 e
Dibutyl phthalate	84-74-2	EPA6 e	5.25E+04	5.25E+04	EPA6 e	1.57E+03	1.57E+03	EPA6 e
Diethyl phthalate	84-66-2	EPA6 e	2.73E+04	2.73E+04	EPA6 e	8.20E+01	8.20E+01	EPA6 e
Dimethyl phthalate	131-11-3	EPA6 e	4.30E+01	4.30E+01	EPA6 e	2.66E+02	2.66E+02	EPA6 e
n-Dioctyl phthalate	117-84-0	EPA6 e	2.14E+09	2.14E+09	EPA6 e	9.03E+08	9.03E+08	EPA6 e
Light Polycyclic Aromatic Hydrocarbons								
2-Chloronaphthalene	91-58-7	EPA6 e	1.17E+04	1.17E+04	EPA6 e	7.14E+03	7.14E+03	EPA6 e
2-Methyl naphthalene	91-57-6	EPA6 calc c	3.86E+00	7.24E+03	Properties a	NA	6.23E+03	EPA6 calc c
5-Nitroacenaphthene	602-87-9	EPA6 calc c	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	EPA6 e	9.22E+03	9.22E+03	EPA6 e	4.90E+03	4.90E+03	EPA6 e
Acenaphthylene	208-96-8	RAIS b	4.07E+00	1.17E+04	Properties a	3.83E+00	6.76E+03	Properties a
Anthracene	120-12-7	EPA6 e	2.95E+04	2.95E+04	EPA6 e	2.35E+04	2.35E+04	EPA6 e
Fluorene	86-73-7	RAIS b	4.18E+00	1.51E+04	Properties a	4.15E+00	1.41E+04	Properties a
Indene	95-13-6	EPA6 calc c	NA	NA	NA	NA	NA	NA
Napthalene	91-20-3	EPA6 e	2.36E+03	2.36E+03	EPA6 e	1.19E+03	1.19E+03	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
Phenanthrene	85-01-8	EPA6 e	3.55E+04	3.55E+04	EPA6 e	5.01E+04	5.01E+04	EPA6 e
Pyrene	129-00-0	EPA6 e	1.00E+05	1.00E+05	EPA6 e	6.80E+04	6.80E+04	EPA6 e
Heavy Polycyclic Aromatic Hydrocarbons								
3-Methylcholanthrene	56-49-5	EPA6 calc c	7.11E+00	1.29E+07	Properties a	6.18E+00	1.51E+06	Properties a
5-Methylchrysene	3697-24-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	56-55-3	EPA6 e	4.77E+05	4.77E+05	EPA6 e	2.60E+05	2.60E+05	EPA6 e
Benzo(a)pyrene	50-32-8	EPA6 e	1.35E+06	1.35E+06	EPA6 e	9.69E+05	9.69E+05	EPA6 e
Benzo(b)fluoranthene	205-99-2	EPA6 e	1.59E+06	1.59E+06	EPA6 e	8.36E+05	8.36E+05	EPA6 e
Benzo(e)pyrene	192-97-2	EPA6 calc c	7.40E+00	2.51E+07	Properties a	7.20E+00	1.58E+07	Properties a
Benzo(g,h,i)perylene	191-24-2	EPA6 calc c	7.10E+00	1.26E+07	Properties a	6.26E+00	1.82E+06	Properties a
Benzo(j)fluoranthene	205-82-3	EPA6 calc c	6.44E+00	2.75E+06	Properties a	NA	2.15E+06	EPA6 calc c
Benzo(k)fluoranthene	207-08-9	EPA6 e	1.56E+06	1.56E+06	EPA6 e	8.32E-05	8.32E-05	EPA6 e
Benzo[a,i]pyrene	191-30-0	EPA6 calc c	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	EPA6 e	5.48E+05	5.48E+05	EPA6 e	2.97E+05	2.97E+05	EPA6 e
Dibenz(a,h)anthracene	53-70-3	EPA6 e	3.53E+06	3.53E+06	EPA6 e	1.79E+06	1.79E+06	EPA6 e
Dibenz[a,h]acridine	226-36-8	EPA6 calc c	NA	NA	NA	NA	NA	NA
Dibenz[a,j]acridine	224-42-0	EPA6 calc c	NA	NA	NA	NA	NA	NA
Dibenzo(a,e)fluoranthene	5385-75-1	EPA6 calc c	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)fluoranthene	no cas #	EPA6 calc c	NA	NA	NA	NA	NA	NA
Dibenzo[a,e]pyrene	192-65-4	EPA6 calc c	NA	NA	NA	NA	NA	NA
Dibenzo[a,h]pyrene	189-64-0	EPA6 calc c	NA	NA	NA	NA	NA	NA
Dibenzo[a,i]pyrene	189-55-9	EPA6 calc c	7.29E+00	1.95E+07	Chemfate i	NA	1.47E+07	EPA6 calc c
Fluoranthene	206-44-0	EPA6 e	1.21E+05	1.21E+05	EPA6 e	4.91E+04	4.91E+04	EPA6 e
Hexachloronaphthalene	1335-87-1	EPA6 calc c	7.59E+00	3.89E+07	Chemfate i	NA	2.89E+07	EPA6 calc c
Indeno(1,2,3-cd)pyrene	193-39-5	EPA6 e	8.22E+06	8.22E+06	EPA6 e	4.11E+06	4.11E+06	EPA6 e
Octachloronaphthalene	2234-13-1	EPA6 calc c	6.42E+00	2.63E+06	Chemfate i	NA	2.05E+06	EPA6 calc c
Pentachloronaphthalene	1321-64-8	EPA6 calc c	NA	NA	NA	NA	NA	NA
Tetrachloronaphthalene	1335-88-2	EPA6 calc c	NA	NA	NA	NA	NA	NA
Trichloronaphthalene	1321-65-9	EPA6 calc c	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
Light Substituted Benzene Compounds								
1,2,3-Trichlorobenzene	87-61-6	EPA6 e	1.11E+04	1.11E+04	EPA6 e	2.02E+04	2.02E+04	EPA6 e
1,2,4-Trichlorobenzene	120-82-1	EPA6 e	9.73E+03	9.73E+03	EPA6 e	1.66E+03	1.66E+03	EPA6 e
1,2,4-Trimethlyl benzene	25551-13-7	EPA6 calc c	3.40E+00	2.51E+03	RAIS b	5.90E+02	5.90E+02	RAIS b
1,2,4-Trimethyl benzene	95-63-6	EPA6 calc c	3.65E+00	4.47E+03	Properties a	NA	3.87E+03	EPA6 calc c
1,2-Dichlorobenzene	95-50-1	EPA6 e	2.79E+03	2.79E+03	EPA6 e	3.79E+02	3.79E+02	EPA6 e
1,3,5-Trimethyl benzene	108-67-8	EPA6 e	2.63E+03	2.63E+03	EPA6 e	1.67E+03	1.67E+03	EPA6 e
1,3-Dichlorobenzene	541-73-1	EPA6 e	3.39E+03	3.39E+03	EPA6 e	8.03E+03	8.03E+03	EPA6 e
1,3-Dinitrobenzene	99-65-0	EPA6 e	3.10E+01	3.10E+01	EPA6 e	2.06E+01	2.06E+01	EPA6 e
1,4-Dichlorobenzene	106-46-7	EPA6 e	2.58E+03	2.58E+03	EPA6 e	6.16E+02	6.16E+02	EPA6 e
1,4-Dinitrobenzene	100-25-4	EPA6 calc c	1.50E+00	3.16E+01	RAIS b	2.98E+01	2.98E+01	RAIS b
2,4,5-Trichorophenol	95-95-4	EPA6 e	7.41E+03	7.41E+03	EPA6 e	1.13E+03**	1.13E+03**	EPA6 e
2,4,6-Trichlorophenol	88-06-2	EPA6 e	5.15E+03	5.15E+03	EPA6 e	2.26E+02**	2.26E+02**	EPA6 e
2,4-Dichlorophenol	120-83-2	EPA6 e	1.09E+03	1.09E+03	EPA6 e	1.40E+02**	1.40E+02**	EPA6 e
2,4-Dimethylphenol	105-67-9	EPA6 e	2.29E+02	2.29E+02	EPA6 e	1.26E+02**	1.26E+02**	EPA6 e
2,4-Dinitrophenol	51-28-5	EPA6 e	3.30E+01	3.30E+01	EPA6 e	1.00E-02**	1.00E-02**	EPA6 e
2,4-Dinitrotoluene	121-14-2	EPA6 e	9.90E+01	9.90E+01	EPA6 e	5.10E+01	5.10E+01	EPA6 e
2,6-Dinitrotoluene	606-20-2	EPA6 e	7.70E+01	7.70E+01	EPA6 e	4.19E+01	4.19E+01	EPA6 e
2-Chlorotoluene	95-49-8	EPA6 calc c	3.54E+00	3.44E+03	RAIS b	7.56E+02	7.56E+02	RAIS b
2-Chorophenol	95-57-8	EPA6 e	1.45E+02	1.45E+02	EPA6 e	3.87E+02**	3.87E+02**	EPA6 e
2-Nitrophenol	88-75-5	EPA6 e	6.17E+01	6.17E+01	EPA6 e	3.53E+02	3.53E+02	EPA6 e
4,6-Dinitro-o-cresol	534-52-1	RAIS b	2.85E+00	7.08E+02	RAIS b	6.34E+02	6.34E+02	RAIS b
4-Chlorotoluene	106-43-4	EPA6 calc c	3.33E+00	2.14E+03	Hansch j	NA	1.88E+03	EPA6 calc c
4-Nitrophenol	100-02-7	EPA6 e	8.13E+01	8.13E+01	EPA6 e	4.37E+02	4.37E+02	EPA6 e
alpha-Methylstyrene	98-83-9	RAIS b	3.46E+00	2.91E+03	RAIS b	6.62E+02	6.62E+02	RAIS b
Aniline	62-53-3	EPA6 e	9.55E+00	9.55E+00	EPA6 e	8.23E+00	8.23E+00	EPA6 e
Benzotrichloride	98-07-7	RAIS b	2.92E+00	8.32E+02	Organics g	7.42E+02	7.42E+02	RAIS b
Benzyl Chloride	100-44-7	EPA6 e	2.30E+00	2.30E+00	EPA6 e	2.71E+00	2.71E+00	EPA6 e
Bromobenzene	108-86-1	EPA6 calc c	2.99E+00	9.77E+02	Properties a	2.65E+00	4.47E+02	Properties a

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			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
Chlorobenzene	108-90-7	EPA6 e	6.16E+02	6.16E+02	EPA6 e	2.24E+02	2.24E+02	EPA6 e
Cumene	98-82-8	EPA6 e	4.10E+03	4.10E+03	EPA6 e	9.31E+03	9.31E+03	EPA6 e
m-Cresol	108-39-4	EPA6 e	9.10E+01	9.10E+01	EPA6 e	4.78E+01	4.78E+01	EPA6 e
n-Butyl benzene	104-51-8	EPA6 calc c	4.28E+00	1.91E+04	Properties a	3.40E+00	2.51E+03	Properties a
Nitrobenzene	98-95-3	EPA6 e	6.80E+01	6.80E+01	EPA6 e	1.19E+02	1.19E+02	EPA6 e
n-Propyl benzene	103-65-1	EPA6 calc c	3.69E+00	4.90E+03	Properties a	2.86E+00	7.24E+02	Properties a
o-Cresol	95-48-7	EPA6 e	1.05E+02	1.05E+02	EPA6 e	5.34E+01	5.34E+01	EPA6 e
o-Dinitrobenzene	528-29-0	EPA6 calc c	1.60E+00	3.98E+01	RAIS b	3.74E+01	3.74E+01	RAIS b
o-Nitroaniline	88-74-4	EPA6 e	7.08E+01	7.08E+01	EPA6 e	3.93E+02	3.93E+02	EPA6 e
o-Toluidine	95-53-4	EPA6 e	2.19E+01	2.19E+01	EPA6 e	1.57E+01	1.57E+01	EPA6 e
p-Chloroaniline	106-47-8	EPA6 e	7.40E+01	7.40E+01	EPA6 e	4.10E+01	4.10E+01	EPA6 e
p-Cresol	106-44-5	EPA6 e	8.70E+01	8.70E+01	EPA6 e	4.61E+01	4.61E+01	EPA6 e
Phenol	108-95-2	EPA6 e	3.00E+01	3.00E+01	EPA6 e	2.20E+01**	2.20E+01**	EPA6 e
p-Nitrochlorobenzene	100-00-5	EPA6 calc c	2.39E+00	2.45E+02	Chemfate i	NA	2.24E+02	EPA6 calc c
p-Toluidine	106-49-0	RAIS b	1.40E+00	2.51E+01	Properties a	NA	2.38E+01	EPA6 calc c
sec-Butyl benzene	135-98-8	EPA6 calc c	NA	NA	NA	NA	NA	NA
tert-Butyl benzene	98-06-6	EPA6 calc c	4.11E+00	1.29E+04	Properties a	NA	1.10E+04	EPA6 calc c
Toluene-2,6-diamine	823-40-5	RAIS b	1.45E+00	2.85E+01	RAIS b	2.69E+01	2.69E+01	RAIS b
Other Light Semivolatile Compounds								
1,1 Dimethyl hydrazine	57-14-7	RAIS b	5.95E-01	3.94E+00	RAIS b	3.85E+00	3.85E+00	RAIS b
1,1-Biphenyl	92-52-4	EPA6 calc c	3.90E+00	7.94E+03	Properties a	3.40E+00	2.51E+03	Properties a
1,2 Diphenylhydrazine	122-66-7	EPA6 e	8.71E+02	8.71E+02	EPA6 e	2.78E+02	2.78E+02	EPA6 e
1,2-Dimethylhydrazine	540-73-8	EPA6 calc c	-1.37E+00	4.29E-02	Chemfate i	NA	4.52E-02	EPA6 calc c
1,3-Propane sultone	1120-71-4	EPA6 calc c	-5.23E-01	3.00E-01	Chemfate i	NA	3.06E-01	EPA6 calc c
2,4-Toluene diisocyanate	584-84-9	EPA6 calc c	NA	NA	NA	NA	NA	NA
2-Chloroacetophenone	532-27-4	RAIS b	2.59E+00	3.93E+02	RAIS b	7.60E+01	7.60E+01	RAIS b
2-Propenoic acid	79-10-7	RAIS b	4.30E-01	2.69E+00	Properties a	NA	2.65E+00	EPA6 calc c
4,4-Methylenedianiline	101-77-9	RAIS b	3.38E+00	2.40E+03	RAIS b	2.10E+03	2.10E+03	RAIS b
Acetophenone	98-86-2	EPA6 e	4.37E+01	4.37E+01	EPA6 e	2.69E+01	2.69E+01	EPA6 e

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			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
Benzoic acid	65-85-0	RAIS b	1.86E+00	7.24E+01	RAIS b	5.50E-1**	5.50E-1**	EPA6 e
bis(2-Chloroethoxy)methane	111-91-1	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	111-44-4	EPA6 e	2.00E+01	2.00E+01	EPA6 e	7.60E+01	7.60E+01	EPA6 e
Chlorocyclopentadiene	41851-50-7	EPA6 calc c	2.43E+00	2.69E+02	RAIS b	2.45E+02	2.45E+02	RAIS b
Cyclohexanol	108-93-0	EPA6 calc c	1.23E+00	1.70E+01	Properties a	1.11E+00	1.30E+01	Properties a
Dichloroisopropyl ether	108-60-1	RAIS b	2.58E+00	3.80E+02	Properties a	1.79E+00	6.10E+01	Properties a
Dichloromethyl ether	542-88-1	EPA6 calc c	-3.80E-01	4.17E-01	RAIS b	7.94E+01	7.94E+01	RAIS b
Dichloropentadiene	no cas #	EPA6 calc c	NA	NA	NA	NA	NA	NA
Dimethyl sulfate	77-78-1	RAIS b	3.18E-01	2.08E+00	RAIS b	2.06E+00	2.06E+00	RAIS b
Dimethylaniline	121-69-7	RAIS b	-8.80E-01	1.32E-01	RAIS b	1.37E-01	1.37E-01	RAIS b
di-n-propylnitrosamine	621-64-7	EPA6 e	2.40E+01	2.40E+01	EPA6 e	1.70E+01	1.70E+01	EPA6 e
Diphenyl ether	101-84-8	EPA6 calc c	4.21E+00	1.62E+04	Properties a	NA	1.38E+04	EPA6 calc c
Epichlorohydrin	106-89-8	EPA6 e	1.78E+00	1.78E+00	EPA6 e	2.22E+00	2.22E+00	EPA6 e
Ethyl carbomate (urethane)	51-79-6	EPA6 calc c	-1.50E-01	7.08E-01	Chemfate i	NA	7.12E-01	EPA6 calc c
Ethyl methane sulfanate	62-50-0	EPA6 e	1.12E+00	1.12E+00	EPA6 e	1.55E+00	1.55E+00	EPA6 e
Ethylene dibromide	106-93-4	EPA6 e	5.62E+01	5.62E+01	EPA6 e	3.28E+01	3.28E+01	EPA6 e
Ethylene glycol	107-21-1	RAIS b	-9.14E-01	1.22E-01	RAIS b	1.26E-01	1.26E-01	RAIS b
Ethylene glycol monobutyl ether	111-76-2	RAIS b	1.55E+00	3.58E+01	RAIS b	6.17E+01	6.17E+01	RAIS b
Ethylene glycol monoethyl ether acetate	111-15-9	RAIS b	6.19E-01	4.16E+00	RAIS b	4.07E+00	4.07E+00	RAIS b
Ethylene thiourea	96-45-7	RAIS b	-6.42E-01	2.28E-01	RAIS b	2.34E-01	2.34E-01	RAIS b
Furfural	98-01-1	RAIS b	9.60E-01	9.12E+00	Properties a	NA	8.79E+00	EPA6 calc c
Maleic hydrazide	123-33-1	EPA6 calc c	-7.40E-01	1.82E-01	RAIS b	1.87E-01	1.87E-01	RAIS b
Malononitrile	109-77-3	EPA6 calc c	4.00E-02	1.10E+00	RAIS b	1.29E+00	1.29E+00	RAIS b
Methyl styrene (mixed isomers)	25013-15-4	RAIS b	3.35E+00	2.24E+03	RAIS b	3.70E+02	3.70E+02	RAIS b
Methylhydrazine	60-34-4	EPA6 calc c	-1.05E+00	8.91E-02	Chemfate i	NA	9.29E-02	EPA6 calc c
N,N-Diphenylamine	122-39-4	EPA6 calc c	3.50E+00	3.16E+03	Properties a	2.54E+00	3.47E+02	Properties a
Nitric acid, propyl ester	627-13-4	EPA6 calc c	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	EPA6 e	2.57E+02	2.57E+02	EPA6 e	1.07E+02	1.07E+02	EPA6 e
N-Nitrosomorpholine	59-89-2	EPA6 calc c	-4.40E-01	9.56E+00	Chemfate i	NA	9.20E+00	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
N-Nitroso-N,N-dimethylamine	62-75-9	RAIS b	-4.70E-01	3.39E-01	RAIS b	8.30E+00	8.30E+00	RAIS b
o-Anisidine	90-04-0	EPA6 calc c	1.18E+00	1.51E+01	Chemfate i	NA	1.45E+01	EPA6 calc c
Oxalic acid	144-62-7	EPA6 calc c	NA	NA	NA	NA	NA	NA
Phthalic Anhydride	85-44-9	EPA6 e	2.50E-01	2.50E-01	EPA6 e	4.80E-01	4.80E-01	EPA6 e
p-Phthalic acid	100-21-0	RAIS b	8.23E-01	6.65E+00	RAIS b	6.44E+00	6.44E+00	RAIS b
Pyridine	110-86-1	EPA6 e	4.68E+00	4.68E+00	EPA6 e	4.72E+00	4.72E+00	EPA6 e
Quinoline	91-22-5	RAIS b	2.03E+00	1.07E+02	RAIS b	9.90E+01	9.90E+01	RAIS b
Quinone	106-51-4	EPA6 calc c	2.00E-01	1.58E+00	Chemfate i	NA	1.57E+00	EPA6 calc c
Safrole	94-59-7	EPA6 e	4.57E+02	4.57E+02	EPA6 e	1.68E+02	1.68E+02	EPA6 e
Tetrahydrofuran	109-99-9	EPA6 e	2.80E+00	2.80E+00	EPA6 e	3.16E+00	3.16E+00	EPA6 e
Other Heavy Semivolatile Compounds								
1,2,4,5-Tetrachlorobenzene	95-94-3	EPA6 e	4.36E+04	4.36E+04	EPA6 e	5.89E+03	5.89E+03	EPA6 e
1,3,5-Trinitrobenzene	99-35-4	EPA6 e	1.51E+01	1.51E+01	EPA6 e	1.18E+01	1.18E+01	EPA6 e
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	EPA6 calc c	4.17E+00	1.48E+04	Chemfate i	NA	1.26E+04	EPA6 calc c
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	EPA6 calc c	-2.70E+00	2.00E-03	RAIS b	2.22E-03	2.22E-03	RAIS b
2-sec-Butyl-4,6-dinitrophenol	88-85-7	EPA6 calc c	3.14E+00	1.38E+03	RAIS b	1.22E+03	1.22E+03	RAIS b
3,3-Dichlorobenzidine	91-94-1	EPA6 e	3.76E+03	3.76E+03	EPA6 e	8.70E+02	8.70E+02	EPA6 e
3,3'-Dimethoxybenzidine	119-90-4	EPA6 e	6.46E+01	6.46E+01	EPA6 e	3.65E+01	3.65E+01	EPA6 e
4-Bromophenylphenyl ether	101-55-3	EPA6 calc c	5.00E+00	1.00E+05	RAIS b	8.23E+04	8.23E+04	RAIS b
Ammonium perfluorooctanoate	3825-26-1	EPA6 calc c	NA	NA	NA	NA	NA	NA
Azobenzene	103-33-3	RAIS b	3.82E+00	6.61E+03	RAIS b	2.69E+03	2.69E+03	RAIS b
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	EPA6 calc c	NA	NA	NA	NA	NA	NA
Captan	133-06-2	RAIS b	2.35E+00	2.24E+02	Properties a	2.30E+00	2.00E+02	Properties a
Chlorobenzilate	510-15-6	EPA6 e	2.40E+04	2.40E+04	EPA6 e	3.69E+03	3.69E+03	EPA6 e
Dibutylphosphate	107-66-4	EPA6 calc c	NA	NA	NA	NA	NA	NA
Dimethyl aminoazobenzene	60-11-7	EPA6 calc c	4.58E+00	3.80E+04	Chemfate i	NA	3.18E+04	EPA6 calc c
Hexachlorobenzene	118-74-1	EPA6 e	3.18E+05	3.18E+05	EPA6 e	8.00E+04	8.00E+04	EPA6 e
Hexachlorobutadiene	87-68-3	EPA6 e	5.38E+04	5.38E+04	EPA6 e	6.94E+03	6.94E+03	EPA6 e
Hexachlorocyclopentadiene	77-47-4	EPA6 e	8.07E-04	8.07E-04	EPA6 e	9.51E+03	9.51E+03	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
Hexachloroethane	67-72-1	EPA6 e	9.66E+03	9.66E+03	EPA6 e	1.82E+04	1.82E+04	EPA6 e
Hexachlorophene	70-30-4	EPA6 e	3.47E+07	3.47E+07	EPA6 e	1.08E+06	1.08E+06	EPA6 e
Hexamethylene-1,5-diisocyanate	822-06-0	RAIS b	1.27E+00	1.88E+01	RAIS b	1.79E+01	1.79E+01	RAIS b
Mirex	2385-85-5	EPA6 calc c	6.89E+00	7.76E+06	Properties a	6.00E+00	1.00E+06	Properties a
Nitrofen	1836-75-5	EPA6 calc c	5.53E+00	3.39E+05	Chemfate i	NA	2.73E+05	EPA6 calc c
Pentachlorobenzene	608-93-5	EPA6 e	1.22E+05	1.22E+05	EPA6 e	3.21E+04	3.21E+04	EPA6 e
Pentachloronitrobenzene	82-68-8	EPA6 e	4.37E+04	4.37E+04	EPA6 e	5.89E+03	5.89E+03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	1.99E+04	1.99E+04	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	1.96E+04	1.96E+04	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	1.69E+04	1.69E+04	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	7.33E+03	7.33E+03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	1.42E+03	1.42E+03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	5.05E+02	5.05E+02	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	4.09E+02	4.09E+02	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	3.99E+02	3.99E+02	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	3.98E+02	3.98E+02	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	3.98E+02	3.98E+02	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	3.98E+02	3.98E+02	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	3.98E+02	3.98E+02	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	1.20E+05	1.20E+05	EPA6 e	1.99E+04	1.99E+04	EPA6 e
Picric acid	88-89-1	EPA6 calc c	2.03E+00	1.07E+02	Chemfate i	NA	9.90E+01	EPA6 calc c
Pronamide	23950-58-5	EPA6 e	3.24E+03	3.24E+03	EPA6 e	7.74E+02	7.74E+02	EPA6 e
Strychnine	57-24-9	EPA6 e	8.51E+01	8.51E+01	EPA6 e	4.53E+02	4.53E+02	EPA6 e
Terphenyls	26140-60-3	EPA6 calc c	NA	NA	NA	NA	NA	NA
Tributyl phosphate	126-73-8	EPA6 calc c	4.00E+00	1.00E+04	Chemfate i	NA	8.55E+03	EPA6 calc c
Trifluralin	1582-09-8	RAIS b	5.34E+00	2.19E+05	Properties a	3.78E+00	6.03E+03	Properties a
Triphenylamine	603-34-9	EPA6 calc c	NA	NA	NA	NA	NA	NA
Herbicides and Organopesticides								
2,4,5-T	93-76-5	RAIS b	3.36E+00	2.29E+03	Properties a	1.72E+00	5.25E+01	Properties a

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source
2,4-D and esters	94-75-7	RAIS b	2.81E+00	6.46E+02	Properties a	1.30E+00	2.00E+01	Properties a
4,4-DDD	72-54-8	RAIS b	6.20E+00	1.58E+06	Properties a	5.00E+00	1.00E+05	Properties a
4,4-DDT	50-29-3	RAIS b	6.00E+00	1.00E+06	Properties a	5.38E+00	2.40E+05	Properties a
Aldrin	309-00-2	EPA6 e	1.51E+06	1.51E+06	EPA6 e	4.87E+04	4.87E+04	EPA6 e
alpha-BHC	319-84-6	EPA6 e	6.30E+03	6.30E+03	EPA6 e	1.76E+03	1.76E+03	EPA6 e
beta-BHC	319-85-7	EPA6 e	6.81E+03	6.81E+03	EPA6 e	2.14E+03	2.14E+03	EPA6 e
Chlordane	57-74-9	EPA6 e	8.66E+05	8.66E+05	EPA6 e	5.13E+04	5.13E+04	EPA6 e
DDE	72-55-9	EPA6 e	1.80E+06	1.80E+06	EPA6 e	8.64E+02	8.64E+02	EPA6 e
Delta-BHC	319-86-8	EPA6 calc c	4.14E+00	1.38E+04	Properties a	2.82E+00	6.61E+02	Properties a
Dieldrin	60-57-1	EPA6 e	1.86E+05	1.86E+05	EPA6 e	2.55E+04	2.55E+04	EPA6 e
Endothall	145-73-3	EPA6 calc c	-8.70E-01	1.35E-01	Organics g	NA	1.40E-01	EPA6 calc c
Endrin	72-20-8	EPA6 e	7.79E+04	7.79E+04	EPA6 e	1.08E+08	1.08E+08	EPA6 e
gamma-BHC(Lindane)	58-89-9	EPA6 calc c	3.72E+00	5.25E+03	Properties a	3.03E+00	1.07E+03	Properties a
Heptachlor	76-44-8	EPA6 e	1.04E+05	1.04E+05	EPA6 e	9.53E+03	9.53E+03	EPA6 e
Isodrin	465-73-6	EPA6 calc c	NA	NA	NA	NA	NA	NA
Methoxychlor	72-43-5	EPA6 e	3.36E+04	3.36E+04	EPA6 e	8.00E+04	8.00E+04	EPA6 e
Silvex (2,4,5-TP)	93-72-1	RAIS b	4.07E+00	1.18E+04	RAIS b	1.01E+04	1.01E+04	RAIS b
Toxaphene	8001-35-2	RAIS b	5.50E+00	3.16E+05	Properties a	5.00E+00	1.00E+05	Properties a

NA = Value not available
** = Varies with pH; values given for a pH of 7.0.
a = Illustrated Handbook of Physical - Chemical Properties and Environmental Fate f
b = RAIS database: http://risk.lsd.ornl.gov/rap_hp.shtml
c = Equations derived from EPA Region 6 Guidance Appendix A-3
d = Handbook of Environmental degradation Rates. 1991.
e = EPA Region 6 Hazardous Waste Combustion Guidance
f = "A Critical Review of Henry's Law Constants for Chemicals of Environmental In
g = Handbook of Environmental Fate and Exposure Data for Organic Chemicals
h = http://www.epa.gov/region09/waste/sfund/prg/.
i = http://esc.syrres.com/efdb/Chemfate.htm
j = Hansch and Leo 1985 in Syracuse 1996

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Octanol / Water Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	Source	K_{ow} (Published Value)	K_{ow} (unitless)	Source	K_{oc} (Published Value)	K_{oc} (mL/g)	Source

k = Schwarzenbach et al. 1993

l = Tomlin 1994 in Syracuse 1996

m = http://www.speclab.com/compound/c959988.htm

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
Aromatic Halogenated Hydrocarbons								
2,3,4,6-Tetrachlorophenol	58-90-2	6.61E+01	EPA6 calc c	4.96E+02	EPA6 calc c	2.64E+02	EPA6 calc c	
4-Chloro-3-methylphenol	59-50-7	6.03E+00	EPA6 calc c	4.52E+01	EPA6 calc c	2.41E+01	EPA6 calc c	
Aromatic Nonhalogenated Hydrocarbons								
2-Nitrotoluene	88-72-2	4.27E+00	EPA6 calc c	3.20E+01	EPA6 calc c	1.71E+01	EPA6 calc c	
4-Nitrobiphenyl	92-93-3	NA	NA	NA	NA	NA	NA	
Benzaldehyde	100-52-7	2.01E-01	EPA6 e	1.51E+00	EPA6 e	8.04E-01	EPA6 e	
Benzene	71-43-2	6.20E-01	EPA6 e	4.65E+00	EPA6 e	2.48E+00	EPA6 e	
Benzyl alcohol	100-51-6	1.02E-01	EPA6 e	7.66E-01	EPA6 e	4.09E-01	EPA6 e	
Ethyl Benzene	100-41-4	2.04E+00	EPA6 e	1.53E+01	EPA6 e	8.16E+00	EPA6 e	
m-Xylene	108-38-3	1.96E+00	EPA6 e	1.47E+01	EPA6 e	7.84E+00	EPA6 e	
o-Xylene	95-47-6	2.41E+00	EPA6 e	1.81E+01	EPA6 e	9.64E+00	EPA6 e	
p-Xylene	106-42-3	3.11E+00	EPA6 e	2.33E+01	EPA6 e	1.24E+01	EPA6 e	
Styrene	100-42-5	9.12E+00	EPA6 e	6.84E+01	EPA6 e	3.65E+01	EPA6 e	
Toluene	108-88-3	1.40E+00	EPA6 e	1.05E+01	EPA6 e	5.60E+00	EPA6 e	
Non-aromatic Nonhalogenated Hydrocarbons								
1,2-Epoxybutane	106-88-7	7.94E-02	EPA6 calc c	5.96E-01	EPA6 calc c	3.18E-01	EPA6 calc c	
1,3-Butadiene	106-99-0	9.04E-01	EPA6 calc c	6.78E+00	EPA6 calc c	3.62E+00	EPA6 calc c	
1,4-Dioxane	123-91-1	8.76E-03	EPA6 e	6.57E-02	EPA6 e	3.50E-02	EPA6 e	
1-Methylpropyl alcohol	78-92-2	3.98E-02	EPA6 calc c	2.98E-01	EPA6 calc c	1.59E-01	EPA6 calc c	
1-Nitropropane	108-03-2	7.17E-02	EPA6 calc c	5.38E-01	EPA6 calc c	2.87E-01	EPA6 calc c	
2,2,4-Trimethlylpentane	540-84-1	8.61E+02	EPA6 calc c	6.46E+03	EPA6 calc c	3.44E+03	EPA6 calc c	
2-Butanone	78-93-3	2.34E-02	EPA6 e	1.76E-01	EPA6 e	9.36E-02	EPA6 e	
2-Butenaldehyde (2-Butenal)	4170-30-3	NA	NA	NA	NA	NA	NA	
2-Ethoxyethanol	110-80-5	2.09E-01	EPA6 calc c	1.57E+00	EPA6 calc c	8.36E-01	EPA6 calc c	
2-Heptanone	110-43-0	8.84E-01	EPA6 calc c	6.63E+00	EPA6 calc c	3.54E+00	EPA6 calc c	
2-Hexanone	591-78-6	1.34E+00	EPA6 calc c	1.00E+01	EPA6 calc c	5.36E+00	EPA6 calc c	
2-Methoxyethanol	109-86-4	8.53E-02	EPA6 calc c	6.40E-01	EPA6 calc c	3.41E-01	EPA6 calc c	
2-Methyl-2-propanol	75-65-0	3.72E-01	EPA6 calc c	2.79E+00	EPA6 calc c	1.49E+00	EPA6 calc c	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
2-Methyl-2-propenenitrile	126-98-7	3.74E-02	EPA6 e	2.80E-01	EPA6 e	1.49E-01	EPA6 e	
2-Methylaziridine	75-55-8	NA	NA	NA	NA	NA	NA	
2-Methylpropyl alcohol	78-83-1	5,59E-02	EPA6 calc c	4.19E-01	EPA6 calc c	2.24E-01	EPA6 calc c	
2-Pentanone	107-87-9	7.40E-01	EPA6 calc c	5.55E+00	EPA6 calc c	2.96E+00	EPA6 calc c	
2-Propanone (Acetone)	67-64-1	9.51E-03	EPA6 e	7.13E-02	EPA6 e	3.80E-02	EPA6 e	
2-Propene-1-ol	107-18-6	1.47E-02	EPA6 calc c	1.10E-01	EPA6 calc c	5.88E-02	EPA6 calc c	
2-Propyl alcohol	67-63-0	1.12E-02	EPA6 calc c	8.40E-02	EPA6 calc c	4.48E-02	EPA6 calc c	
3-Heptanone	106-35-4	NA	NA	NA	NA	NA	NA	
3-Methyl-1-butanol	123-51-3	NA	NA	NA	NA	NA	NA	
3-Methyl-2-butanone	563-80-4	NA	NA	NA	NA	NA	NA	
3-Pentanone	96-22-0	1.20E-01	EPA6 calc c	9.02E-01	EPA6 calc c	4.81E-01	EPA6 calc c	
4-Heptanone	123-19-3	NA	NA	NA	NA	NA	NA	
4-Methyl-2-pentanone	108-10-1	1.20E-01	EPA6 e	9.00E-01	EPA6 e	4.80E-01	EPA6 e	
4-Methyl-3-penten-2-one	141-79-7	NA	NA	NA	NA	NA	NA	
5-Methyl-2-hexanone	110-12-3	NA	NA	NA	NA	NA	NA	
Acetaldehyde	75-07-0	9.53E-03	EPA6 e	7.15E-02	EPA6 e	3.81E-02	EPA6 e	
Acetamide	60-35-5	2.82E-04	EPA6 calc c	2.11E-03	EPA6 calc c	1.13E-03	EPA6 calc c	
Acetic acid	64-19-7	1.00E-02	EPA6 calc c	7.50E-02	EPA6 calc c	4.00E-02	EPA6 calc c	
Acetic acid ethyl ester	141-78-6	2.30E-02	EPA6 calc c	1.72E-01	EPA6 calc c	9.18E-02	EPA6 calc c	
Acetic acid n-butyl ester	123-86-4	5.02E-01	EPA6 calc c	3.77E+00	EPA6 calc c	2.01E+00	EPA6 calc c	
Acetonitrile	75-05-8	7.69E-03	EPA6 e	5.76E-02	EPA6 e	3.07E-02	EPA6 e	
Acrolein	107-02-8	1.39E-02	EPA6 e	1.05E-01	EPA6 e	5.57E-02	EPA6 e	
Acrylonitrile	107-13-1	2.22E-02	EPA6 e	1.66E-01	EPA6 e	8.88E-02	EPA6 e	
Bis(isopropyl)ether	108-20-3	NA	NA	NA	NA	NA	NA	
Butane	106-97-8	6.94E+00	EPA6 calc c	5.20E+01	EPA6 calc c	2.77E+01	EPA6 calc c	
Carbon disulfide	75-15-0	5.14E-01	EPA6 e	3.86E+00	EPA6 e	2.06E+00	EPA6 e	
Cyanogen	460-19-5	5.22E-02	EPA6 calc c	3.92E-01	EPA6 calc c	2.09E-01	EPA6 calc c	
Cyclohexane	110-82-7	4.79E+00	EPA6 calc c	3.59E+01	EPA6 calc c	1.91E+01	EPA6 calc c	
Cyclohexanone	108-94-1	6.26E-02	EPA6 calc c	4.69E-01	EPA6 calc c	2.50E-01	EPA6 calc c	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
Cyclohexene	110-83-8	6.48E+00	EPA6 calc c	4.86E+01	EPA6 calc c	2.59E+01	EPA6 calc c	
Cyclopentane	287-92-3	8.90E+00	EPA6 calc c	6.67E+01	EPA6 calc c	3.56E+01	EPA6 calc c	
Ethyl alcohol	64-17-5	4.96E-03	EPA6 calc c	3.72E-02	EPA6 calc c	1.98E-02	EPA6 calc c	
Ethyl ether	60-29-7	7.50E-02	EPA6 calc c	5.63E-01	EPA6 calc c	3.00E-01	EPA6 calc c	
Ethyl methacrylate	97-63-2	2.46E-01	EPA6 e	1.85E+00	EPA6 e	9.80E-01	EPA6 e	
Formaldehyde	50-00-0	2.62E-02	EPA6 e	1.96E-01	EPA6 e	1.05E-01	EPA6 e	
Formamide	75-12-7	3.28E-04	EPA6 calc c	2.46E-03	EPA6 calc c	1.31E-03	EPA6 calc c	
Formic acid	64-18-6	5.39E-02	EPA6 e	4.04E-01	EPA6 e	2.16E-01	EPA6 e	
Formic acid, methyl ester	107-31-3	5.50E-03	EPA6 calc c	4.13E-02	EPA6 calc c	2.20E-02	EPA6 calc c	
Glycidylaldehyde	765-34-4	1.00E-03	EPA6 calc c	7.50E-03	EPA6 calc c	4.00E-03	EPA6 calc c	
Methyl acetate	79-20-9	4.80E-02	EPA6 calc c	3.60E-01	EPA6 calc c	1.92E-01	EPA6 calc c	
Methyl alcohol	67-56-1	3.96E-03	EPA6 e	2.97E-02	EPA6 e	1.58E-02	EPA6 e	
Methyl isocyanate	624-83-9	NA	NA	NA	NA	NA	NA	
Methyl methacrylate	80-62-6	6.31E-01	EPA6 calc c	4.73E+00	EPA6 calc c	2.52E+00	EPA6 calc c	
Methyl tert-butyl ether	1634-04-4	8.40E-02	EPA6 calc c	6.30E-01	EPA6 calc c	3.36E-01	EPA6 calc c	
Methylacetylene	74-99-7	8.40E-02	EPA6 calc c	6.30E-01	EPA6 calc c	3.36E-01	EPA6 calc c	
Methylcyclohexane	108-87-2	1.07E+02	EPA6 calc c	8.05E+02	EPA6 calc c	4.29E+02	EPA6 calc c	
N,N-Dimethylacetamide	127-19-5	NA	NA	NA	NA	NA	NA	
n-Butyl alcohol	71-36-3	7.33E-02	EPA6 calc c	5.50E-01	EPA6 calc c	2.93E-01	EPA6 calc c	
n-Heptane	142-82-5	3.81E+02	EPA6 calc c	2.86E+03	EPA6 calc c	1.52E+03	EPA6 calc c	
n-Hexane	110-54-3	1.10E+02	EPA6 calc c	8.23E+02	EPA6 calc c	4.39E+02	EPA6 calc c	
Nitromethane	75-52-5	4.53E-03	EPA6 calc c	3.40E-02	EPA6 calc c	1.81E-02	EPA6 calc c	
n-Nonane	111-84-2	3.58E+03	EPA6 calc c	2.69E+04	EPA6 calc c	1.43E+04	EPA6 calc c	
n-Octane	111-65-9	8.55E+01	EPA6 calc c	6.42E+02	EPA6 calc c	3.42E+02	EPA6 calc c	
n-Pentane	109-66-0	1.43E+01	EPA6 calc c	1.07E+02	EPA6 calc c	5.72E+01	EPA6 calc c	
n-Propionaldehyde	123-38-6	3.80E-02	EPA6 calc c	2.85E-01	EPA6 calc c	1.52E-01	EPA6 calc c	
n-Propyl alcohol	71-23-8	1.76E-02	EPA6 calc c	1.32E-01	EPA6 calc c	7.05E-02	EPA6 calc c	
n-Valeraldehyde	110-62-3	NA	NA	NA	NA	NA	NA	
Oxirane	75-21-8	8.26E-03	EPA6 e	6.19E-02	EPA6 e	3.30E-02	EPA6 e	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
p-Cymene	99-87-6	1.07E+02	EPA6 calc c	8.05E+02	EPA6 calc c	4.29E+02	EPA6 calc c	
Phosgene	75-44-5	NA	NA	NA	NA	NA	NA	
Propargyl alcohol	107-19-7	NA	NA	NA	NA	NA	NA	
Propionic acid	79-09-4	2.11E-02	EPA6 calc c	1.58E-01	EPA6 calc c	8.45E-02	EPA6 calc c	
Propionitrile	107-12-0	1.44E-02	EPA6 calc c	1.08E-01	EPA6 calc c	5.75E-02	EPA6 calc c	
Propylene glycol monomethyl ether	107-98-2	1.26E-01	EPA6 calc c	9.44E-01	EPA6 calc c	5.04E-01	EPA6 calc c	
p-tert-Butyltoluene	98-51-1	NA	NA	NA	NA	NA	NA	
Triethylamine	121-44-8	NA	NA	NA	NA	NA	NA	
Trimethylamine	75-50-3	4.00E-02	EPA6 calc c	3.00E-01	EPA6 calc c	1.60E-01	EPA6 calc c	
Vinyl acetate	108-05-4	4.97E-02	EPA6 e	3.73E-01	EPA6 e	1.99E-01	EPA6 e	
Non-aromatic Halogenated Hydrocarbons								
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	NA	NA	NA	NA	NA	NA	
1,1,1,2-Tetrachloroethane	630-20-6	1.59E+00	EPA6 e	1.20E+01	EPA6 e	6.37E+00	EPA6 e	
1,1,1-Trichloroethane	71-55-6	1.35E+03	EPA6 e	1.01E+04	EPA6 e	5.40E+03	EPA6 e	
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	3.16E+00	EPA6 calc c	2.37E+01	EPA6 calc c	1.26E+01	EPA6 calc c	
1,1,2,2-Tetrachloroethane	79-34-5	7.90E-01	EPA6 e	5.93E+00	EPA6 e	3.16E+00	EPA6 e	
1,1,2,2-Tetrachloroethene	127-18-4	2.65E+00	EPA6 e	1.99E+01	EPA6 e	1.06E+01	EPA6 e	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.57E+00	EPA6 calc c	1.93E+01	EPA6 calc c	1.03E+01	EPA6 calc c	
1,1,2-Trichloroethane	79-00-5	7.50E-01	EPA6 e	5.63E+00	EPA6 e	3.00E+00	EPA6 e	
1,1,2-Trichloroethylene	79-01-6	9.40E-01	EPA6 e	7.05E+00	EPA6 e	3.76E+00	EPA6 e	
1,1-Dichloroethane	75-34-3	5.30E-01	EPA6 e	3.98E+00	EPA6 e	2.12E+00	EPA6 e	
1,1-Dichloroethene	75-35-4	6.50E-01	EPA6 e	4.88E+00	EPA6 e	2.60E+00	EPA6 e	
1,2,3-Trichloropropane	96-18-4	8.10E-01	EPA6 e	6.04E+00	EPA6 e	3.22E+00	EPA6 e	
1,2-dibromo-3-chloropropane	96-12-8	9.47E-01	EPA6 e	7.10E+00	EPA6 e	3.79E+00	EPA6 e	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	NA	NA	NA	NA	NA	NA	
1,2-Dichloroethane	107-06-2	1.96E-01	EPA6 e	1.47E+00	EPA6 e	7.83E-01	EPA6 e	
1,2-Dichloroethylene	540-59-0	2.87E-02	EPA6 calc c	2.16E-01	EPA6 calc c	1.15E-01	EPA6 calc c	
1,2-Dichloropropane	78-87-5	4.70E-01	EPA6 e	3.53E+00	EPA6 e	1.88E+00	EPA6 e	
1,3-Dichloropropene	542-75-6	2.70E-01	EPA6 e	2.03E+00	EPA6 e	1.08E+00	EPA6 e	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
1,4-Dichloro-2-butene	764-41-0	1.82E+00	EPA6 calc c	1.36E+01	EPA6 calc c	7.28E+00	EPA6 calc c	
1-Chloroethene	75-01-4	1.11E-01	EPA6 e	8.32E-01	EPA6 e	4.44E-01	EPA6 e	
2,2-Dichloropropionic acid	75-99-0	5.82E-02	EPA6 calc c	4.37E-01	EPA6 calc c	2.33E-01	EPA6 calc c	
2-Chloropropane	75-29-6	7.38E-01	EPA6 calc c	5.53E+00	EPA6 calc c	2.95E+00	EPA6 calc c	
3-Chloropropene (allyl chloride)	107-05-1	4.79E-01	EPA6 calc c	3.59E+00	EPA6 calc c	1.91E+00	EPA6 calc c	
Bromochloromethane	74-97-5	2.43E-01	EPA6 calc c	1.83E+00	EPA6 calc c	9.73E-01	EPA6 calc c	
Bromodichloromethane	75-27-4	5.38E-01	EPA6 e	4.03E+00	EPA6 e	2.15E+00	EPA6 e	
Bromoethene	593-60-2	1.51E+00	EPA6 calc c	1.14E+01	EPA6 calc c	6.05E+00	EPA6 calc c	
Bromoform	75-25-2	1.26E+00	EPA6 e	9.45E+00	EPA6 e	5.04E+00	EPA6 e	
Bromomethane	74-83-9	9.00E-02	EPA6 e	6.75E-01	EPA6 e	3.60E-01	EPA6 e	
Carbon tetrachloride	56-23-5	1.52E+00	EPA6 e	1.14E+01	EPA6 e	6.08E+00	EPA6 e	
Chlordibromomethane	124-48-1	7.05E-01	EPA6 e	5.29E+00	EPA6 e	2.82E+00	EPA6 e	
Chlorodifluoromethane	75-45-6	9.83E-02	EPA6 e	9.83E-04	EPA6 e	3.93E-01	EPA6 e	
Chloroethane	75-00-3	3.71E+00	EPA6 e	2.78E+01	EPA6 e	1.48E+01	EPA6 e	
Chloroform	67-66-3	5.30E+01	EPA6 e	3.98E+00	EPA6 e	2.12E+00	EPA6 e	
Chloromethane	74-87-3	6.00E-02	EPA6 e	4.50E-01	EPA6 e	2.40E-01	EPA6 e	
Chloropentafluoroethane	76-15-3	NA	NA	NA	NA	NA	NA	
cis-1,2-Dichloroethene	156-59-2	4.98E+00	EPA6 e	3.73E+01	EPA6 e	1.99E+01	EPA6 e	
cis-1,3-Dichloropropene	10061-01-5	NA	NA	NA	NA	NA	NA	
Cyanogen bromide	506-68-3	NA	NA	NA	NA	NA	NA	
Cyanogen chloride	506-77-4	NA	NA	NA	NA	NA	NA	
Dichlorodifluoromethane	75-71-8	6.85E-01	EPA6 e	5.14E+00	EPA6 e	2.74E+00	EPA6 e	
Dichlorofluoromethane	75-43-4	NA	NA	NA	NA	NA	NA	
Dichloromethane	75-09-2	1.00E-01	EPA6 e	7.50E-01	EPA6 e	4.00E-01	EPA6 e	
Difluorodibromomethane	75-61-6	NA	NA	NA	NA	NA	NA	
Hexafluoroacetone	684-16-2	NA	NA	NA	NA	NA	NA	
Iodomethane	74-88-4	4.59E-01	EPA6 calc c	3.44E+00	EPA6 calc c	1.83E+00	EPA6 calc c	
Methylene bromide	74-95-3	2.60E-01	EPA6 e	1.95E+00	EPA6 e	1.04E+00	EPA6 e	
Pentachloroethane	76-01-7	9.96E+00	EPA6 calc c	7.47E+01	EPA6 calc c	3.98E+01	EPA6 calc c	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
trans-1,2-Dichloroethene	156-60-5	3.80E-01	EPA6 e	2.85E+00	EPA6 e	1.52E+00	EPA6 e	
trans-1,3-Dichloropropene	10061-02-6	1.06E+00	EPA6 calc c	7.95E+00	EPA6 calc c	4.24E+00	EPA6 calc c	
Trichloroacetic acid	76-03-9	2.03E-01	EPA6 calc c	1.52E+00	EPA6 calc c	8.12E-01	EPA6 calc c	
Trichlorofluoroethane	27154-33-2	NA	NA	NA	NA	NA	NA	
Trichlorofluoromethane	75-69-4	1.34E+00	EPA6 e	1.00E+01	EPA6 e	5.34E+00	EPA6 e	
Trifluorobromomethane	75-63-8	6.74E-01	EPA6 calc c	5.05E+00	EPA6 calc c	2.70E+00	EPA6 calc c	
Dioxin and Furan Compounds								
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	9.77E+05	EPA6 e	7.33E+06	EPA6 e	3.91E+06	EPA6 e	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	5.13E+05	EPA6 e	3.85E+06	EPA6 e	2.05E+06	EPA6 e	
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	5.13E+05	EPA6 e	3.85E+06	EPA6 e	2.05E+06	EPA6 e	
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	3.80E+05	EPA6 e	2.85E+06	EPA6 e	1.52E+06	EPA6 e	
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	1.10E+05	EPA6 e	8.22E+05	EPA6 e	4.39E+05	EPA6 e	
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	1.10E+05	EPA6 e	8.22E+05	EPA6 e	4.39E+05	EPA6 e	
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	1.10E+05	EPA6 e	8.22E+05	EPA6 e	4.39E+05	EPA6 e	
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	1.10E+05	EPA6 e	8.22E+05	EPA6 e	4.39E+05	EPA6 e	
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	1.10E+05	EPA6 e	8.22E+05	EPA6 e	4.39E+05	EPA6 e	
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	2.69E+04	EPA6 e	2.02E+05	EPA6 e	1.08E+05	EPA6 e	
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	3.80E+04	EPA6 e	2.85E+05	EPA6 e	1.52E+05	EPA6 e	
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	1.10E+05	EPA6 e	8.22E+05	EPA6 e	4.39E+05	EPA6 e	
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	5.13E+04	EPA6 e	3.85E+05	EPA6 e	2.05E+05	EPA6 e	
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	2.69E+04	EPA6 e	2.02E+05	EPA6 e	1.08E+05	EPA6 e	
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	2.09E+04	EPA6 e	1.57E+05	EPA6 e	8.36E+04	EPA6 e	
Dibenzofuran	132-64-9	1.81E+02	EPA6 calc c	1.35E+03	EPA6 calc c	7.22E+02	EPA6 calc c	
Octachlorodibenzo(p)dioxin	3268-87-9	2.40E+05	EPA6 e	1.80E+06	EPA6 e	9.60E+05	EPA6 e	
Octachlorodibenzofuran	39001-02-0	3.72E+06	EPA6 e	2.79E+07	EPA6 e	1.49E+07	EPA6 e	
PCBs								
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	7.08E+04	EPA6 calc c	5.31E+05	EPA6 calc c	2.83E+05	EPA6 calc c	
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	8.32E+04	EPA6 calc c	6.24E+05	EPA6 calc c	3.33E+05	EPA6 calc c	
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	NA	NA	NA	NA	NA	NA	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	NA	NA	NA	NA	NA	NA	
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	NA	NA	NA	NA	NA	NA	
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	NA	NA	NA	NA	NA	NA	
2',3,4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	9.98E+04	EPA6 calc c	7.49E+05	EPA6 calc c	3.99E+05	EPA6 calc c	
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	3.98E+04	EPA6 calc c	2.99E+05	EPA6 calc c	1.59E+05	EPA6 calc c	
3,3',4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	NA	NA	NA	NA	NA	NA	
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	NA	NA	NA	NA	NA	NA	
Polychlorinated biphenyls (PCBs)**	1336-36-3	3.09E+03	EPA6 calc c	2.32E+04	EPA6 calc c	1.24E+04	EPA6 calc c	
Phthalates								
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	1.11E+03	EPA6 e	8.33E+03	EPA6 e	4.44E+03	EPA6 e	
Butylbenzyl phthalate	85-68-7	1.37E+02	EPA6 e	1.03E+03	EPA6 e	5.50E+02	EPA6 e	
Dibutyl phthalate	84-74-2	1.57E+01	EPA6 e	1.18E+02	EPA6 e	6.27E+01	EPA6 e	
Diethyl phthalate	84-66-2	8.20E-01	EPA6 e	6.15E+00	EPA6 e	3.28E+00	EPA6 e	
Dimethyl phthalate	131-11-3	2.66E+00	EPA6 e	2.00E+01	EPA6 e	1.06E+01	EPA6 e	
n-Dioctyl phthalate	117-84-0	9.03E+06	EPA6 e	6.78E+07	EPA6 e	3.61E+07	EPA6 e	
Light Polycyclic Aromatic Hydrocarbons								
2-Chloronaphthalene	91-58-7	7.14E+01	EPA6 e	5.36E+02	EPA6 e	2.86E+02	EPA6 e	
2-Methyl naphthalene	91-57-6	6.23E+01	EPA6 calc c	4.67E+02	EPA6 calc c	2.49E+02	EPA6 calc c	
5-Nitroacenaphthene	602-87-9	NA	NA	NA	NA	NA	NA	
Acenaphthene	83-32-9	4.90E+01	EPA6 e	3.67E+02	EPA6 e	1.96E+02	EPA6 e	
Acenaphthylene	208-96-8	6.76E+01	EPA6 calc c	5.07E+02	EPA6 calc c	2.70E+02	EPA6 calc c	
Anthracene	120-12-7	2.35E+02	EPA6 e	1.76E+03	EPA6 e	9.40E+02	EPA6 e	
Fluorene	86-73-7	1.41E+02	EPA6 calc c	1.06E+03	EPA6 calc c	5.65E+02	EPA6 calc c	
Indene	95-13-6	NA	NA	NA	NA	NA	NA	
Napthalene	91-20-3	1.19E+01	EPA6 e	8.93E+01	EPA6 e	4.76E+01	EPA6 e	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
Phenanthrene	85-01-8	5.01E+02	EPA6 e	3.76E+03	EPA6 e	2.01E+03	EPA6 e	
Pyrene	129-00-0	6.80E+02	EPA6 e	5.10E+03	EPA6 e	2.72E+03	EPA6 e	
Heavy Polycyclic Aromatic Hydrocarbons								
3-Methylcholanthrene	56-49-5	1.51E+04	EPA6 calc c	1.14E+05	EPA6 calc c	6.05E+04	EPA6 calc c	
5-Methylchrysene	3697-24-3	NA	NA	NA	NA	NA	NA	
Benzo(a)anthracene	56-55-3	2.60E+03	EPA6 e	1.95E+04	EPA6 e	1.04E+04	EPA6 e	
Benzo(a)pyrene	50-32-8	9.69E+03	EPA6 e	7.27E+04	EPA6 e	3.87E+04	EPA6 e	
Benzo(b)fluoranthene	205-99-2	8.36E+03	EPA6 e	6.27E+04	EPA6 e	3.34E+04	EPA6 e	
Benzo(e)pyrene	192-97-2	1.58E+05	EPA6 calc c	1.19E+06	EPA6 calc c	6.34E+05	EPA6 calc c	
Benzo(g,h,i)perylene	191-24-2	1.82E+04	EPA6 calc c	1.36E+05	EPA6 calc c	7.28E+04	EPA6 calc c	
Benzo(j)fluoranthene	205-82-3	2.15E+04	EPA6 calc c	1.61E+05	EPA6 calc c	8.60E+04	EPA6 calc c	
Benzo(k)fluoranthene	207-08-9	8.32E+03	EPA6 e	6.24E+04	EPA6 e	3.33E+04	EPA6 e	
Benzo[a,i]pyrene	191-30-0	NA	NA	NA	NA	NA	NA	
Chrysene	218-01-9	2.97E+03	EPA6 e	2.23E+04	EPA6 e	1.19E+04	EPA6 e	
Dibenz(a,h)anthracene	53-70-3	1.79E+04	EPA6 e	1.34E+05	EPA6 e	7.16E+04	EPA6 e	
Dibenz[a,h]acridine	226-36-8	NA	NA	NA	NA	NA	NA	
Dibenz[a,j]acridine	224-42-0	NA	NA	NA	NA	NA	NA	
Dibenzo(a,e)fluoranthene	5385-75-1	NA	NA	NA	NA	NA	NA	
Dibenzo(a,h)fluoranthene	no cas #	NA	NA	NA	NA	NA	NA	
Dibenzo[a,e]pyrene	192-65-4	NA	NA	NA	NA	NA	NA	
Dibenzo[a,h]pyrene	189-64-0	NA	NA	NA	NA	NA	NA	
Dibenzo[a,i]pyrene	189-55-9	1.47E+05	EPA6 calc c	1.10E+06	EPA6 calc c	5.87E+05	EPA6 calc c	
Fluoranthene	206-44-0	4.91E+02	EPA6 e	3.68E+03	EPA6 e	1.96E+03	EPA6 e	
Hexachloronaphthalene	1335-87-1	2.89E+05	EPA6 calc c	2.17E+06	EPA6 calc c	1.16E+06	EPA6 calc c	
Indeno(1,2,3-cd)pyrene	193-39-5	4.11E+04	EPA6 e	3.08E+05	EPA6 e	1.64E+05	EPA6 e	
Octachloronaphthalene	2234-13-1	2.05E+04	EPA6 calc c	1.54E+05	EPA6 calc c	8.19E+04	EPA6 calc c	
Pentachloronaphthalene	1321-64-8	NA	NA	NA	NA	NA	NA	
Tetrachloronaphthalene	1335-88-2	NA	NA	NA	NA	NA	NA	
Trichloronaphthalene	1321-65-9	NA	NA	NA	NA	NA	NA	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
Light Substituted Benzene Compounds								
1,2,3-Trichlorobenzene	87-61-6	2.02E+02	EPA6 e	1.52E+03	EPA6 e	8.10E+02	EPA6 e	
1,2,4-Trichlorobenzene	120-82-1	1.66E+01	EPA6 e	1.24E+02	EPA6 e	6.64E+01	EPA6 e	
1,2,4-Trimethlyl benzene	25551-13-7	5.90E+00	EPA6 calc c	4.43E+01	EPA6 calc c	2.36E+01	EPA6 calc c	
1,2,4-Trimethyl benzene	95-63-6	3.87E+01	EPA6 calc c	2.91E+02	EPA6 calc c	1.55E+02	EPA6 calc c	
1,2-Dichlorobenzene	95-50-1	3.79E+00	EPA6 e	2.84E+01	EPA6 e	1.52E+01	EPA6 e	
1,3,5-Trimethyl benzene	108-67-8	1.67E+01	EPA6 e	1.25E+02	EPA6 e	6.69E+01	EPA6 e	
1,3-Dichlorobenzene	541-73-1	8.03E+01	EPA6 e	6.02E+02	EPA6 e	3.21E+02	EPA6 e	
1,3-Dinitrobenzene	99-65-0	2.06E-01	EPA6 e	1.55E+00	EPA6 e	8.25E-01	EPA6 e	
1,4-Dichlorobenzene	106-46-7	6.16E+00	EPA6 e	4.62E+01	EPA6 e	2.46E+01	EPA6 e	
1,4-Dinitrobenzene	100-25-4	2.98E-01	EPA6 calc c	2.24E+00	EPA6 calc c	1.19E+00	EPA6 calc c	
2,4,5-Trichorophenol	95-95-4	1.13E+01**	EPA6 e	8.45E+01**	EPA6 e	4.51E+01**	EPA6 e	
2,4,6-Trichlorophenol	88-06-2	2.26E+00**	EPA6 e	1.70E+01**	EPA6 e	9.05E+00**	EPA6 e	
2,4-Dichlorophenol	120-83-2	1.40E+00	EPA6 e	1.05E+01	EPA6 e	5.58E+00	EPA6 e	
2,4-Dimethylphenol	105-67-9	1.26E+00	EPA6 e	9.44E+00	EPA6 e	5.04E+00	EPA6 e	
2,4-Dinitrophenol	51-28-5	1.00E-04**	EPA6 e	7.50E-04**	EPA6 e	4.00E-04**	EPA6 e	
2,4-Dinitrotoluene	121-14-2	5.10E-01	EPA6 e	3.83E+00	EPA6 e	2.04E+00	EPA6 e	
2,6-Dinitrotoluene	606-20-2	4.19E-01	EPA6 e	3.14E+00	EPA6 e	1.68E+00	EPA6 e	
2-Chlorotoluene	95-49-8	7.56E+00	EPA6 calc c	5.67E+01	EPA6 calc c	3.03E+01	EPA6 calc c	
2-Chorophenol	95-57-8	3.87E+00	EPA6 e	2.90E+01	EPA6 e	1.55E+01	EPA6 e	
2-Nitrophenol	88-75-5	3.53E+00	EPA6 e	2.65E+01	EPA6 e	1.41E+01	EPA6 e	
4,6-Dinitro-o-cresol	534-52-1	6.34E+00	EPA6 calc c	4.75E+01	EPA6 calc c	2.53E+01	EPA6 calc c	
4-Chlorotoluene	106-43-4	1.88E+01	EPA6 calc c	1.41E+02	EPA6 calc c	7.51E+01	EPA6 calc c	
4-Nitrophenol	100-02-7	4.37E+00	EPA6 e	3.28E+01	EPA6 e	1.75E+01	EPA6 e	
alpha-Methylstyrene	98-83-9	6.62E+00	EPA6 calc c	4.97E+01	EPA6 calc c	2.65E+01	EPA6 calc c	
Aniline	62-53-3	8.23E-02	EPA6 e	6.17E-01	EPA6 e	3.29E-01	EPA6 e	
Benzotrichloride	98-07-7	7.42E+00	EPA6 calc c	5.57E+01	EPA6 calc c	2.97E+01	EPA6 calc c	
Benzyl Chloride	100-44-7	2.71E-02	EPA6 e	2.03E-01	EPA6 e	1.08E-01	EPA6 e	
Bromobenzene	108-86-1	4.47E+00	EPA6 calc c	3.35E+01	EPA6 calc c	1.79E+01	EPA6 calc c	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
Chlorobenzene	108-90-7	2.24E+00	EPA6 e	1.68E+01	EPA6 e	8.96E+00	EPA6 e	
Cumene	98-82-8	9.31E+01	EPA6 e	6.98E+02	EPA6 e	3.72E+02	EPA6 e	
m-Cresol	108-39-4	4.78E-01	EPA6 e	3.58E+00	EPA6 e	1.91E+00	EPA6 e	
n-Butyl benzene	104-51-8	2.51E+01	EPA6 calc c	1.88E+02	EPA6 calc c	1.00E+02	EPA6 calc c	
Nitrobenzene	98-95-3	1.19E+00	EPA6 e	8.93E+00	EPA6 e	4.76E+04	EPA6 e	
n-Propyl benzene	103-65-1	7.24E+00	EPA6 calc c	5.43E+01	EPA6 calc c	2.90E+01	EPA6 calc c	
o-Cresol	95-48-7	5.34E-01	EPA6 e	4.00E+00	EPA6 e	2.14E+00	EPA6 e	
o-Dinitrobenzene	528-29-0	3.74E-01	EPA6 calc c	2.81E+00	EPA6 calc c	1.50E+00	EPA6 calc c	
o-Nitroaniline	88-74-4	3.93E+00	EPA6 e	2.95E+01	EPA6 e	1.57E+01	EPA6 e	
o-Toluidine	95-53-4	1.57E-01	EPA6 e	1.18E+00	EPA6 e	6.28E-01	EPA6 e	
p-Chloroaniline	106-47-8	4.06E-01	EPA6 e	3.05E+00	EPA6 e	1.63E+00	EPA6 e	
p-Cresol	106-44-5	4.61E-01	EPA6 e	3.46E+00	EPA6 e	1.84E+00	EPA6 e	
Phenol	108-95-2	2.20E-01	EPA6 e	1.65E+00	EPA6 e	8.79E-01	EPA6 e	
p-Nitrochlorobenzene	100-00-5	2.24E+00	EPA6 calc c	1.68E+01	EPA6 calc c	8.95E+00	EPA6 calc c	
p-Toluidine	106-49-0	2.38E-01	EPA6 calc c	1.78E+00	EPA6 calc c	9.52E-01	EPA6 calc c	
sec-Butyl benzene	135-98-8	NA	NA	NA	NA	NA	NA	
tert-Butyl benzene	98-06-6	1.10E+02	EPA6 calc c	8.23E+02	EPA6 calc c	4.39E+02	EPA6 calc c	
Toluene-2,6-diamine	823-40-5	2.69E-01	EPA6 calc c	2.02E+00	EPA6 calc c	1.08E+00	EPA6 calc c	
Other Light Semivolatile Compounds								
1,1 Dimethyl hydrazine	57-14-7	3.85E-02	EPA6 calc c	2.89E-01	EPA6 calc c	1.54E-01	EPA6 calc c	
1,1-Biphenyl	92-52-4	2.51E+01	EPA6 calc c	1.88E+02	EPA6 calc c	1.00E+02	EPA6 calc c	
1,2 Diphenylhydrazine	122-66-7	2.78E+00	EPA6 e	2.09E+01	EPA6 e	1.11E+01	EPA6 e	
1,2-Dimethylhydrazine	540-73-8	4.52E-04	EPA6 calc c	3.39E-03	EPA6 calc c	1.81E-03	EPA6 calc c	
1,3-Propane sultone	1120-71-4	3.06E-03	EPA6 calc c	2.30E-02	EPA6 calc c	1.23E-02	EPA6 calc c	
2,4-Toluene diisocyanate	584-84-9	NA	NA	NA	NA	NA	NA	
2-Chloroacetophenone	532-27-4	7.60E-01	EPA6 calc c	5.70E+00	EPA6 calc c	3.04E+00	EPA6 calc c	
2-Propenoic acid	79-10-7	2.65E-02	EPA6 calc c	1.99E-01	EPA6 calc c	1.06E-01	EPA6 calc c	
4,4-Methylenedianiline	101-77-9	2.10E+01	EPA6 calc c	1.58E+02	EPA6 calc c	8.40E+01	EPA6 calc c	
Acetophenone	98-86-2	2.69E-01	EPA6 e	2.02E+00	EPA6 e	1.08E+00	EPA6 e	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
Benzoic acid	65-85-0	5.50E-03	NA	4.13E-02	NA	2.20E-02	NA	
bis(2-Chloroethoxy)methane	111-91-1	NA	NA	NA	NA	NA	NA	
bis(2-Chloroethyl) ether	111-44-4	7.60E-01	EPA6 e	5.70E+00	EPA6 e	3.04E+00	EPA6 e	
Chlorocyclopentadiene	41851-50-7	2.45E+00	EPA6 calc c	1.84E+01	EPA6 calc c	9.80E+00	EPA6 calc c	
Cyclohexanol	108-93-0	1.30E-01	EPA6 calc c	9.75E-01	EPA6 calc c	5.20E-01	EPA6 calc c	
Dichloroisopropyl ether	108-60-1	6.10E-01	EPA6 calc c	4.57E+00	EPA6 calc c	2.44E+00	EPA6 calc c	
Dichloromethyl ether	542-88-1	7.94E-01	EPA6 calc c	5.96E+00	EPA6 calc c	3.18E+00	EPA6 calc c	
Dichloropentadiene	no cas #	NA	NA	NA	NA	NA	NA	
Dimethyl sulfate	77-78-1	2.06E-02	EPA6 calc c	1.54E-01	EPA6 calc c	8.23E-02	EPA6 calc c	
Dimethylaniline	121-69-7	1.37E-03	EPA6 calc c	1.02E-02	EPA6 calc c	5.46E-03	EPA6 calc c	
di-n-propylnitrosamine	621-64-7	1.70E-01	EPA6 e	1.28E+00	EPA6 e	6.80E-01	EPA6 e	
Diphenyl ether	101-84-8	1.38E+02	EPA6 calc c	1.03E+03	EPA6 calc c	5.50E+02	EPA6 calc c	
Epichlorohydrin	106-89-8	2.22E-02	EPA6 e	1.66E-01	EPA6 e	8.88E-02	EPA6 e	
Ethyl carbomate (urethane)	51-79-6	7.12E-03	EPA6 calc c	5.34E-02	EPA6 calc c	2.85E-02	EPA6 calc c	
Ethyl methane sulfanate	62-50-0	1.55E-02	EPA6 e	1.16E-01	EPA6 e	6.19E-02	EPA6 e	
Ethylene dibromide	106-93-4	3.28E-01	EPA6 e	2.46E+00	EPA6 e	1.31E+00	EPA6 e	
Ethylene glycol	107-21-1	1.26E-03	EPA6 calc c	9.47E-03	EPA6 calc c	5.05E-03	EPA6 calc c	
Ethylene glycol monobutyl ether	111-76-2	6.17E-01	EPA6 calc c	4.62E+00	EPA6 calc c	2.47E+00	EPA6 calc c	
Ethylene glycol monoethyl ether acetate	111-15-9	4.07E-02	EPA6 calc c	3.05E-01	EPA6 calc c	1.63E-01	EPA6 calc c	
Ethylene thiourea	96-45-7	2.34E-03	EPA6 calc c	1.76E-02	EPA6 calc c	9.37E-03	EPA6 calc c	
Furfural	98-01-1	8.79E-02	EPA6 calc c	6.59E-01	EPA6 calc c	3.52E-01	EPA6 calc c	
Maleic hydrazide	123-33-1	1.87E-03	EPA6 calc c	1.41E-02	EPA6 calc c	7.50E-03	EPA6 calc c	
Malononitrile	109-77-3	1.29E-02	EPA6 calc c	9.66E-02	EPA6 calc c	5.15E-02	EPA6 calc c	
Methyl styrene (mixed isomers)	25013-15-4	3.70E+00	EPA6 calc c	2.78E+01	EPA6 calc c	1.48E+01	EPA6 calc c	
Methylhydrazine	60-34-4	9.29E-04	EPA6 calc c	6.97E-03	EPA6 calc c	3.72E-03	EPA6 calc c	
N,N-Diphenylamine	122-39-4	3.47E+00	EPA6 calc c	2.60E+01	EPA6 calc c	1.39E+01	EPA6 calc c	
Nitric acid, propyl ester	627-13-4	NA	NA	NA	NA	NA	NA	
N-Nitrosodi-n-butylamine	924-16-3	1.07E+00	EPA6 e	8.05E+00	EPA6 e	4.29E+00	EPA6 e	
N-Nitrosomorpholine	59-89-2	9.20E-02	EPA6 calc c	6.90E-01	EPA6 calc c	3.68E-01	EPA6 calc c	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	**CAS Registry Number**	**Kd_s (cm^3/g)**	**Source**	**Kd_{sw} (L/kg)**	**Source**	**Kd_{bs} (cm^3/g)**	**Source**	
N-Nitroso-N,N-dimethylamine	62-75-9	8.30E-02	EPA6 calc c	6.22E-01	EPA6 calc c	3.32E-01	EPA6 calc c	
o-Anisidine	90-04-0	1.45E-01	EPA6 calc c	1.08E+00	EPA6 calc c	5.78E-01	EPA6 calc c	
Oxalic acid	144-62-7	NA	NA	NA	NA	NA	NA	
Phthalic Anhydride	85-44-9	4.80E-03	EPA6 e	3.60E-02	EPA6 e	1.92E-02	EPA6 e	
p-Phthalic acid	100-21-0	6.44E-02	EPA6 calc c	4.83E-01	EPA6 calc c	2.58E-01	EPA6 calc c	
Pyridine	110-86-1	4.72E-02	EPA6 e	3.54E-01	EPA6 e	1.89E-01	EPA6 e	
Quinoline	91-22-5	9.90E-01	EPA6 calc c	7.43E+00	EPA6 calc c	3.96E+00	EPA6 calc c	
Quinone	106-51-4	1.57E-02	EPA6 calc c	1.18E-01	EPA6 calc c	6.29E-02	EPA6 calc c	
Safrole	94-59-7	1.68E+00	EPA6 e	1.26E+01	EPA6 e	6.73E+00	EPA6 e	
Tetrahydrofuran	109-99-9	3.16E-02	EPA6 e	2.37E-01	EPA6 e	1.26E-01	EPA6 e	
Other Heavy Semivolatile Compounds								
1,2,4,5-Tetrachlorobenzene	95-94-3	5.89E+01	EPA6 e	4.42E+02	EPA6 e	2.36E+02	EPA6 e	
1,3,5-Trinitrobenzene	99-35-4	1.18E-01	EPA6 e	8.84E-01	EPA6 e	4.72E-01	EPA6 e	
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	1.26E+02	EPA6 calc c	9.43E+02	EPA6 calc c	5.03E+02	EPA6 calc c	
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	2.22E-05	EPA6 calc c	1.66E-04	EPA6 calc c	8.88E-05	EPA6 calc c	
2-sec-Butyl-4,6-dinitrophenol	88-85-7	1.22E+01	EPA6 calc c	9.16E+01	EPA6 calc c	4.89E+01	EPA6 calc c	
3,3-Dichlorobenzidine	91-94-1	8.70E+00	EPA6 e	6.52E+01	EPA6 e	3.48E+01	EPA6 e	
3,3'-Dimethoxybenzidine	119-90-4	3.65E-01	EPA6 e	2.74E+00	EPA6 e	1.46E+00	EPA6 e	
4-Bromophenylphenyl ether	101-55-3	8.23E+02	EPA6 calc c	6.17E+03	EPA6 calc c	3.29E+03	EPA6 calc c	
Ammonium perfluorooctanoate	3825-26-1	NA	NA	NA	NA	NA	NA	
Azobenzene	103-33-3	2.69E+01	EPA6 calc c	2.02E+02	EPA6 calc c	1.08E+02	EPA6 calc c	
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	NA	NA	NA	NA	NA	NA	
Captan	133-06-2	2.00E+00	EPA6 calc c	1.50E+01	EPA6 calc c	7.98E+00	EPA6 calc c	
Chlorobenzilate	510-15-6	3.69E+01	EPA6 e	2.77E+02	EPA6 e	1.48E+02	EPA6 e	
Dibutylphosphate	107-66-4	NA	NA	NA	NA	NA	NA	
Dimethyl aminoazobenzene	60-11-7	3.18E+02	EPA6 calc c	2.38E+03	EPA6 calc c	1.27E+03	EPA6 calc c	
Hexachlorobenzene	118-74-1	8.00E+02	EPA6 e	6.00E+03	EPA6 e	3.20E+03	EPA6 e	
Hexachlorobutadiene	87-68-3	6.94E+01	EPA6 e	5.20E+02	EPA6 e	2.77E+02	EPA6 e	
Hexachlorocyclopentadiene	77-47-4	9.51E+01	EPA6 e	7.13E+02	EPA6 e	3.80E+02	EPA6 e	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_b, (cm^3/g)	Source	
Hexachloroethane	67-72-1	1.82E+01	EPA6 e	1.36E+01	EPA6 e	7.27E+01	EPA6 e	
Hexachlorophene	70-30-4	1.08E+04	EPA6 e	8.08E+04	EPA6 e	4.31E+04	EPA6 e	
Hexamethylene-1,5-diisocyanate	822-06-0	1.79E-01	EPA6 calc c	1.34E+00	EPA6 calc c	7.15E-01	EPA6 calc c	
Mirex	2385-85-5	1.00E+04	EPA6 calc c	7.50E+04	EPA6 calc c	4.00E+04	EPA6 calc c	
Nitrofen	1836-75-5	2.73E+03	EPA6 calc c	2.05E+04	EPA6 calc c	1.09E+04	EPA6 calc c	
Pentachlorobenzene	608-93-5	3.21E+02	EPA6 e	2.41E+03	EPA6 e	1.29E+03	EPA6 e	
Pentachloronitrobenzene	82-68-8	5.89E+01	EPA6 e	4.42E+02	EPA6 e	2.36E+02	EPA6 e	
Pentachlorophenol*	87-86-5	1.99E+02	EPA6 e	1.49E+03	EPA6 e	7.97E+02	EPA6 e	
Pentachlorophenol*	87-86-5	1.96E+02	EPA6 e	1.47E+03	EPA6 e	7.84E+02	EPA6 e	
Pentachlorophenol*	87-86-5	1.69E+02	EPA6 e	1.27E+03	EPA6 e	6.78E+02	EPA6 e	
Pentachlorophenol*	87-86-5	7.33E+01	EPA6 e	5.50E+02	EPA6 e	2.93E+02	EPA6 e	
Pentachlorophenol*	87-86-5	1.42E+01	EPA6 e	1.06E+02	EPA6 e	5.67E+01	EPA6 e	
Pentachlorophenol*	87-86-5	5.05E+00	EPA6 e	3.79E+01	EPA6 e	2.02E+01	EPA6 e	
Pentachlorophenol*	87-86-5	4.09E+00	EPA6 e	3.07E+01	EPA6 e	1.64E+01	EPA6 e	
Pentachlorophenol*	87-86-5	3.99E+00	EPA6 e	2.99E+01	EPA6 e	1.60E+01	EPA6 e	
Pentachlorophenol*	87-86-5	3.98E+00	EPA6 e	2.99E+01	EPA6 e	1.59E+01	EPA6 e	
Pentachlorophenol*	87-86-5	3.98E+00	EPA6 e	2.99E+01	EPA6 e	1.59E+01	EPA6 e	
Pentachlorophenol*	87-86-5	3.98E+00	EPA6 e	2.99E+01	EPA6 e	1.59E+01	EPA6 e	
Pentachlorophenol*	87-86-5	3.98E+00	EPA6 e	2.99E+01	EPA6 e	1.59E+01	EPA6 e	
Pentachlorophenol*	87-86-5	2.00E+02	EPA6 e	1.50E+03	EPA6 e	7.98E+02	EPA6 e	
Picric acid	88-89-1	9.90E-01	EPA6 calc c	7.43E+00	EPA6 calc c	3.96E+00	EPA6 calc c	
Pronamide	23950-58-5	7.74E+00	EPA6 e	5.81E+01	EPA6 e	3.10E+01	EPA6 e	
Strychnine	57-24-9	4.53E-01	EPA6 e	3.40E+00	EPA6 e	1.81E+00	EPA6 e	
Terphenyls	26140-60-3	NA	NA	NA	NA	NA	NA	
Tributyl phosphate	126-73-8	8.55E+01	EPA6 calc c	6.42E+02	EPA6 calc c	3.42E+02	EPA6 calc c	
Trifluralin	1582-09-8	6.03E+01	EPA6 calc c	4.52E+02	EPA6 calc c	2.41E+02	EPA6 calc c	
Triphenylamine	603-34-9	NA	NA	NA	NA	NA	NA	
Herbicides and Organopesticides								
2,4,5-T	93-76-5	5.25E-01	EPA6 calc c	3.94E+00	EPA6 calc c	2.10E+00	EPA6 calc c	

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	
2,4-D and esters	94-75-7	2.00E-01	EPA6 calc c	1.50E+00	EPA6 calc c	7.98E-01	EPA6 calc c	
4,4-DDD	72-54-8	1.00E+03	EPA6 calc c	7.50E+03	EPA6 calc c	4.00E+03	EPA6 calc c	
4,4-DDT	50-29-3	2.40E+03	EPA6 calc c	1.80E+04	EPA6 calc c	9.60E+03	EPA6 calc c	
Aldrin	309-00-2	4.87E+02	EPA6 e	3.65E+03	EPA6 e	1.95E+03	EPA6 e	
alpha-BHC	319-84-6	1.76E+01	EPA6 e	1.32E+02	EPA6 e	7.05E+01	EPA6 e	
beta-BHC	319-85-7	2.14E+01	EPA6 e	1.60E+02	EPA6 e	8.56E+01	EPA6 e	
Chlordane	57-74-9	5.13E+02	EPA6 e	3.85E+03	EPA6 e	2.05E+03	EPA6 e	
DDE	72-55-9	8.64E+06	EPA6 e	6.48E+03	EPA6 e	3.46E+03	EPA6 e	
Delta-BHC	319-86-8	6.61E+00	EPA6 calc c	4.96E+01	EPA6 calc c	2.64E+01	EPA6 calc c	
Dieldrin	60-57-1	2.55E+02	EPA6 e	1.91E+03	EPA6 e	1.02E+03	EPA6 e	
Endothall	145-73-3	1.40E-03	EPA6 calc c	1.05E-02	EPA6 calc c	5.59E-03	EPA6 calc c	
Endrin	72-20-8	1.08E+02	EPA6 e	8.11E+02	EPA6 e	4.32E+02	EPA6 e	
gamma-BHC(Lindane)	58-89-9	1.07E+01	EPA6 calc c	8.04E+01	EPA6 calc c	4.29E+01	EPA6 calc c	
Heptachlor	76-44-8	9.53E+01	EPA6 e	7.15E+02	EPA6 e	3.81E+02	EPA6 e	
Isodrin	465-73-6	NA	NA	NA	NA	NA	NA	
Methoxychlor	72-43-5	8.00E+02	EPA6 e	6.00E+03	EPA6 e	3.20E+03	EPA6 e	
Silvex (2,4,5-TP)	93-72-1	1.01E+02	EPA6 calc c	7.56E+02	EPA6 calc c	4.03E+02	EPA6 calc c	
Toxaphene	8001-35-2	1.00E+03	EPA6 calc c	7.50E+03	EPA6 calc c	4.00E+03	EPA6 calc c	

NA = Value not available
** = Varies with pH; values given for a pH of 7.0.
a = Illustrated Handbook of Physical - Chemical Properties and Environmental Fate f
b = RAIS database: http://risk.lsd.ornl.gov/rap_hp.shtml
c = Equations derived from EPA Region 6 Guidance Appendix A-3
d = Handbook of Environmental degradation Rates. 1991.
e = EPA Region 6 Hazardous Waste Combustion Guidance
f = "A Critical Review of Henry's Law Constants for Chemicals of Environmental In
g = Handbook of Environmental Fate and Exposure Data for Organic Chemicals
h = http://www.epa.gov/region09/waste/sfund/prg/.
i = http://esc.syrres.com/efdb/Chemfate.htm
j = Hansch and Leo 1985 in Syracuse 1996

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Partitioning Coefficients						
Constituent of Potential Concern	CAS Registry Number	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)	Source	

k = Schwarzenbach et al. 1993

l = Tomlin 1994 in Syracuse 1996

m = http://www.speclab.com/compound/c959988.htm

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
Aromatic Halogenated Hydrocarbons							
2,3,4,6-Tetrachlorophenol	58-90-2	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
4-Chloro-3-methylphenol	59-50-7	NA	NA	NA	NA	NA	NA
Aromatic Nonhalogenated Hydrocarbons							
2-Nitrotoluene	88-72-2	NA	NA	NA	NA	NA	NA
4-Nitrobiphenyl	92-93-3	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
Benzaldehyde	100-52-7	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Benzene	71-43-2	3.89E+00	EPA6 e	3.84E+02	Degradation d	1.00E+00	EPA6 e
Benzyl alcohol	100-51-6	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Ethyl Benzene	100-41-4	2.53E+01	EPA6 e	2.40E+02	Degradation d	1.00E+00	EPA6 e
m-Xylene	108-38-3	9.03E+00	EPA6 e	6.72E+02	Degradation d	1.00E+00	EPA6 e
o-Xylene	95-47-6	9.03E+00	EPA6 e	6.72E+02	Degradation d	1.00E+00	EPA6 e
p-Xylene	106-42-3	9.03E+00	EPA6 e	6.72E+02	Degradation d	1.00E+00	EPA6 e
Styrene	100-42-5	9.03E+00	EPA6 e	6.72E+02	Degradation d	1.00E+00	EPA6 e
Toluene	108-88-3	1.15E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Non-aromatic Nonhalogenated Hydrocarbons							
1,2-Epoxybutane	106-88-7	1.96E+01	EPA6 calc c	3.10E+02	Degradation d	NA	NA
1,3-Butadiene	106-99-0	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
1,4-Dioxane	123-91-1	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1-Methylpropyl alcohol	78-92-2	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
1-Nitropropane	108-03-2	NA	NA	NA	NA	NA	NA
2,2,4-Trimethlylpentane	540-84-1	NA	NA	NA	NA	NA	NA
2-Butanone	78-93-3	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2-Butenaldehyde (2-Butenal)	4170-30-3	NA	NA	NA	NA	NA	NA
2-Ethoxyethanol	110-80-5	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
2-Heptanone	110-43-0	NA	NA	NA	NA	NA	NA
2-Hexanone	591-78-6	NA	NA	NA	NA	NA	NA
2-Methoxyethanol	109-86-4	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
2-Methyl-2-propanol	75-65-0	1.26E+00	EPA6 calc c	4.80E+03	Degradation d	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
2-Methyl-2-propenenitrile	126-98-7	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2-Methylaziridine	75-55-8	6.98E+00	EPA6 calc c	8.70E+02	Degradation d	NA	NA
2-Methylpropyl alcohol	78-83-1	3.51E+01	EPA6 calc c	1.73E+02	Degradation d	NA	NA
2-Pentanone	107-87-9	NA	NA	NA	NA	NA	NA
2-Propanone (Acetone)	67-64-1	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2-Propene-1-ol	107-18-6	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
2-Propyl alcohol	67-63-0	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
3-Heptanone	106-35-4	NA	NA	NA	NA	NA	NA
3-Methyl-1-butanol	123-51-3	NA	NA	NA	NA	NA	NA
3-Methyl-2-butanone	563-80-4	NA	NA	NA	NA	NA	NA
3-Pentanone	96-22-0	NA	NA	NA	NA	NA	NA
4-Heptanone	123-19-3	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	108-10-1	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
4-Methyl-3-penten-2-one	141-79-7	NA	NA	NA	NA	NA	NA
5-Methyl-2-hexanone	110-12-3	NA	NA	NA	NA	NA	NA
Acetaldehyde	75-07-0	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Acetamide	60-35-5	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
Acetic acid	64-19-7	NA	NA	NA	NA	NA	NA
Acetic acid ethyl ester	141-78-6	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
Acetic acid n-butyl ester	123-86-4	NA	NA	NA	NA	NA	NA
Acetonitrile	75-05-8	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Acrolein	107-02-8	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Acrylonitrile	107-13-1	1.10E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Bis(isopropyl)ether	108-20-3	NA	NA	NA	NA	NA	NA
Butane	106-97-8	NA	NA	NA	NA	NA	NA
Carbon disulfide	75-15-0	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Cyanogen	460-19-5	NA	NA	NA	NA	NA	NA
Cyclohexane	110-82-7	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
Cyclohexanone	108-94-1	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
Cyclohexene	110-83-8	NA	NA	NA	NA	NA	NA
Cyclopentane	287-92-3	NA	NA	NA	NA	NA	NA
Ethyl alcohol	64-17-5	2.53E+02	EPA6 calc c	2.40E+01	Degradation d	NA	NA
Ethyl ether	60-29-7	NA	NA	NA	NA	NA	NA
Ethyl methacrylate	97-63-2	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Formaldehyde	50-00-0	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Formamide	75-12-7	NA	NA	NA	NA	NA	NA
Formic acid	64-18-6	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Formic acid, methyl ester	107-31-3	NA	NA	NA	NA	NA	NA
Glycidylaldehyde	765-34-4	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
Methyl acetate	79-20-9	NA	NA	NA	NA	NA	NA
Methyl alcohol	67-56-1	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Methyl isocyanate	624-83-9	1.86E+04	EPA6 calc c	3.26E-01	Degradation d	NA	NA
Methyl methacrylate	80-62-6	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
Methyl tert-butyl ether	1634-04-4	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
Methylacetylene	74-99-7	NA	NA	NA	NA	NA	NA
Methylcyclohexane	108-87-2	NA	NA	NA	NA	NA	NA
N,N-Dimethylacetamide	127-19-5	NA	NA	NA	NA	NA	NA
n-Butyl alcohol	71-36-3	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
n-Heptane	142-82-5	NA	NA	NA	NA	NA	NA
n-Hexane	110-54-3	NA	NA	NA	NA	NA	NA
Nitromethane	75-52-5	NA	NA	NA	NA	NA	NA
n-Nonane	111-84-2	NA	NA	NA	NA	NA	NA
n-Octane	111-65-9	NA	NA	NA	NA	NA	NA
n-Pentane	109-66-0	NA	NA	NA	NA	NA	NA
n-Propionaldehyde	123-38-6	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
n-Propyl alcohol	71-23-8	NA	NA	NA	NA	NA	NA
n-Valeraldehyde	110-62-3	NA	NA	NA	NA	NA	NA
Oxirane	75-21-8	2.13E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
p-Cymene	99-87-6	NA	NA	NA	NA	NA	NA
Phosgene	75-44-5	6.07E+03	EPA6 calc c	1.00E+00	Degradation d	NA	NA
Propargyl alcohol	107-19-7	NA	NA	NA	NA	NA	NA
Propionic acid	79-09-4	NA	NA	NA	NA	NA	NA
Propionitrile	107-12-0	NA	NA	NA	NA	NA	NA
Propylene glycol monomethyl ether	107-98-2	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
p-tert-Butyltoluene	98-51-1	NA	NA	NA	NA	NA	NA
Triethylamine	121-44-8	NA	NA	NA	NA	NA	NA
Trimethylamine	75-50-3	NA	NA	NA	NA	NA	NA
Vinyl acetate	108-05-4	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Non-aromatic Halogenated Hydrocarbons							
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	NA	NA	NA	NA	NA	NA
1,1,1,2-Tetrachloroethane	630-20-6	5.75E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,1,1-Trichloroethane	71-55-6	9.26E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	79-34-5	5.75E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,1,2,2-Tetrachloroethene	127-18-4	7.03E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	7.03E-01	EPA6 calc c	8.64E+03	Degradation d	NA	NA
1,1,2-Trichloroethane	79-00-5	6.93E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,1,2-Trichloroethylene	79-01-6	7.03E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,1-Dichloroethane	75-34-3	1.64E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,1-Dichloroethene	75-35-4	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,2,3-Trichloropropane	96-18-4	7.03E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,2-dibromo-3-chloropropane	96-12-8	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,2-Dichloroethylene	540-59-0	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
1,2-Dichloropropane	78-87-5	1.96E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,3-Dichloropropene	542-75-6	2.24E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
1,4-Dichloro-2-butene	764-41-0	NA	NA	NA	NA	NA	NA
1-Chloroethene	75-01-4	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2,2-Dichloropropionic acid	75-99-0	4.22E+00	EPA6 calc c	1.44E+03	Degradation d	NA	NA
2-Chloropropane	75-29-6	NA	NA	NA	NA	NA	NA
3-Chloropropene (allyl chloride)	107-05-1	1.81E+01	EPA6 calc c	3.35E+02	Degradation d	NA	NA
Bromochloromethane	74-97-5	NA	NA	NA	NA	NA	NA
Bromodichloromethane	75-27-4	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Bromoethene	593-60-2	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
Bromoform	75-25-2	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Bromomethane	74-83-9	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Carbon tetrachloride	56-23-5	7.03E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Chlordibromomethane	124-48-1	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Chlorodifluoromethane	75-45-6	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Chloroethane	75-00-3	6.72E+02	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Chloroform	67-66-3	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Chloromethane	74-87-3	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Chloropentafluoroethane	76-15-3	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
cis-1,3-Dichloropropene	10061-01-5	NA	NA	NA	NA	NA	NA
Cyanogen bromide	506-68-3	NA	NA	NA	NA	NA	NA
Cyanogen chloride	506-77-4	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	75-71-8	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Dichlorofluoromethane	75-43-4	NA	NA	NA	NA	NA	NA
Dichloromethane	75-09-2	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Difluorodibromomethane	75-61-6	NA	NA	NA	NA	NA	NA
Hexafluoroacetone	684-16-2	NA	NA	NA	NA	NA	NA
Iodomethane	74-88-4	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
Methylene bromide	74-95-3	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachloroethane	76-01-7	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg (year)$^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
trans-1,2-Dichloroethene	156-60-5	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
trans-1,3-Dichloropropene	10061-02-6	NA	NA	NA	NA	NA	NA
Trichloroacetic acid	76-03-9	NA	NA	NA	NA	NA	NA
Trichlorofluoroethane	27154-33-2	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	75-69-4	7.03E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Trifluorobromomethane	75-63-8	NA	NA	NA	NA	NA	NA
Dioxin and Furan Compounds							
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	1.09E-01	EPA6 e	NA	EPA6 e	1.62E-02	EPA6 e
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	3.57E-01	EPA6 e	NA	EPA6 e	3.47E-02	EPA6 e
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	3.57E-01	EPA6 e	NA	EPA6 e	2.01E-02	EPA6 e
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	1.09E-01	EPA6 e	NA	EPA6 e	5.96E-02	EPA6 e
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	NA	EPA6 e	NA	EPA6 e	4.86E-02	EPA6 e
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	1.09E-01	EPA6 e	NA	EPA6 e	2.89E-02	EPA6 e
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	NA	EPA6 e	NA	EPA6 e	5.15E-02	EPA6 e
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	1.09E-01	EPA6 e	NA	EPA6 e	1.53E-02	EPA6 e
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	NA	EPA6 e	NA	EPA6 e	5.76E+00	EPA6 e
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	NA	EPA6 e	NA	EPA6 e	2.19E-01	EPA6 e
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	3.57E-01	EPA6 e	NA	EPA6 e	3.64E-01	EPA6 e
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	NA	EPA6 e	NA	EPA6 e	5.47E-02	EPA6 e
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	3.57E-01	EPA6 e	NA	EPA6 e	2.63E-01	EPA6 e
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	4.29E-01	EPA6 e	NA	EPA6 e	9.78E-01	EPA6 e
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	3.57E-01	EPA6 e	NA	EPA6 e	7.68E-01	EPA6 e
Dibenzofuran	132-64-9	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
Octachlorodibenzo(p)dioxin	3268-87-9	1.09E-01	EPA6 e	NA	EPA6 e	9.93E-01	EPA6 e
Octachlorodibenzofuran	39001-02-0	1.10E-01	EPA6 e	NA	EPA6 e	1.67E-03	EPA6 e
PCBs							
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	NA	NA	NA	NA	NA	NA
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	NA	NA	NA	NA	NA	NA
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	**CAS Registry Number**	**ksg (year)$^{-1}$**	**Source**	**$t_{1/2}$ (hours)**	**Source**	**F_v (unitless)**	**Source**
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	NA	NA	NA	NA	NA	NA
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	NA	NA	NA	NA	NA	NA
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	NA	NA	NA	NA	NA	NA
2',3,4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	NA	NA	NA	NA	NA	NA
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	NA	NA	NA	NA	NA	NA
3,3',4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	NA	NA	NA	NA	NA	NA
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	NA	NA	NA	NA	NA	NA
Polychlorinated biphenyls (PCBs)**	1336-36-3	NA	NA	NA	NA	NA	NA
Phthalates							
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	1.10E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Butylbenzyl phthalate	85-68-7	3.61E+01	EPA6 e	NA	EPA6 e	9.64E-01	EPA6 e
Dibutyl phthalate	84-74-2	1.11E+01	EPA6 e	NA	EPA6 e	9.89E-01	EPA6 e
Diethyl phthalate	84-66-2	4.52E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Dimethyl phthalate	131-11-3	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
n-Dioctyl phthalate	117-84-0	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Light Polycyclic Aromatic Hydrocarbons							
2-Chloronaphthalene	91-58-7	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2-Methyl naphthalene	91-57-6	NA	NA	NA	NA	NA	NA
5-Nitroacenaphthene	602-87-9	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	2.48E+00	EPA6 e	NA	NA	1.00E+00	EPA6 e
Acenaphthylene	208-96-8	4.22E+00	EPA6 calc c	1.44E+03	Degradation d	NA	NA
Anthracene	120-12-7	5.50E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Fluorene	86-73-7	4.22E+00	EPA6 calc c	1.44E+03	Degradation d	NA	NA
Indene	95-13-6	NA	NA	NA	NA	NA	NA
Napthalene	91-20-3	5.27E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
Phenanthrene	85-01-8	1.26E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pyrene	129-00-0	1.33E-01	EPA6 e	NA	EPA6 e	1.96E-01	EPA6 e
Heavy Polycyclic Aromatic Hydrocarbons							
3-Methylcholanthrene	56-49-5	1.81E-01	EPA6 calc c	3.36E+04	Degradation d	NA	NA
5-Methylchrysene	3697-24-3	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	56-55-3	3.72E-01	EPA6 e	NA	EPA6 e	8.81E-01	EPA6 e
Benzo(a)pyrene	50-32-8	4.77E-01	EPA6 e	NA	EPA6 e	2.65E-01	EPA6 e
Benzo(b)fluoranthene	205-99-2	4.15E-01	EPA6 e	NA	EPA6 e	8.22E-01	EPA6 e
Benzo(e)pyrene	192-97-2	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	191-24-2	3.89E-01	EPA6 calc c	1.56E+04	Degradation d	NA	NA
Benzo(j)fluoranthene	205-82-3	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	207-08-9	1.18E-01	EPA6 e	NA	EPA6 e	1.49E-01	EPA6 e
Benzo[a,i]pyrene	191-30-0	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	2.53E-01	EPA6 e	NA	EPA6 e	7.61E-01	EPA6 e
Dibenz(a,h)anthracene	53-70-3	2.69E-01	EPA6 e	NA	EPA6 e	1.10E-02	EPA6 e
Dibenz[a,h]acridine	226-36-8	NA	NA	NA	NA	NA	NA
Dibenz[a,j]acridine	224-42-0	NA	NA	NA	NA	NA	NA
Dibenzo(a,e)fluoranthene	5385-75-1	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)fluoranthene	no cas #	NA	NA	NA	NA	NA	NA
Dibenzo[a,e]pyrene	192-65-4	NA	NA	NA	NA	NA	NA
Dibenzo[a,h]pyrene	189-64-0	NA	NA	NA	NA	NA	NA
Dibenzo[a,i]pyrene	189-55-9	7.01E-01	EPA6 calc c	8.66E+03	Degradation d	NA	NA
Fluoranthene	206-44-0	5.75E-01	EPA6 e	NA	EPA6 e	9.92E-01	EPA6 e
Hexachloronaphthalene	1335-87-1	6.93E-01	EPA6 calc c	8.76E+03	Degradation d	NA	NA
Indeno(1,2,3-cd)pyrene	193-39-5	3.47E-01	EPA6 e	NA	EPA6 e	7.00E-03	EPA6 e
Octachloronaphthalene	2234-13-1	6.93E-01	EPA6 calc c	8.76E+03	Degradation d	NA	NA
Pentachloronaphthalene	1321-64-8	NA	NA	NA	NA	NA	NA
Tetrachloronaphthalene	1335-88-2	NA	NA	NA	NA	NA	NA
Trichloronaphthalene	1321-65-9	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
Light Substituted Benzene Compounds							
1,2,3-Trichlorobenzene	87-61-6	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,2,4-Trichlorobenzene	120-82-1	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,2,4-Trimethlyl benzene	25551-13-7	NA	NA	NA	NA	NA	NA
1,2,4-Trimethyl benzene	95-63-6	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
1,2-Dichlorobenzene	95-50-1	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,3,5-Trimethyl benzene	108-67-8	3.16E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,3-Dichlorobenzene	541-73-1	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,3-Dinitrobenzene	99-65-0	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,4-Dichlorobenzene	106-46-7	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,4-Dinitrobenzene	100-25-4	NA	NA	NA	NA	NA	NA
2,4,5-Trichorophenol	95-95-4	3.67E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2,4,6-Trichlorophenol	88-06-2	3.61E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2,4-Dichlorophenol	120-83-2	3.61E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2,4-Dimethylphenol	105-67-9	3.61E+01	EPA6 e	NA	EPA6 e	9.97E-01	EPA6 e
2,4-Dinitrophenol	51-28-5	9.62E-01	EPA6 e	NA	EPA6 e	9.99E-01	EPA6 e
2,4-Dinitrotoluene	121-14-2	1.41E+00	EPA6 e	NA	EPA6 e	9.99E-01	EPA6 e
2,6-Dinitrotoluene	606-20-2	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2-Chlorotoluene	95-49-8	NA	NA	NA	NA	NA	NA
2-Chorophenol	95-57-8	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2-Nitrophenol	88-75-5	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
4,6-Dinitro-o-cresol	534-52-1	1.20E+01	EPA6 calc c	5.04E+02	Degradation d	NA	NA
4-Chlorotoluene	106-43-4	NA	NA	NA	NA	NA	NA
4-Nitrophenol	100-02-7	2.09E+02	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
alpha-Methylstyrene	98-83-9	NA	NA	NA	NA	NA	NA
Aniline	62-53-3	3.20E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Benzotrichloride	98-07-7	1.21E+05	EPA6 calc c	5.00E-02	Degradation d	NA	NA
Benzyl Chloride	100-44-7	2.09E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Bromobenzene	108-86-1	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
Chlorobenzene	108-90-7	1.69E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Cumene	98-82-8	3.16E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
m-Cresol	108-39-4	8.72E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
n-Butyl benzene	104-51-8	NA	NA	NA	NA	NA	NA
Nitrobenzene	98-95-3	1.28E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
n-Propyl benzene	103-65-1	NA	NA	NA	NA	NA	NA
o-Cresol	95-48-7	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
o-Dinitrobenzene	528-29-0	NA	NA	NA	NA	NA	NA
o-Nitroaniline	88-74-4	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
o-Toluidine	95-53-4	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
p-Chloroaniline	106-47-8	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
p-Cresol	106-44-5	3.79E+02	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Phenol	108-95-2	2.53E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
p-Nitrochlorobenzene	100-00-5	NA	NA	NA	NA	NA	NA
p-Toluidine	106-49-0	NA	NA	NA	NA	NA	NA
sec-Butyl benzene	135-98-8	NA	NA	NA	NA	NA	NA
tert-Butyl benzene	98-06-6	NA	NA	NA	NA	NA	NA
Toluene-2,6-diamine	823-40-5	NA	NA	NA	NA	NA	NA
Other Light Semivolatile Compounds							
1,1 Dimethyl hydrazine	57-14-7	1.15E+01	EPA6 calc c	5.28E+02	Degradation d	NA	NA
1,1-Biphenyl	92-52-4	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
1,2 Diphenylhydrazine	122-66-7	1.41E+00	EPA6 e	NA	EPA6 e	9.99E-01	EPA6 e
1,2-Dimethylhydrazine	540-73-8	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
1,3-Propane sultone	1120-71-4	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
2,4-Toluene diisocyanate	584-84-9	NA	NA	NA	NA	NA	NA
2-Chloroacetophenone	532-27-4	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
2-Propenoic acid	79-10-7	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
4,4-Methylenedianiline	101-77-9	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
Acetophenone	98-86-2	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
Benzoic acid	65-85-0	1.26E+02	NA	NA	NA	1.00E+00	NA
bis(2-Chloroethoxy)methane	111-91-1	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	111-44-4	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Chlorocyclopentadiene	41851-50-7	NA	NA	NA	NA	NA	NA
Cyclohexanol	108-93-0	NA	NA	NA	NA	NA	NA
Dichloroisopropyl ether	108-60-1	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
Dichloromethyl ether	542-88-1	NA	NA	NA	NA	NA	NA
Dichloropentadiene	no cas #	NA	NA	NA	NA	NA	NA
Dimethyl sulfate	77-78-1	5.06E+02	EPA6 calc c	1.20E+01	Degradation d	NA	NA
Dimethylaniline	121-69-7	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
di-n-propylnitrosamine	621-64-7	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Diphenyl ether	101-84-8	NA	NA	NA	NA	NA	NA
Epichlorohydrin	106-89-8	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Ethyl carbomate (urethane)	51-79-6	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
Ethyl methane sulfanate	62-50-0	7.88E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Ethylene dibromide	106-93-4	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Ethylene glycol	107-21-1	2.11E+01	EPA6 calc c	2.88E+02	Degradation d	NA	NA
Ethylene glycol monobutyl ether	111-76-2	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
Ethylene glycol monoethyl ether acetate	111-15-9	NA	NA	NA	NA	NA	NA
Ethylene thiourea	96-45-7	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
Furfural	98-01-1	NA	NA	NA	NA	NA	NA
Maleic hydrazide	123-33-1	NA	NA	NA	NA	NA	NA
Malononitrile	109-77-3	NA	NA	NA	NA	NA	NA
Methyl styrene (mixed isomers)	25013-15-4	NA	NA	NA	NA	NA	NA
Methylhydrazine	60-34-4	1.05E+01	EPA6 calc c	5.76E+02	Degradation d	NA	NA
N,N-Diphenylamine	122-39-4	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
Nitric acid, propyl ester	627-13-4	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	7.44E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
N-Nitrosomorpholine	59-89-2	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
N-Nitroso-N,N-dimethylamine	62-75-9	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
o-Anisidine	90-04-0	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
Oxalic acid	144-62-7	NA	NA	NA	NA	NA	NA
Phthalic Anhydride	85-44-9	1.35E+04	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
p-Phthalic acid	100-21-0	3.61E+01	EPA6 calc c	1.68E+02	Degradation d	NA	NA
Pyridine	110-86-1	3.61E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Quinoline	91-22-5	2.53E+01	EPA6 calc c	2.40E+02	Degradation d	NA	NA
Quinone	106-51-4	5.06E+01	EPA6 calc c	1.20E+02	Degradation d	NA	NA
Safrole	94-59-7	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Tetrahydrofuran	109-99-9	4.43E+01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Other Heavy Semivolatile Compounds							
1,2,4,5-Tetrachlorobenzene	95-94-3	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
1,3,5-Trinitrobenzene	99-35-4	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	NA	NA	NA	NA	NA	NA
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	NA	NA	NA	NA	NA	NA
2-sec-Butyl-4,6-dinitrophenol	88-85-7	2.06E+00	EPA6 calc c	2.95E+03	Degradation d	NA	NA
3,3-Dichlorobenzidine	91-94-1	1.41E+00	EPA6 e	NA	EPA6 e	8.47E-01	EPA6 e
3,3'-Dimethoxybenzidine	119-90-4	1.41E+00	EPA6 e	NA	EPA6 e	8.77E-01	EPA6 e
4-Bromophenylphenyl ether	101-55-3	NA	NA	NA	NA	NA	NA
Ammonium perfluorooctanoate	3825-26-1	NA	NA	NA	NA	NA	NA
Azobenzene	103-33-3	NA	NA	NA	NA	NA	NA
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	NA	NA	NA	NA	NA	NA
Captan	133-06-2	4.22E+00	EPA6 calc c	1.44E+03	Degradation d	NA	NA
Chlorobenzilate	510-15-6	7.23E+00	EPA6 e	NA	EPA6 e	8.62E-01	EPA6 e
Dibutylphosphate	107-66-4	NA	NA	NA	NA	NA	NA
Dimethyl aminoazobenzene	60-11-7	9.03E+00	EPA6 calc c	6.72E+02	Degradation d	NA	NA
Hexachlorobenzene	118-74-1	1.21E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Hexachlorobutadiene	87-68-3	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Hexachlorocyclopentadiene	77-47-4	9.03E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg (year)$^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
Hexachloroethane	67-72-1	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Hexachlorophene	70-30-4	7.71E-01	EPA6 e	NA	EPA6 e	1.40E-04	EPA6 e
Hexamethylene-1,5-diisocyanate	822-06-0	NA	NA	NA	NA	NA	NA
Mirex	2385-85-5	NA	NA	NA	NA	NA	NA
Nitrofen	1836-75-5	NA	NA	NA	NA	NA	NA
Pentachlorobenzene	608-93-5	7.33E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachloronitrobenzene	82-68-8	3.62E-01	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Pentachlorophenol*	87-86-5	1.42E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Picric acid	88-89-1	1.41E+00	EPA6 calc c	4.32E+03	Degradation d	NA	NA
Pronamide	23950-58-5	NA	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Strychnine	57-24-9	9.03E+00	EPA6 e	NA	EPA6 e	8.60E-02	EPA6 e
Terphenyls	26140-60-3	NA	NA	NA	NA	NA	NA
Tributyl phosphate	126-73-8	NA	NA	NA	NA	NA	NA
Trifluralin	1582-09-8	NA	NA	NA	NA	NA	NA
Triphenylamine	603-34-9	NA	NA	NA	NA	NA	NA
Herbicides and Organopesticides							
2,4,5-T	93-76-5	1.26E+01	EPA6 calc c	4.80E+02	Degradation d	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source
2,4-D and esters	94-75-7	5.06E+00	EPA6 calc c	1.20E+03	Degradation d	NA	NA
4,4-DDD	72-54-8	4.34E-02	EPA6 calc c	1.40E+05	Degradation d	NA	NA
4,4-DDT	50-29-3	4.34E-02	EPA6 calc c	1.40E+05	Degradation d	NA	NA
Aldrin	309-00-2	4.28E-01	EPA6 e	NA	EPA6 e	2.27E-01	EPA6 e
alpha-BHC	319-84-6	1.87E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
beta-BHC	319-85-7	2.04E+00	EPA6 e	NA	EPA6 e	9.99E-01	EPA6 e
Chlordane	57-74-9	1.83E-01	EPA6 e	NA	EPA6 e	9.97E-01	EPA6 e
DDE	72-55-9	4.34E-02	EPA6 e	NA	EPA6 e	9.81E-01	EPA6 e
Delta-BHC	319-86-8	2.53E+00	EPA6 calc c	2.40E+03	Degradation d	NA	NA
Dieldrin	60-57-1	2.34E+00	EPA6 e	NA	EPA6 e	8.30E-02	EPA6 e
Endothall	145-73-3	NA	NA	NA	NA	NA	NA
Endrin	72-20-8	3.61E+04	EPA6 e	NA	EPA6 e	NA	EPA6 e
gamma-BHC(Lindane)	58-89-9	1.05E+00	EPA6 calc c	5.77E+03	Degradation d	NA	NA
Heptachlor	76-44-8	1.41E+00	EPA6 e	NA	EPA6 e	1.00E+00	EPA6 e
Isodrin	465-73-6	NA	NA	NA	NA	NA	NA
Methoxychlor	72-43-5	6.93E-01	EPA6 e	NA	EPA6 e	9.01E-01	EPA6 e
Silvex (2,4,5-TP)	93-72-1	NA	NA	NA	NA	NA	NA
Toxaphene	8001-35-2	NA	NA	NA	NA	NA	NA

NA = Value not available
** = Varies with pH; values given for a pH of 7.0.
a = Illustrated Handbook of Physical - Chemical Properties and Environmental Fate f
b = RAIS database: http://risk.lsd.ornl.gov/rap_hp.shtml
c = Equations derived from EPA Region 6 Guidance Appendix A-3
d = Handbook of Environmental degradation Rates. 1991.
e = EPA Region 6 Hazardous Waste Combustion Guidance
f = "A Critical Review of Henry's Law Constants for Chemicals of Environmental In
g = Handbook of Environmental Fate and Exposure Data for Organic Chemicals
h = http://www.epa.gov/region09/waste/sfund/prg/.
i = http://esc.syrres.com/efdb/Chemfate.htm
j = Hansch and Leo 1985 in Syracuse 1996

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Soil Loss		Half Life		Vapor Phase Fraction	
Constituent of Potential Concern	CAS Registry Number	ksg $(year)^{-1}$	Source	$t_{1/2}$ (hours)	Source	F_v (unitless)	Source

k = Schwarzenbach et al. 1993
l = Tomlin 1994 in Syracuse 1996
m = http://www.speclab.com/compound/c959988.htm

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
Aromatic Halogenated Hydrocarbons							
2,3,4,6-Tetrachlorophenol	58-90-2	7.73E+01	EPA6 calc c	1.17E+00	EPA6 calc c	1.08E-01	EPA6 calc c
4-Chloro-3-methylphenol	59-50-7	8.18E+00	EPA6 calc c	1.36E+00	EPA6 calc c	6.25E-01	EPA6 calc c
Aromatic Nonhalogenated Hydrocarbons							
2-Nitrotoluene	88-72-2	2.60E+00	EPA6 calc c	6.10E-01	EPA6 calc c	1.81E+00	EPA6 calc c
4-Nitrobiphenyl	92-93-3	2.50E+01	EPA6 calc c	NA	NA	2.56E-01	EPA6 calc c
Benzaldehyde	100-52-7	9.50E+00	EPA6 e	4.72E+01	EPA6 e	5.42E+00	EPA6 e
Benzene	71-43-2	1.66E+01	EPA6 e	2.67E+01	EPA6 e	2.25E+00	EPA6 e
Benzyl alcohol	100-51-6	7.94E+00	EPA6 e	7.77E+01	EPA6 e	8.95E+00	EPA6 e
Ethyl Benzene	100-41-4	6.52E+01	EPA6 e	3.20E+01	EPA6 e	6.07E-01	EPA6 e
m-Xylene	108-38-3	7.41E+01	EPA6 e	3.78E+01	EPA6 e	5.47E-01	EPA6 e
o-Xylene	95-47-6	6.61E+01	EPA6 e	2.74E+01	EPA6 e	6.01E-01	EPA6 e
p-Xylene	106-42-3	7.05E+01	EPA6 e	2.27E+01	EPA6 e	5.70E-01	EPA6 e
Styrene	100-42-5	4.81E+01	EPA6 e	5.28E+00	EPA6 e	7.85E-01	EPA6 e
Toluene	108-88-3	3.26E+01	EPA6 e	2.33E+01	EPA6 e	1.11E+00	EPA6 e
Non-aromatic Nonhalogenated Hydrocarbons							
1,2-Epoxybutane	106-88-7	1.21E+00	EPA6 calc c	1.52E+01	EPA6 calc c	5.69E+00	EPA6 calc c
1,3-Butadiene	106-99-0	1.85E+00	EPA6 calc c	2.04E+00	EPA6 calc c	2.74E+00	EPA6 calc c
1,4-Dioxane	123-91-1	6.45E+00	EPA6 e	7.37E+02	EPA6 e	5.53E+01	EPA6 e
1-Methylpropyl alcohol	78-92-2	9.09E-01	EPA6 calc c	2.28E+01	EPA6 calc c	1.72E+01	EPA6 calc c
1-Nitropropane	108-03-2	9.61E-01	EPA6 calc c	1.34E+01	EPA6 calc c	1.22E+01	EPA6 calc c
2,2,4-Trimethlylpentane	540-84-1	2.22E+02	EPA6 calc c	2.58E-01	EPA6 calc c	4.86E-02	EPA6 calc c
2-Butanone	78-93-3	6.69E+00	EPA6 e	2.86E+02	EPA6 e	2.67E+01	EPA6 e
2-Butenaldehyde (2-Butenal)	4170-30-3	NA	NA	NA	NA	NA	NA
2-Ethoxyethanol	110-80-5	8.45E-01	EPA6 calc c	4.05E+00	EPA6 calc c	4.42E+01	EPA6 calc c
2-Heptanone	110-43-0	1.83E+00	EPA6 calc c	2.07E+00	EPA6 calc c	2.78E+00	EPA6 calc c
2-Hexanone	591-78-6	1.17E+00	EPA6 calc c	8.72E-01	EPA6 calc c	6.17E+00	EPA6 calc c
2-Methoxyethanol	109-86-4	8.67E-01	EPA6 calc c	1.02E+01	EPA6 calc c	2.77E+01	EPA6 calc c
2-Methyl-2-propanol	75-65-0	8.76E-01	EPA6 calc c	2.36E+00	EPA6 calc c	2.43E+01	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
2-Methyl-2-propenenitrile	126-98-7	6.91E+00	EPA6 e	1.85E+02	EPA6 e	1.89E+01	EPA6 e
2-Methylaziridine	75-55-8	NA	NA	NA	NA	NA	NA
2-Methylpropyl alcohol	78-83-1	9.36E-01	EPA6 calc c	1.68E+01	EPA6 calc c	1.41E+01	EPA6 calc c
2-Pentanone	107-87-9	9.72E-01	EPA6 calc c	1.31E+00	EPA6 calc c	1.15E+01	EPA6 calc c
2-Propanone (Acetone)	67-64-1	6.46E+00	EPA6 e	6.80E+02	EPA6 e	5.20E+01	EPA6 e
2-Propene-1-ol	107-18-6	8.61E-01	EPA6 calc c	5.86E+01	EPA6 calc c	3.09E+01	EPA6 calc c
2-Propyl alcohol	67-63-0	8.53E-01	EPA6 calc c	7.61E+01	EPA6 calc c	3.62E+01	EPA6 calc c
3-Heptanone	106-35-4	NA	NA	NA	NA	NA	NA
3-Methyl-1-butanol	123-51-3	NA	NA	NA	NA	NA	NA
3-Methyl-2-butanone	563-80-4	NA	NA	NA	NA	NA	NA
3-Pentanone	96-22-0	9.95E-01	EPA6 calc c	8.27E+00	EPA6 calc c	1.04E+01	EPA6 calc c
4-Heptanone	123-19-3	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	108-10-1	8.22E+00	EPA6 e	6.85E+01	EPA6 e	7.95E+00	EPA6 e
4-Methyl-3-penten-2-one	141-79-7	NA	NA	NA	NA	NA	NA
5-Methyl-2-hexanone	110-12-3	NA	NA	NA	NA	NA	NA
Acetaldehyde	75-07-0	6.46E+00	EPA6 e	6.78E+02	EPA6 e	5.19E+01	EPA6 e
Acetamide	60-35-5	8.23E-01	EPA6 calc c	2.92E+03	EPA6 calc c	2.07E+02	EPA6 calc c
Acetic acid	64-19-7	8.42E-01	EPA6 calc c	8.42E+01	EPA6 calc c	4.86E+01	EPA6 calc c
Acetic acid ethyl ester	141-78-6	9.30E-01	EPA6 calc c	4.05E+01	EPA6 calc c	1.47E+01	EPA6 calc c
Acetic acid n-butyl ester	123-86-4	1.47E+00	EPA6 calc c	2.93E+00	EPA6 calc c	3.87E+00	EPA6 calc c
Acetonitrile	75-05-8	6.43E+00	EPA6 e	8.37E+02	EPA6 e	6.09E+01	EPA6 e
Acrolein	107-02-8	6.54E+00	EPA6 e	4.69E+02	EPA6 e	3.92E+01	EPA6 e
Acrylonitrile	107-13-1	6.67E+00	EPA6 e	3.00E+02	EPA6 e	2.77E+01	EPA6 e
Bis(isopropyl)ether	108-20-3	NA	NA	NA	NA	NA	NA
Butane	106-97-8	5.89E+00	EPA6 calc c	8.50E-01	EPA6 calc c	8.27E-01	EPA6 calc c
Carbon disulfide	75-15-0	1.44E+01	EPA6 e	2.79E+01	EPA6 e	2.70E+00	EPA6 e
Cyanogen	460-19-5	9.46E-01	EPA6 calc c	1.81E+01	EPA6 calc c	1.32E+01	EPA6 calc c
Cyclohexane	110-82-7	1.43E+01	EPA6 calc c	2.98E+00	EPA6 calc c	3.98E-01	EPA6 calc c
Cyclohexanone	108-94-1	9.47E-01	EPA6 calc c	1.51E+01	EPA6 calc c	1.32E+01	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
Cyclohexene	110-83-8	5.63E+00	EPA6 calc c	8.69E-01	EPA6 calc c	8.61E-01	EPA6 calc c
Cyclopentane	287-92-3	6.99E+00	EPA6 calc c	7.85E-01	EPA6 calc c	7.14E-01	EPA6 calc c
Ethyl alcohol	64-17-5	8.37E-01	EPA6 calc c	1.69E+02	EPA6 calc c	5.85E+01	EPA6 calc c
Ethyl ether	60-29-7	9.66E-01	EPA6 calc c	1.29E+01	EPA6 calc c	1.18E+01	EPA6 calc c
Ethyl methacrylate	97-63-2	1.02E+01	EPA6 e	4.14E+01	EPA6 e	4.67E+00	EPA6 e
Formaldehyde	50-00-0	6.73E+00	EPA6 e	2.57E+02	EPA6 e	2.46E+01	EPA6 e
Formamide	75-12-7	8.22E-01	EPA6 calc c	2.51E+03	EPA6 calc c	2.89E+02	EPA6 calc c
Formic acid	64-18-6	6.40E+00	EPA6 e	1.19E+02	EPA6 e	7.92E+01	EPA6 e
Formic acid, methyl ester	107-31-3	8.39E-01	EPA6 calc c	1.52E+02	EPA6 calc c	5.50E+01	EPA6 calc c
Glycidylaldehyde	765-34-4	8.28E-01	EPA6 calc c	8.28E+02	EPA6 calc c	1.02E+02	EPA6 calc c
Methyl acetate	79-20-9	8.62E-01	EPA6 calc c	1.80E+01	EPA6 calc c	3.05E+01	EPA6 calc c
Methyl alcohol	67-56-1	6.37E+00	EPA6 e	1.61E+03	EPA6 e	9.96E+01	EPA6 e
Methyl isocyanate	624-83-9	NA	NA	NA	NA	NA	NA
Methyl methacrylate	80-62-6	9.43E-01	EPA6 calc c	1.49E+00	EPA6 calc c	1.35E+01	EPA6 calc c
Methyl tert-butyl ether	1634-04-4	9.80E-01	EPA6 calc c	1.17E+01	EPA6 calc c	1.11E+01	EPA6 calc c
Methylacetylene	74-99-7	9.80E-01	EPA6 calc c	1.17E+01	EPA6 calc c	1.11E+01	EPA6 calc c
Methylcyclohexane	108-87-2	4.42E+01	EPA6 calc c	4.12E-01	EPA6 calc c	1.65E-01	EPA6 calc c
N,N-Dimethylacetamide	127-19-5	NA	NA	NA	NA	NA	NA
n-Butyl alcohol	71-36-3	9.64E-01	EPA6 calc c	1.31E+01	EPA6 calc c	1.20E+01	EPA6 calc c
n-Heptane	142-82-5	1.18E+02	EPA6 calc c	3.09E-01	EPA6 calc c	7.84E-02	EPA6 calc c
n-Hexane	110-54-3	4.49E+01	EPA6 calc c	4.10E-01	EPA6 calc c	1.63E-01	EPA6 calc c
Nitromethane	75-52-5	8.36E-01	EPA6 calc c	1.85E+02	EPA6 calc c	6.17E+01	EPA6 calc c
n-Nonane	111-84-2	6.78E+02	EPA6 calc c	1.89E-01	EPA6 calc c	2.10E-02	EPA6 calc c
n-Octane	111-65-9	3.71E+01	EPA6 calc c	4.34E-01	EPA6 calc c	1.89E-01	EPA6 calc c
n-Pentane	109-66-0	9.77E+00	EPA6 calc c	6.83E-01	EPA6 calc c	5.40E-01	EPA6 calc c
n-Propionaldehyde	123-38-6	9.06E-01	EPA6 calc c	2.38E+01	EPA6 calc c	1.77E+01	EPA6 calc c
n-Propyl alcohol	71-23-8	NA	NA	NA	NA	NA	NA
n-Valeraldehyde	110-62-3	NA	NA	NA	NA	NA	NA
Oxirane	75-21-8	6.44E+00	EPA6 e	7.80E+02	EPA6 e	5.77E+01	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
p-Cymene	99-87-6	4.42E+01	EPA6 calc c	4.12E-01	EPA6 calc c	1.65E-01	EPA6 calc c
Phosgene	75-44-5	NA	NA	NA	NA	NA	NA
Propargyl alcohol	107-19-7	NA	NA	NA	NA	NA	NA
Propionic acid	79-09-4	8.74E-01	EPA6 calc c	4.14E+01	EPA6 calc c	2.50E+01	EPA6 calc c
Propionitrile	107-12-0	8.60E-01	EPA6 calc c	5.99E+01	EPA6 calc c	3.13E+01	EPA6 calc c
Propylene glycol monomethyl ether	107-98-2	8.42E-01	EPA6 calc c	6.69E+00	EPA6 calc c	4.92E+01	EPA6 calc c
p-tert-Butyltoluene	98-51-1	NA	NA	NA	NA	NA	NA
Triethylamine	121-44-8	NA	NA	NA	NA	NA	NA
Trimethylamine	75-50-3	8.60E-01	EPA6 calc c	2.15E+01	EPA6 calc c	3.13E+01	EPA6 calc c
Vinyl acetate	108-05-4	7.11E+00	EPA6 e	1.43E+02	EPA6 e	1.53E+01	EPA6 e
Non-aromatic Halogenated Hydrocarbons							
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	NA	NA	NA	NA	NA	NA
1,1,1,2-Tetrachloroethane	630-20-6	3.09E+01	EPA6 e	1.94E+01	EPA6 e	1.17E+00	EPA6 e
1,1,1-Trichloroethane	71-55-6	2.33E+01	EPA6 e	1.73E-02	EPA6 e	1.54E+00	EPA6 e
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	2.33E+01	EPA6 calc c	7.37E+00	EPA6 calc c	2.70E-01	EPA6 calc c
1,1,2,2-Tetrachloroethane	79-34-5	8.80E+02	EPA6 e	1.11E+03	EPA6 e	8.02E-02	EPA6 e
1,1,2,2-Tetrachloroethene	127-18-4	2.75E+01	EPA6 e	1.04E-03	EPA6 e	1.31E+00	EPA6 e
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	9.01E+00	EPA6 calc c	3.50E+00	EPA6 calc c	5.77E-01	EPA6 calc c
1,1,2-Trichloroethane	79-00-5	1.59E+01	EPA6 e	2.12E+01	EPA6 e	2.38E+00	EPA6 e
1,1,2-Trichloroethylene	79-01-6	2.37E+01	EPA6 e	2.12E+01	EPA6 e	1.52E+00	EPA6 e
1,1-Dichloroethane	75-34-3	1.19E+01	EPA6 e	2.24E+01	EPA6 e	3.56E+00	EPA6 e
1,1-Dichloroethene	75-35-4	1.63E+01	EPA6 e	2.50E+01	EPA6 e	2.30E+00	EPA6 e
1,2,3-Trichloropropane	96-18-4	1.89E+01	EPA6 e	2.34E+01	EPA6 e	1.94E+00	EPA6 e
1,2-dibromo-3-chloropropane	96-12-8	2.10E+01	EPA6 e	2.22E+01	EPA6 e	1.72E+00	EPA6 e
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	9.41E+00	EPA6 e	4.81E+01	EPA6 e	5.53E+00	EPA6 e
1,2-Dichloroethylene	540-59-0	8.91E-01	EPA6 calc c	3.10E+01	EPA6 calc c	2.04E+01	EPA6 calc c
1,2-Dichloropropane	78-87-5	1.89E+01	EPA6 e	4.01E+01	EPA6 e	1.94E+00	EPA6 e
1,3-Dichloropropene	542-75-6	1.15E+01	EPA6 e	4.25E+01	EPA6 e	3.78E+00	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
1,4-Dichloro-2-butene	764-41-0	9.62E-01	EPA6 calc c	5.29E-01	EPA6 calc c	1.21E+01	EPA6 calc c
1-Chloroethene	75-01-4	8.08E+00	EPA6 e	7.29E+01	EPA6 e	8.42E+00	EPA6 e
2,2-Dichloropropionic acid	75-99-0	9.40E-01	EPA6 calc c	1.61E+01	EPA6 calc c	1.38E+01	EPA6 calc c
2-Chloropropane	75-29-6	1.70E+00	EPA6 calc c	2.30E+00	EPA6 calc c	3.09E+00	EPA6 calc c
3-Chloropropene (allyl chloride)	107-05-1	9.84E-01	EPA6 calc c	2.06E+00	EPA6 calc c	1.09E+01	EPA6 calc c
Bromochloromethane	74-97-5	1.19E+00	EPA6 calc c	4.88E+00	EPA6 calc c	5.93E+00	EPA6 calc c
Bromodichloromethane	75-27-4	1.47E+01	EPA6 e	2.74E+01	EPA6 e	2.61E+00	EPA6 e
Bromoethene	593-60-2	1.02E+00	EPA6 calc c	6.74E-01	EPA6 calc c	9.37E+00	EPA6 calc c
Bromoform	75-25-2	2.13E+01	EPA6 e	1.69E+01	EPA6 e	1.70E+00	EPA6 e
Bromomethane	74-83-9	7.98E+00	EPA6 e	8.87E+01	EPA6 e	8.79E+00	EPA6 e
Carbon tetrachloride	56-23-5	3.50E+01	EPA6 e	2.30E+01	EPA6 e	1.04E+00	EPA6 e
Chlordibromomethane	124-48-1	1.73E+01	EPA6 e	2.45E+01	EPA6 e	2.14E+00	EPA6 e
Chlorodifluoromethane	75-45-6	7.88E+00	EPA6 e	8.01E+01	EPA6 e	9.21E+00	EPA6 e
Chloroethane	75-00-3	6.30E+01	EPA6 e	1.70E+01	EPA6 e	6.25E-01	EPA6 e
Chloroform	67-66-3	1.37E+01	EPA6 e	2.58E+01	EPA6 e	2.89E+00	EPA6 e
Chloromethane	74-87-3	7.46E+00	EPA6 e	1.24E+02	EPA6 e	1.16E+01	EPA6 e
Chloropentafluoroethane	76-15-3	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	1.41E+01	EPA6 e	2.38E+00	EPA6 e	2.77E+00	EPA6 e
cis-1,3-Dichloropropene	10061-01-5	NA	NA	NA	NA	NA	NA
Cyanogen bromide	506-68-3	NA	NA	NA	NA	NA	NA
Cyanogen chloride	506-77-4	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	75-71-8	1.70E+01	EPA6 e	2.48E+01	EPA6 e	2.19E+00	EPA6 e
Dichlorofluoromethane	75-43-4	NA	NA	NA	NA	NA	NA
Dichloromethane	75-09-2	8.46E+00	EPA6 e	8.46E+01	EPA6 e	7.29E+00	EPA6 e
Difluorodibromomethane	75-61-6	NA	NA	NA	NA	NA	NA
Hexafluoroacetone	684-16-2	NA	NA	NA	NA	NA	NA
Iodomethane	74-88-4	1.42E+00	EPA6 calc c	3.11E+00	EPA6 calc c	4.08E+00	EPA6 calc c
Methylene bromide	74-95-3	1.04E+01	EPA6 e	4.01E+01	EPA6 e	4.48E+00	EPA6 e
Pentachloroethane	76-01-7	7.56E+00	EPA6 calc c	7.59E-01	EPA6 calc c	6.68E-01	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{all} ((ug/g DW plant) /(ug/g soil))	Source
trans-1,2-Dichloroethene	156-60-5	1.41E+01	EPA6 e	3.71E+01	EPA6 e	2.77E+00	EPA6 e
trans-1,3-Dichloropropene	10061-02-6	1.98E+00	EPA6 calc c	1.87E+00	EPA6 calc c	2.50E+00	EPA6 calc c
Trichloroacetic acid	76-03-9	1.14E+00	EPA6 calc c	5.61E+00	EPA6 calc c	6.60E+00	EPA6 calc c
Trichlorofluoroethane	27154-33-2	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	75-69-4	2.70E+01	EPA6 e	2.02E+00	EPA6 e	1.33E+00	EPA6 e
Trifluorobromomethane	75-63-8	1.64E+00	EPA6 calc c	2.43E+00	EPA6 calc c	3.26E+00	EPA6 calc c
Dioxin and Furan Compounds							
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	4.79E+05	EPA6 e	4.90E-01	EPA6 e	7.05E-04	EPA6 e
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	2.91E+05	EPA6 e	5.68E-01	EPA6 e	1.02E-03	EPA6 e
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	2.91E+05	EPA6 e	5.68E-01	EPA6 e	1.02E-03	EPA6 e
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	2.31E+05	EPA6 e	6.09E-01	EPA6 e	1.22E-03	EPA6 e
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	8.88E+04	EPA6 e	8.10E-01	EPA6 e	2.50E-03	EPA6 e
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	8.88E+04	EPA6 e	8.10E-01	EPA6 e	2.50E-03	EPA6 e
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	8.88E+04	EPA6 e	8.10E-01	EPA6 e	2.50E-03	EPA6 e
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	8.88E+04	EPA6 e	8.10E-01	EPA6 e	2.50E-03	EPA6 e
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	8.88E+04	EPA6 e	8.10E-01	EPA6 e	2.50E-03	EPA6 e
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	3.01E+04	EPA6 e	1.12E+00	EPA6 e	5.62E-03	EPA6 e
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	3.93E+04	EPA6 e	1.03E+00	EPA6 e	4.61E-03	EPA6 e
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	8.88E+04	EPA6 e	8.10E-01	EPA6 e	2.50E-03	EPA6 e
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	4.95E+04	EPA6 e	9.65E-01	EPA6 e	3.87E-03	EPA6 e
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	3.01E+04	EPA6 e	1.12E+00	EPA6 e	5.62E-03	EPA6 e
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	2.48E+04	EPA6 e	1.19E+00	EPA6 e	6.51E-03	EPA6 e
Dibenzofuran	132-64-9	6.60E+01	EPA6 calc c	3.66E-01	EPA6 calc c	1.22E-01	EPA6 calc c
Octachlorodibenzo(p)dioxin	3268-87-9	1.62E+05	EPA6 e	6.77E-01	EPA6 e	1.59E-03	EPA6 e
Octachlorodibenzofuran	39001-02-0	1.34E+06	EPA6 e	3.60E-01	EPA6 e	3.26E-04	EPA6 e
PCBs							
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	8.54E+03	EPA6 calc c	1.21E-01	EPA6 calc c	3.13E-03	EPA6 calc c
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	9.17E+03	EPA6 calc c	1.10E-01	EPA6 calc c	2.97E-03	EPA6 calc c
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	NA	NA	NA	NA	NA	NA
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	NA	NA	NA	NA	NA	NA
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	NA	NA	NA	NA	NA	NA
2',3,4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	9.17E+03	EPA6 calc c	9.19E-02	EPA6 calc c	2.97E-03	EPA6 calc c
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	1.53E+04	EPA6 calc c	3.84E-01	EPA6 calc c	2.02E-03	EPA6 calc c
3,3',4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	NA	NA	NA	NA	NA	NA
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	NA	NA	NA	NA	NA	NA
Polychlorinated biphenyls (PCBs)**	1336-36-3	1.28E+04	EPA6 calc c	4.15E+00	EPA6 calc c	2.31E-03	EPA6 calc c
Phthalates							
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	2.37E+03	EPA6 e	2.13E+00	EPA6 e	3.80E-02	EPA6 e
Butylbenzyl phthalate	85-68-7	5.87E+02	EPA6 e	4.27E+00	EPA6 e	1.09E-01	EPA6 e
Dibutyl phthalate	84-74-2	1.01E+03	EPA6 e	6.43E+01	EPA6 e	7.24E-02	EPA6 e
Diethyl phthalate	84-66-2	6.12E+02	EPA6 e	7.46E+02	EPA6 e	1.06E-01	EPA6 e
Dimethyl phthalate	131-11-3	1.05E+01	EPA6 e	3.95E+00	EPA6 e	4.40E+00	EPA6 e
n-Dioctyl phthalate	117-84-0	3.55E+06	EPA6 e	3.93E-01	EPA6 e	1.57E-04	EPA6 e
Light Polycyclic Aromatic Hydrocarbons							
2-Chloronaphthalene	91-58-7	3.23E+02	EPA6 e	4.51E+00	EPA6 e	1.72E-01	EPA6 e
2-Methyl naphthalene	91-57-6	2.91E+01	EPA6 calc c	4.68E-01	EPA6 calc c	2.27E-01	EPA6 calc c
5-Nitroacenaphthene	602-87-9	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	2.69E+02	EPA6 e	5.48E+00	EPA6 e	1.98E-01	EPA6 e
Acenaphthylene	208-96-8	4.19E+01	EPA6 calc c	6.20E-01	EPA6 calc c	1.72E-01	EPA6 calc c
Anthracene	120-12-7	6.49E+02	EPA6 e	2.76E+00	EPA6 e	1.01E-01	EPA6 e
Fluorene	86-73-7	5.08E+01	EPA6 calc c	3.59E-01	EPA6 calc c	1.49E-01	EPA6 calc c
Indene	95-13-6	NA	NA	NA	NA	NA	NA
Napthalene	91-20-3	9.81E+01	EPA6 e	8.23E+00	EPA6 e	4.35E-01	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{eg} ((ug/g DW plant) /(ug/g soil))	Source
Phenanthrene	85-01-8	7.47E+02	EPA6 e	1.49E+00	EPA6 e	9.08E-02	EPA6 e
Pyrene	129-00-0	1.66E+03	EPA6 e	2.44E+00	EPA6 e	4.98E-02	EPA6 e
Heavy Polycyclic Aromatic Hydrocarbons							
3-Methylcholanthrene	56-49-5	9.01E+03	EPA6 calc c	5.95E-01	EPA6 calc c	3.01E-03	EPA6 calc c
5-Methylchrysene	3697-24-3	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	56-55-3	5.48E+03	EPA6 e	2.11E+00	EPA6 e	2.02E-02	EPA6 e
Benzo(a)pyrene	50-32-8	1.22E+04	EPA6 e	1.26E+00	EPA6 e	1.11E-02	EPA6 e
Benzo(b)fluoranthene	205-99-2	1.39E+04	EPA6 e	1.66E+00	EPA6 e	1.01E-02	EPA6 e
Benzo(e)pyrene	192-97-2	1.51E+04	EPA6 calc c	9.51E-02	EPA6 calc c	2.05E-03	EPA6 calc c
Benzo(g,h,i)perylene	191-24-2	8.85E+03	EPA6 calc c	4.86E-01	EPA6 calc c	3.05E-03	EPA6 calc c
Benzo(j)fluoranthene	205-82-3	2.75E+03	EPA6 calc c	1.28E-01	EPA6 calc c	7.34E-03	EPA6 calc c
Benzo(k)fluoranthene	207-08-9	1.38E+04	EPA6 e	1.66E+00	EPA6 e	1.01E-02	EPA6 e
Benzo[a,i]pyrene	191-30-0	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	6.10E+03	EPA6 e	2.05E+00	EPA6 e	1.87E-02	EPA6 e
Dibenz(a,h)anthracene	53-70-3	2.56E+04	EPA6 e	1.43E-04	EPA6 e	6.36E-03	EPA6 e
Dibenz[a,h]acridine	226-36-8	NA	NA	NA	NA	NA	NA
Dibenz[a,j]acridine	224-42-0	NA	NA	NA	NA	NA	NA
Dibenzo(a,e)fluoranthene	5385-75-1	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)fluoranthene	no cas #	NA	NA	NA	NA	NA	NA
Dibenzo[a,e]pyrene	192-65-4	NA	NA	NA	NA	NA	NA
Dibenzo[a,h]pyrene	189-64-0	NA	NA	NA	NA	NA	NA
Dibenzo[a,i]pyrene	189-55-9	1.24E+04	EPA6 calc c	8.45E-02	EPA6 calc c	2.37E-03	EPA6 calc c
Fluoranthene	206-44-0	1.92E+03	EPA6 e	3.90E+00	EPA6 e	4.46E-02	EPA6 e
Hexachloronaphthalene	1335-87-1	2.11E+04	EPA6 calc c	7.30E-02	EPA6 calc c	1.59E-03	EPA6 calc c
Indeno(1,2,3-cd)pyrene	193-39-5	4.91E+04	EPA6 e	1.19E+00	EPA6 e	3.90E-03	EPA6 e
Octachloronaphthalene	2234-13-1	2.65E+03	EPA6 calc c	1.30E-01	EPA6 calc c	7.54E-03	EPA6 calc c
Pentachloronaphthalene	1321-64-8	NA	NA	NA	NA	NA	NA
Tetrachloronaphthalene	1335-88-2	NA	NA	NA	NA	NA	NA
Trichloronaphthalene	1321-65-9	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
Light Substituted Benzene Compounds							
1,2,3-Trichlorobenzene	87-61-6	3.09E+02	EPA6 e	1.53E+00	EPA6 e	1.78E-01	EPA6 e
1,2,4-Trichlorobenzene	120-82-1	2.80E+02	EPA6 e	1.69E+01	EPA6 e	1.92E-01	EPA6 e
1,2,4-Trimethlyl benzene	25551-13-7	1.34E+01	EPA6 calc c	2.26E+00	EPA6 calc c	4.20E-01	EPA6 calc c
1,2,4-Trimethyl benzene	95-63-6	2.03E+01	EPA6 calc c	5.25E-01	EPA6 calc c	3.01E-01	EPA6 calc c
1,2-Dichlorobenzene	95-50-1	1.11E+02	EPA6 e	2.92E+01	EPA6 e	3.95E-01	EPA6 e
1,3,5-Trimethyl benzene	108-67-8	1.06E+02	EPA6 e	6.35E+00	EPA6 e	4.09E-01	EPA6 e
1,3-Dichlorobenzene	541-73-1	1.28E+02	EPA6 e	1.59E+00	EPA6 e	3.53E-01	EPA6 e
1,3-Dinitrobenzene	99-65-0	9.58E+00	EPA6 e	4.64E+01	EPA6 e	5.32E+00	EPA6 e
1,4-Dichlorobenzene	106-46-7	1.05E+02	EPA6 e	1.70E+01	EPA6 e	4.13E-01	EPA6 e
1,4-Dinitrobenzene	100-25-4	1.25E+00	EPA6 calc c	4.19E+00	EPA6 calc c	5.26E+00	EPA6 calc c
2,4,5-Trichorophenol	95-95-4	2.28E+02	EPA6 e	2.02E+01	EPA6 e	2.24E-01	EPA6 e
2,4,6-Trichlorophenol	88-06-2	1.74E+01	EPA6 e	7.69E+01	EPA6 e	2.77E-01	EPA6 e
2,4-Dichlorophenol	120-83-2	5.68E+01	EPA6 e	4.07E+01	EPA6 e	6.82E-01	EPA6 e
2,4-Dimethylphenol	105-67-9	2.16E+01	EPA6 e	1.71E+01	EPA6 e	1.68E+00	EPA6 e
2,4-Dinitrophenol	51-28-5	9.74E+00	EPA6 e	9.74E+04	EPA6 e	5.13E+00	EPA6 e
2,4-Dinitrotoluene	121-14-2	1.43E+01	EPA6 e	2.80E+01	EPA6 e	2.72E+00	EPA6 e
2,6-Dinitrotoluene	606-20-2	1.29E+01	EPA6 e	3.08E+01	EPA6 e	3.15E+00	EPA6 e
2-Chlorotoluene	95-49-8	1.68E+01	EPA6 calc c	2.22E+00	EPA6 calc c	3.50E-01	EPA6 calc c
2-Chorophenol	95-57-8	1.70E+01	EPA6 e	4.40E+00	EPA6 e	2.18E+00	EPA6 e
2-Nitrophenol	88-75-5	1.19E+01	EPA6 e	3.36E+00	EPA6 e	3.57E+00	EPA6 e
4,6-Dinitro-o-cresol	534-52-1	5.55E+00	EPA6 calc c	8.75E-01	EPA6 calc c	8.72E-01	EPA6 calc c
4-Chlorotoluene	106-43-4	1.19E+01	EPA6 calc c	6.33E-01	EPA6 calc c	4.61E-01	EPA6 calc c
4-Nitrophenol	100-02-7	1.32E+01	EPA6 e	3.01E+00	EPA6 e	3.05E+00	EPA6 e
alpha-Methylstyrene	98-83-9	1.48E+01	EPA6 calc c	2.24E+00	EPA6 calc c	3.86E-01	EPA6 calc c
Aniline	62-53-3	7.63E+00	EPA6 e	9.27E+01	EPA6 e	1.05E+01	EPA6 e
Benzotrichloride	98-07-7	6.17E+00	EPA6 calc c	8.31E-01	EPA6 calc c	7.95E-01	EPA6 calc c
Benzyl Chloride	100-44-7	6.75E+00	EPA6 e	2.49E+02	EPA6 e	2.39E+01	EPA6 e
Bromobenzene	108-86-1	6.88E+00	EPA6 calc c	1.54E+00	EPA6 calc c	7.24E-01	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
Chlorobenzene	108-90-7	3.90E+01	EPA6 e	1.74E+01	EPA6 e	9.45E-01	EPA6 e
Cumene	98-82-8	1.47E+02	EPA6 e	1.58E+00	EPA6 e	3.16E-01	EPA6 e
m-Cresol	108-39-4	1.38E+01	EPA6 e	2.89E+01	EPA6 e	2.86E+00	EPA6 e
n-Butyl benzene	104-51-8	6.05E+01	EPA6 calc c	2.41E+00	EPA6 calc c	1.30E-01	EPA6 calc c
Nitrobenzene	98-95-3	1.23E+01	EPA6 e	1.03E+01	EPA6 e	3.38E+00	EPA6 e
n-Propyl benzene	103-65-1	2.18E+01	EPA6 calc c	3.01E+00	EPA6 calc c	2.85E-01	EPA6 calc c
o-Cresol	95-48-7	1.47E+01	EPA6 e	2.75E+01	EPA6 e	2.63E+00	EPA6 e
o-Dinitrobenzene	528-29-0	1.34E+00	EPA6 calc c	3.57E+00	EPA6 calc c	4.60E+00	EPA6 calc c
o-Nitroaniline	88-74-4	1.25E+01	EPA6 e	3.18E+00	EPA6 e	3.30E+00	EPA6 e
o-Toluidine	95-53-4	8.81E+00	EPA6 e	5.61E+01	EPA6 e	6.51E+00	EPA6 e
p-Chloroaniline	106-47-8	1.27E+01	EPA6 e	3.12E+01	EPA6 e	3.22E+00	EPA6 e
p-Cresol	106-44-5	1.35E+01	EPA6 e	2.94E+01	EPA6 e	2.93E+00	EPA6 e
Phenol	108-95-2	9.50E+00	EPA6 e	4.32E+01	EPA6 e	5.42E+00	EPA6 e
p-Nitrochlorobenzene	100-00-5	2.91E+00	EPA6 calc c	1.30E+00	EPA6 calc c	1.61E+00	EPA6 calc c
p-Toluidine	106-49-0	1.18E+00	EPA6 calc c	4.97E+00	EPA6 calc c	6.01E+00	EPA6 calc c
sec-Butyl benzene	135-98-8	NA	NA	NA	NA	NA	NA
tert-Butyl benzene	98-06-6	4.49E+01	EPA6 calc c	4.10E-01	EPA6 calc c	1.63E-01	EPA6 calc c
Toluene-2,6-diamine	823-40-5	1.22E+00	EPA6 calc c	4.52E+00	EPA6 calc c	5.59E+00	EPA6 calc c
Other Light Semivolatile Compounds							
1,1 Dimethyl hydrazine	57-14-7	9.07E-01	EPA6 calc c	2.36E+01	EPA6 calc c	1.75E+01	EPA6 calc c
1,1-Biphenyl	92-52-4	3.12E+01	EPA6 calc c	1.24E+00	EPA6 calc c	2.16E-01	EPA6 calc c
1,2 Diphenylhydrazine	122-66-7	4.90E+01	EPA6 e	1.76E+01	EPA6 e	7.74E-01	EPA6 e
1,2-Dimethylhydrazine	540-73-8	8.23E-01	EPA6 calc c	1.82E+03	EPA6 calc c	2.39E+02	EPA6 calc c
1,3-Propane sultone	1120-71-4	8.32E-01	EPA6 calc c	2.72E+02	EPA6 calc c	7.77E+01	EPA6 calc c
2,4-Toluene diisocyanate	584-84-9	NA	NA	NA	NA	NA	NA
2-Chloroacetophenone	532-27-4	3.83E+00	EPA6 calc c	5.03E+00	EPA6 calc c	1.23E+00	EPA6 calc c
2-Propenoic acid	79-10-7	8.85E-01	EPA6 calc c	3.34E+01	EPA6 calc c	2.19E+01	EPA6 calc c
4,4-Methylenedianiline	101-77-9	1.29E+01	EPA6 calc c	6.14E-01	EPA6 calc c	4.31E-01	EPA6 calc c
Acetophenone	98-86-2	1.06E+01	EPA6 e	3.92E+01	EPA6 e	4.37E+00	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
Benzoic acid	65-85-0	1.28E+01	NA	2.33E+03	NA	3.17E+00	NA
bis(2-Chloroethoxy)methane	111-91-1	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	111-44-4	8.64E+00	EPA6 e	1.14E+01	EPA6 e	6.85E+00	EPA6 e
Chlorocyclopentadiene	41851-50-7	3.06E+00	EPA6 calc c	1.25E+00	EPA6 calc c	1.53E+00	EPA6 calc c
Cyclohexanol	108-93-0	1.09E+00	EPA6 calc c	8.36E+00	EPA6 calc c	7.53E+00	EPA6 calc c
Dichloroisopropyl ether	108-60-1	3.75E+00	EPA6 calc c	6.15E+00	EPA6 calc c	1.25E+00	EPA6 calc c
Dichloromethyl ether	542-88-1	8.35E-01	EPA6 calc c	1.05E+00	EPA6 calc c	6.42E+01	EPA6 calc c
Dichloropentadiene	no cas #	NA	NA	NA	NA	NA	NA
Dimethyl sulfate	77-78-1	8.73E-01	EPA6 calc c	4.25E+01	EPA6 calc c	2.54E+01	EPA6 calc c
Dimethylaniline	121-69-7	8.26E-01	EPA6 calc c	6.05E+02	EPA6 calc c	1.25E+02	EPA6 calc c
di-n-propylnitrosamine	621-64-7	8.99E+00	EPA6 e	5.29E+01	EPA6 e	6.17E+00	EPA6 e
Diphenyl ether	101-84-8	5.35E+01	EPA6 calc c	3.89E-01	EPA6 calc c	1.43E-01	EPA6 calc c
Epichlorohydrin	106-89-8	6.67E+00	EPA6 e	3.00E+02	EPA6 e	2.77E+01	EPA6 e
Ethyl carbomate (urethane)	51-79-6	8.43E-01	EPA6 calc c	1.18E+02	EPA6 calc c	4.73E+01	EPA6 calc c
Ethyl methane sulfanate	62-50-0	6.56E+00	EPA6 e	4.24E+02	EPA6 e	3.63E+01	EPA6 e
Ethylene dibromide	106-93-4	1.15E+01	EPA6 e	3.50E+01	EPA6 e	3.77E+00	EPA6 e
Ethylene glycol	107-21-1	8.26E-01	EPA6 calc c	6.54E+02	EPA6 calc c	1.31E+02	EPA6 calc c
Ethylene glycol monobutyl ether	111-76-2	1.30E+00	EPA6 calc c	2.10E+00	EPA6 calc c	4.89E+00	EPA6 calc c
Ethylene glycol monoethyl ether acetate	111-15-9	9.11E-01	EPA6 calc c	2.24E+01	EPA6 calc c	1.70E+01	EPA6 calc c
Ethylene thiourea	96-45-7	8.30E-01	EPA6 calc c	3.54E+02	EPA6 calc c	9.10E+01	EPA6 calc c
Furfural	98-01-1	9.86E-01	EPA6 calc c	1.12E+01	EPA6 calc c	1.08E+01	EPA6 calc c
Maleic hydrazide	123-33-1	8.28E-01	EPA6 calc c	4.42E+02	EPA6 calc c	1.04E+02	EPA6 calc c
Malononitrile	109-77-3	8.52E-01	EPA6 calc c	6.62E+01	EPA6 calc c	3.67E+01	EPA6 calc c
Methyl styrene (mixed isomers)	25013-15-4	1.23E+01	EPA6 calc c	3.32E+00	EPA6 calc c	4.48E-01	EPA6 calc c
Methylhydrazine	60-34-4	8.25E-01	EPA6 calc c	8.88E+02	EPA6 calc c	1.57E+02	EPA6 calc c
N,N-Diphenylamine	122-39-4	1.58E+01	EPA6 calc c	4.55E+00	EPA6 calc c	3.67E-01	EPA6 calc c
Nitric acid, propyl ester	627-13-4	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	2.30E+01	EPA6 e	2.14E+01	EPA6 e	1.57E+00	EPA6 e
N-Nitrosomorpholine	59-89-2	9.92E-01	EPA6 calc c	1.08E+01	EPA6 calc c	1.05E+01	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
N-Nitroso-N,N-dimethylamine	62-75-9	8.33E-01	EPA6 calc c	1.00E+01	EPA6 calc c	7.24E+01	EPA6 calc c
o-Anisidine	90-04-0	1.06E+00	EPA6 calc c	7.36E+00	EPA6 calc c	8.05E+00	EPA6 calc c
Oxalic acid	144-62-7	NA	NA	NA	NA	NA	NA
Phthalic Anhydride	85-44-9	6.39E+00	EPA6 e	1.33E+03	EPA6 e	8.63E+01	EPA6 e
p-Phthalic acid	100-21-0	9.50E-01	EPA6 calc c	1.47E+01	EPA6 calc c	1.30E+01	EPA6 calc c
Pyridine	110-86-1	7.07E+00	EPA6 e	1.50E+02	EPA6 e	1.59E+01	EPA6 e
Quinoline	91-22-5	1.92E+00	EPA6 calc c	1.94E+00	EPA6 calc c	2.60E+00	EPA6 calc c
Quinone	106-51-4	8.63E-01	EPA6 calc c	5.49E+01	EPA6 calc c	2.97E+01	EPA6 calc c
Safrole	94-59-7	3.23E+01	EPA6 e	1.92E+01	EPA6 e	1.12E+00	EPA6 e
Tetrahydrofuran	109-99-9	6.82E+00	EPA6 e	2.16E+02	EPA6 e	2.14E+01	EPA6 e
Other Heavy Semivolatile Compounds							
1,2,4,5-Tetrachlorobenzene	95-94-3	8.75E+02	EPA6 e	1.49E+01	EPA6 e	8.06E-02	EPA6 e
1,3,5-Trinitrobenzene	99-35-4	8.19E+00	EPA6 e	6.95E+01	EPA6 e	8.05E+00	EPA6 e
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	4.99E+01	EPA6 calc c	3.97E-01	EPA6 calc c	1.51E-01	EPA6 calc c
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	8.20E-01	EPA6 calc c	3.70E+04	EPA6 calc c	1.41E+03	EPA6 calc c
2-sec-Butyl-4,6-dinitrophenol	88-85-7	8.72E+00	EPA6 calc c	7.14E-01	EPA6 calc c	5.93E-01	EPA6 calc c
3,3-Dichlorobenzidine	91-94-1	1.38E+02	EPA6 e	1.58E+01	EPA6 e	3.32E-01	EPA6 e
3,3'-Dimethoxybenzidine	119-90-4	1.21E+01	EPA6 e	3.30E+01	EPA6 e	3.48E+00	EPA6 e
4-Bromophenylphenyl ether	101-55-3	2.15E+02	EPA6 calc c	2.61E-01	EPA6 calc c	4.99E-02	EPA6 calc c
Ammonium perfluorooctanoate	3825-26-1	NA	NA	NA	NA	NA	NA
Azobenzene	103-33-3	2.72E+01	EPA6 calc c	1.01E+00	EPA6 calc c	2.40E-01	EPA6 calc c
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	NA	NA	NA	NA	NA	NA
Captan	133-06-2	2.77E+00	EPA6 calc c	1.39E+00	EPA6 calc c	1.70E+00	EPA6 calc c
Chlorobenzilate	510-15-6	5.54E+02	EPA6 e	1.50E+01	EPA6 e	1.14E-01	EPA6 e
Dibutylphosphate	107-66-4	NA	NA	NA	NA	NA	NA
Dimethyl aminoazobenzene	60-11-7	1.02E+02	EPA6 calc c	3.22E-01	EPA6 calc c	8.72E-02	EPA6 calc c
Hexachlorobenzene	118-74-1	4.02E+03	EPA6 e	5.02E+00	EPA6 e	2.56E-02	EPA6 e
Hexachlorobutadiene	87-68-3	1.03E+03	EPA6 e	1.48E+01	EPA6 e	7.14E-02	EPA6 e
Hexachlorocyclopentadiene	77-47-4	1.40E+03	EPA6 e	1.47E+01	EPA6 e	5.65E-02	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
Hexachloroethane	67-72-1	2.78E+02	EPA6 e	1.53E+01	EPA6 e	1.93E-01	EPA6 e
Hexachlorophene	70-30-4	1.49E+05	EPA6 e	1.38E+00	EPA6 e	1.70E-03	EPA6 e
Hexamethylene-1,5-diisocyanate	822-06-0	1.11E+00	EPA6 calc c	6.21E+00	EPA6 calc c	7.11E+00	EPA6 calc c
Mirex	2385-85-5	6.10E+03	EPA6 calc c	6.10E-01	EPA6 calc c	4.03E-03	EPA6 calc c
Nitrofen	1836-75-5	5.48E+02	EPA6 calc c	2.01E-01	EPA6 calc c	2.46E-02	EPA6 calc c
Pentachlorobenzene	608-93-5	1.93E+03	EPA6 e	5.99E+00	EPA6 e	4.44E-02	EPA6 e
Pentachloronitrobenzene	82-68-8	8.75E+02	EPA6 e	1.49E+01	EPA6 e	8.06E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Pentachlorophenol*	87-86-5	1.90E+03	EPA6 e	3.77E+02	EPA6 e	4.48E-02	EPA6 e
Picric acid	88-89-1	1.92E+00	EPA6 calc c	1.94E+00	EPA6 calc c	2.60E+00	EPA6 calc c
Pronamide	23950-58-5	1.23E+02	EPA6 e	1.59E+01	EPA6 e	3.62E-01	EPA6 e
Strychnine	57-24-9	1.34E+01	EPA6 e	2.96E+01	EPA6 e	2.97E+00	EPA6 e
Terphenyls	26140-60-3	NA	NA	NA	NA	NA	NA
Tributyl phosphate	126-73-8	3.71E+01	EPA6 calc c	4.34E-01	EPA6 calc c	1.89E-01	EPA6 calc c
Trifluralin	1582-09-8	3.91E+02	EPA6 calc c	6.50E+00	EPA6 calc c	3.17E-02	EPA6 calc c
Triphenylamine	603-34-9	NA	NA	NA	NA	NA	NA
Herbicides and Organopesticides							
2,4,5-T	93-76-5	1.25E+01	EPA6 calc c	2.38E+01	EPA6 calc c	4.43E-01	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source
2,4-D and esters	94-75-7	5.22E+00	EPA6 calc c	2.62E+01	EPA6 calc c	9.20E-01	EPA6 calc c
4,4-DDD	72-54-8	1.80E+03	EPA6 calc c	1.80E+00	EPA6 calc c	1.01E-02	EPA6 calc c
4,4-DDT	50-29-3	1.26E+03	EPA6 calc c	5.25E-01	EPA6 calc c	1.32E-02	EPA6 calc c
Aldrin	309-00-2	1.33E+04	EPA6 e	2.73E+01	EPA6 e	1.04E-02	EPA6 e
alpha-BHC	319-84-6	2.02E+02	EPA6 e	1.15E+01	EPA6 e	2.47E-01	EPA6 e
beta-BHC	319-85-7	2.14E+02	EPA6 e	1.00E+01	EPA6 e	2.36E-01	EPA6 e
Chlordane	57-74-9	8.67E+03	EPA6 e	1.69E+01	EPA6 e	1.43E-02	EPA6 e
DDE	72-55-9	1.53E+04	EPA6 e	1.77E+01	EPA6 e	9.37E-03	EPA6 e
Delta-BHC	319-86-8	4.74E+01	EPA6 calc c	7.17E+00	EPA6 calc c	1.57E-01	EPA6 calc c
Dieldrin	60-57-1	2.66E+03	EPA6 e	1.04E+01	EPA6 e	3.49E-02	EPA6 e
Endothall	145-73-3	8.26E-01	EPA6 calc c	5.92E+02	EPA6 calc c	1.23E+02	EPA6 calc c
Endrin	72-20-8	1.36E+03	EPA6 e	1.26E+01	EPA6 e	5.76E-02	EPA6 e
gamma-BHC(Lindane)	58-89-9	2.29E+01	EPA6 calc c	2.14E+00	EPA6 calc c	2.74E-01	EPA6 calc c
Heptachlor	76-44-8	1.70E+03	EPA6 e	1.78E+01	EPA6 e	4.89E-02	EPA6 e
Isodrin	465-73-6	NA	NA	NA	NA	NA	NA
Methoxychlor	72-43-5	7.16E+02	EPA6 e	8.95E-01	EPA6 e	9.38E-02	EPA6 e
Silvex (2,4,5-TP)	93-72-1	4.21E+01	EPA6 calc c	4.18E-01	EPA6 calc c	1.71E-01	EPA6 calc c
Toxaphene	8001-35-2	5.20E+02	EPA6 calc c	5.20E-01	EPA6 calc c	2.56E-02	EPA6 calc c

NA = Value not available
** = Varies with pH; values given for a pH of 7.0.
a = Illustrated Handbook of Physical - Chemical Properties and Environmental Fate f
b = RAIS database: http://risk.lsd.ornl.gov/rap_hp.shtml
c = Equations derived from EPA Region 6 Guidance Appendix A-3
d = Handbook of Environmental degradation Rates. 1991.
e = EPA Region 6 Hazardous Waste Combustion Guidance
f = "A Critical Review of Henry's Law Constants for Chemicals of Environmental In
g = Handbook of Environmental Fate and Exposure Data for Organic Chemicals
h = http://www.epa.gov/region09/waste/sfund/prg/.
i = http://esc.syrres.com/efdb/Chemfate.htm
j = Hansch and Leo 1985 in Syracuse 1996

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	RCF ((ug/g DW plant)/ (ug/mL soil water))	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))	Source

k = Schwarzenbach et al. 1993

l = Tomlin 1994 in Syracuse 1996

m = http://www.speclab.com/compound/c959988.htm

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
Aromatic Halogenated Hydrocarbons							
2,3,4,6-Tetrachlorophenol	58-90-2	1.08E-01	EPA6 calc c	NA	8.13E+02	EPA6 calc c	8.13E+02
4-Chloro-3-methylphenol	59-50-7	6.25E-01	EPA6 calc c	NA	NA	NA	NA
Aromatic Nonhalogenated Hydrocarbons							
2-Nitrotoluene	88-72-2	1.81E+00	EPA6 calc c	NA	2.74E-01	EPA6 calc c	2.74E-01
4-Nitrobiphenyl	92-93-3	2.56E-01	EPA6 calc c	NA	NA	NA	NA
Benzaldehyde	100-52-7	5.42E+00	EPA6 e	NA	5.00E-02	EPA6 e	5.00E-02
Benzene	71-43-2	2.25E+00	EPA6 e	NA	1.92E-03	EPA6 e	1.92E-03
Benzyl alcohol	100-51-6	8.95E+00	EPA6 e	NA	2.19E+00	EPA6 e	2.19E+00
Ethyl Benzene	100-41-4	6.07E-01	EPA6 e	NA	1.53E-02	EPA6 e	1.53E-02
m-Xylene	108-38-3	5.47E-01	EPA6 e	NA	1.55E+01	EPA6 e	1.55E+01
o-Xylene	95-47-6	6.01E-01	EPA6 e	NA	1.79E+01	EPA6 e	1.79E+01
p-Xylene	106-42-3	5.70E-01	EPA6 e	NA	1.93E+01	EPA6 e	1.93E+01
Styrene	100-42-5	7.85E-01	EPA6 e	NA	2.21E-02	EPA6 e	2.21E-02
Toluene	108-88-3	1.11E+00	EPA6 e	NA	6.33E-03	EPA6 e	6.33E-03
Non-aromatic Nonhalogenated Hydrocarbons							
1,2-Epoxybutane	106-88-7	5.69E+00	EPA6 calc c	NA	4.17E-03	EPA6 calc c	4.17E-03
1,3-Butadiene	106-99-0	2.74E+00	EPA6 calc c	NA	9.99E-05	EPA6 calc c	8.01E-05
1,4-Dioxane	123-91-1	5.53E+01	EPA6 e	NA	5.93E-03	EPA6 e	5.93E-03
1-Methylpropyl alcohol	78-92-2	1.72E+01	EPA6 calc c	NA	2.45E-02	EPA6 calc c	2.45E-02
1-Nitropropane	108-03-2	1.22E+01	EPA6 calc c	NA	NA	NA	NA
2,2,4-Trimethlylpentane	540-84-1	4.86E-02	EPA6 calc c	NA	4.12E-03	EPA6 calc c	4.12E-03
2-Butanone	78-93-3	2.67E+01	EPA6 e	NA	3.08E-03	EPA6 e	3.08E-03
2-Butenaldehyde (2-Butenal)	4170-30-3	NA	NA	NA	NA	NA	NA
2-Ethoxyethanol	110-80-5	4.42E+01	EPA6 calc c	NA	8.55E-07	EPA6 calc c	8.55E-07
2-Heptanone	110-43-0	2.78E+00	EPA6 calc c	NA	4.98E-02	EPA6 calc c	4.98E-02
2-Hexanone	591-78-6	6.17E+00	EPA6 calc c	NA	1.72E-02	EPA6 calc c	1.72E-02
2-Methoxyethanol	109-86-4	2.77E+01	EPA6 calc c	NA	1.26E-01	EPA6 calc c	1.26E-01
2-Methyl-2-propanol	75-65-0	2.43E+01	EPA6 calc c	NA	1.10E-02	EPA6 calc c	1.10E-02

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
2-Methyl-2-propenenitrile	126-98-7	1.89E+01	EPA6 e	NA	8.81E-04	EPA6 e	8.81E-04
2-Methylaziridine	75-55-8	NA	NA	NA	NA	NA	NA
2-Methylpropyl alcohol	78-83-1	1.41E+01	EPA6 calc c	NA	3.01E-02	EPA6 calc c	3.01E-02
2-Pentanone	107-87-9	1.15E+01	EPA6 calc c	NA	8.09E-03	EPA6 calc c	8.09E-03
2-Propanone (Acetone)	67-64-1	5.20E+01	EPA6 e	NA	1.13E-03	EPA6 e	1.13E-03
2-Propene-1-ol	107-18-6	3.09E+01	EPA6 calc c	NA	1.70E-02	EPA6 calc c	1.70E-02
2-Propyl alcohol	67-63-0	3.62E+01	EPA6 calc c	NA	7.80E-03	EPA6 calc c	7.80E-03
3-Heptanone	106-35-4	NA	NA	NA	NA	NA	NA
3-Methyl-1-butanol	123-51-3	NA	NA	NA	NA	NA	NA
3-Methyl-2-butanone	563-80-4	NA	NA	NA	NA	NA	NA
3-Pentanone	96-22-0	1.04E+01	EPA6 calc c	NA	7.89E-03	EPA6 calc c	7.89E-03
4-Heptanone	123-19-3	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	108-10-1	7.95E+00	EPA6 e	NA	8.26E-03	EPA6 e	8.26E-03
4-Methyl-3-penten-2-one	141-79-7	NA	NA	NA	NA	NA	NA
5-Methyl-2-hexanone	110-12-3	NA	NA	NA	NA	NA	NA
Acetaldehyde	75-07-0	5.19E+01	EPA6 e	NA	NA	EPA6 e	NA
Acetamide	60-35-5	2.07E+02	EPA6 calc c	NA	7.30E-01	EPA6 calc c	7.30E-01
Acetic acid	64-19-7	4.86E+01	EPA6 calc c	NA	1.22E-01	EPA6 calc c	1.22E-01
Acetic acid ethyl ester	141-78-6	1.47E+01	EPA6 calc c	NA	2.49E-03	EPA6 calc c	2.49E-03
Acetic acid n-butyl ester	123-86-4	3.87E+00	EPA6 calc c	NA	1.18E-02	EPA6 calc c	1.18E-02
Acetonitrile	75-05-8	6.09E+01	EPA6 e	NA	6.41E-10	EPA6 e	6.41E-10
Acrolein	107-02-8	3.92E+01	EPA6 e	NA	5.86E-04	EPA6 e	5.86E-04
Acrylonitrile	107-13-1	2.77E+01	EPA6 e	NA	1.04E-03	EPA6 e	1.04E-03
Bis(isopropyl)ether	108-20-3	NA	NA	NA	NA	NA	NA
Butane	106-97-8	8.27E-01	EPA6 calc c	NA	7.06E-05	EPA6 calc c	1.18E-02
Carbon disulfide	75-15-0	2.70E+00	EPA6 e	NA	5.92E-04	EPA6 e	5.92E-04
Cyanogen	460-19-5	1.32E+01	EPA6 calc c	NA	8.19E-05	EPA6 calc c	1.18E-02
Cyclohexane	110-82-7	3.98E-01	EPA6 calc c	NA	1.33E-03	EPA6 calc c	1.33E-03
Cyclohexanone	108-94-1	1.32E+01	EPA6 calc c	NA	3.39E-02	EPA6 calc c	3.39E-02

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
Cyclohexene	110-83-8	8.61E-01	EPA6 calc c	NA	1.57E-03	EPA6 calc c	1.57E-03
Cyclopentane	287-92-3	7.14E-01	EPA6 calc c	NA	4.72E-04	EPA6 calc c	4.72E-04
Ethyl alcohol	64-17-5	5.85E+01	EPA6 calc c	NA	4.17E-03	EPA6 calc c	1.91E-02
Ethyl ether	60-29-7	1.18E+01	EPA6 calc c	NA	3.86E-04	EPA6 calc c	3.86E-04
Ethyl methacrylate	97-63-2	4.67E+00	EPA6 e	NA	2.00E-02	EPA6 e	2.00E-02
Formaldehyde	50-00-0	2.46E+01	EPA6 e	NA	4.65E-04	EPA6 e	4.65E-04
Formamide	75-12-7	2.89E+02	EPA6 calc c	NA	NA	NA	1.18E-02
Formic acid	64-18-6	7.92E+01	EPA6 e	NA	6.02E-03	EPA6 e	6.02E-03
Formic acid, methyl ester	107-31-3	5.50E+01	EPA6 calc c	NA	NA	NA	NA
Glycidylaldehyde	765-34-4	1.02E+02	EPA6 calc c	NA	1.83E-02	EPA6 calc c	1.18E-02
Methyl acetate	79-20-9	3.05E+01	EPA6 calc c	NA	1.00E-03	EPA6 calc c	1.00E-03
Methyl alcohol	67-56-1	9.96E+01	EPA6 e	NA	6.82E-05	EPA6 e	6.82E-05
Methyl isocyanate	624-83-9	NA	NA	NA	NA	NA	NA
Methyl methacrylate	80-62-6	1.35E+01	EPA6 calc c	NA	1.22E-03	EPA6 calc c	1.22E-03
Methyl tert-butyl ether	1634-04-4	1.11E+01	EPA6 calc c	NA	9.55E-04	EPA6 calc c	9.55E-04
Methylacetylene	74-99-7	1.11E+01	EPA6 calc c	NA	NA	NA	NA
Methylcyclohexane	108-87-2	1.65E-01	EPA6 calc c	NA	2.99E-03	EPA6 calc c	2.99E-03
N,N-Dimethylacetamide	127-19-5	NA	NA	NA	NA	NA	NA
n-Butyl alcohol	71-36-3	1.20E+01	EPA6 calc c	NA	5.70E-02	EPA6 calc c	5.70E-02
n-Heptane	142-82-5	7.84E-02	EPA6 calc c	NA	2.26E-03	EPA6 calc c	2.26E-03
n-Hexane	110-54-3	1.63E-01	EPA6 calc c	NA	7.35E-04	EPA6 calc c	7.35E-04
Nitromethane	75-52-5	6.17E+01	EPA6 calc c	NA	NA	NA	NA
n-Nonane	111-84-2	2.10E-02	EPA6 calc c	NA	1.18E-02	EPA6 calc c	1.18E-02
n-Octane	111-65-9	1.89E-01	EPA6 calc c	NA	3.15E-04	EPA6 calc c	3.15E-04
n-Pentane	109-66-0	5.40E-01	EPA6 calc c	NA	1.17E-04	EPA6 calc c	1.17E-04
n-Propionaldehyde	123-38-6	1.77E+01	EPA6 calc c	NA	3.21E-03	EPA6 calc c	3.21E-03
n-Propyl alcohol	71-23-8	NA	NA	NA	NA	NA	NA
n-Valeraldehyde	110-62-3	NA	NA	NA	NA	NA	NA
Oxirane	75-21-8	5.77E+01	EPA6 e	NA	1.60E-04	EPA6 e	1.60E-04

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
p-Cymene	99-87-6	1.65E-01	EPA6 calc c	NA	1.65E-01	EPA6 calc c	2.83E-01
Phosgene	75-44-5	NA	NA	NA	NA	NA	NA
Propargyl alcohol	107-19-7	NA	NA	NA	NA	NA	NA
Propionic acid	79-09-4	2.50E+01	EPA6 calc c	NA	2.83E-01	EPA6 calc c	2.83E-01
Propionitrile	107-12-0	3.13E+01	EPA6 calc c	NA	2.23E-03	EPA6 calc c	2.23E-03
Propylene glycol monomethyl ether	107-98-2	4.92E+01	EPA6 calc c	NA	3.47E-02	EPA6 calc c	3.47E-02
p-tert-Butyltoluene	98-51-1	NA	NA	NA	NA	NA	NA
Triethylamine	121-44-8	NA	NA	NA	NA	NA	NA
Trimethylamine	75-50-3	3.13E+01	EPA6 calc c	NA	7.95E-04	EPA6 calc c	1.26E-03
Vinyl acetate	108-05-4	1.53E+01	EPA6 e	NA	5.65E-04	EPA6 e	5.65E-04
Non-aromatic Halogenated Hydrocarbons							
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	NA	NA	NA	NA	NA	NA
1,1,1,2-Tetrachloroethane	630-20-6	1.17E+00	EPA6 e	NA	1.45E-02	EPA6 e	1.45E-02
1,1,1-Trichloroethane	71-55-6	1.54E+00	EPA6 e	NA	1.14E-03	EPA6 e	1.14E-03
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	2.70E-01	EPA6 calc c	NA	5.38E-03	EPA6 calc c	5.38E-03
1,1,2,2-Tetrachloroethane	79-34-5	8.02E-02	EPA6 e	NA	1.33E+01	EPA6 e	1.33E+01
1,1,2,2-Tetrachloroethene	127-18-4	1.31E+00	EPA6 e	NA	1.66E-03	EPA6 e	1.66E-03
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5.77E-01	EPA6 calc c	NA	2.46E-04	EPA6 calc c	2.46E-04
1,1,2-Trichloroethane	79-00-5	2.38E+00	EPA6 e	NA	9.53E-03	EPA6 e	9.53E-03
1,1,2-Trichloroethylene	79-01-6	1.52E+00	EPA6 e	NA	2.07E-03	EPA6 e	2.07E-03
1,1-Dichloroethane	75-34-3	3.56E+00	EPA6 e	NA	7.88E-04	EPA6 e	7.88E-04
1,1-Dichloroethene	75-35-4	2.30E+00	EPA6 e	NA	3.98E-04	EPA6 e	3.98E-04
1,2,3-Trichloropropane	96-18-4	1.94E+00	EPA6 e	NA	3.66E-02	EPA6 e	3.66E-02
1,2-dibromo-3-chloropropane	96-12-8	1.72E+00	EPA6 e	NA	8.81E-02	EPA6 e	8.81E-02
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	5.53E+00	EPA6 e	NA	1.58E-03	EPA6 e	1.58E-03
1,2-Dichloroethylene	540-59-0	2.04E+01	EPA6 calc c	NA	2.41E-05	EPA6 calc c	2.41E-05
1,2-Dichloropropane	78-87-5	1.94E+00	EPA6 e	NA	4.96E-03	EPA6 e	4.96E-03
1,3-Dichloropropene	542-75-6	3.78E+00	EPA6 e	NA	1.38E-03	EPA6 e	1.38E-03

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		Plant Uptake Factors					
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1,4-Dichloro-2-butene	764-41-0	1.21E+01	EPA6 calc c	NA	1.84E-03	EPA6 calc c	1.84E-03
1-Chloroethene	75-01-4	8.42E+00	EPA6 e	NA	2.95E-06	EPA6 e	2.95E-06
2,2-Dichloropropionic acid	75-99-0	1.38E+01	EPA6 calc c	NA	5.87E+00	EPA6 calc c	5.87E+00
2-Chloropropane	75-29-6	3.09E+00	EPA6 calc c	NA	3.62E-04	EPA6 calc c	3.62E-04
3-Chloropropene (allyl chloride)	107-05-1	1.09E+01	EPA6 calc c	NA	5.35E-05	EPA6 calc c	5.35E-05
Bromochloromethane	74-97-5	5.93E+00	EPA6 calc c	NA	6.87E-08	EPA6 calc c	1.68E-09
Bromodichloromethane	75-27-4	2.61E+00	EPA6 e	NA	2.53E-03	EPA6 e	2.53E-03
Bromoethene	593-60-2	9.37E+00	EPA6 calc c	NA	1.14E-04	EPA6 calc c	1.14E-04
Bromoform	75-25-2	1.70E+00	EPA6 e	NA	2.89E-02	EPA6 e	2.89E-02
Bromomethane	74-83-9	8.79E+00	EPA6 e	NA	6.07E-05	EPA6 e	6.07E-05
Carbon tetrachloride	56-23-5	1.04E+00	EPA6 e	NA	1.52E-03	EPA6 e	1.52E-03
Chlordibromomethane	124-48-1	2.14E+00	EPA6 e	NA	9.59E-03	EPA6 e	9.59E-03
Chlorodifluoromethane	75-45-6	9.21E+00	EPA6 e	NA	4.69E-06	EPA6 e	4.69E-06
Chloroethane	75-00-3	6.25E-01	EPA6 e	NA	6.05E-05	EPA6 e	6.05E-05
Chloroform	67-66-3	2.89E+00	EPA6 e	NA	1.65E-03	EPA6 e	1.65E-03
Chloromethane	74-87-3	1.16E+01	EPA6 e	NA	1.13E-05	EPA6 e	1.13E-05
Chloropentafluoroethane	76-15-3	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	2.77E+00	EPA6 e	NA	1.60E-03	EPA6 e	1.60E-03
cis-1,3-Dichloropropene	10061-01-5	NA	NA	NA	NA	NA	NA
Cyanogen bromide	506-68-3	NA	NA	NA	NA	NA	NA
Cyanogen chloride	506-77-4	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	75-71-8	2.19E+00	EPA6 e	NA	4.33E-06	EPA6 e	4.33E-06
Dichlorofluoromethane	75-43-4	NA	NA	NA	NA	NA	NA
Dichloromethane	75-09-2	7.29E+00	EPA6 e	NA	5.11E-04	EPA6 e	5.11E-04
Difluorodibromomethane	75-61-6	NA	NA	NA	NA	NA	NA
Hexafluoroacetone	684-16-2	NA	NA	NA	NA	NA	NA
Iodomethane	74-88-4	4.08E+00	EPA6 calc c	NA	6.44E-04	EPA6 calc c	6.44E-04
Methylene bromide	74-95-3	4.48E+00	EPA6 e	NA	1.13E-04	EPA6 e	1.13E-04
Pentachloroethane	76-01-7	6.68E-01	EPA6 calc c	NA	4.04E-02	EPA6 calc c	4.04E-02

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trans-1,2-Dichloroethene	156-60-5	2.77E+00	EPA6 e	NA	9.70E-04	EPA6 e	9.70E-04
trans-1,3-Dichloropropene	10061-02-6	2.50E+00	EPA6 calc c	NA	NA	NA	NA
Trichloroacetic acid	76-03-9	6.60E+00	EPA6 calc c	NA	8.14E+00	EPA6 calc c	8.14E+00
Trichlorofluoroethane	27154-33-2	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	75-69-4	1.33E+00	EPA6 e	NA	2.02E-04	EPA6 e	2.02E-04
Trifluorobromomethane	75-63-8	3.26E+00	EPA6 calc c	NA	NA	NA	NA
Dioxin and Furan Compounds							
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	7.05E-04	EPA6 e	NA	3.50E+05	EPA6 e	3.50E+05
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	1.02E-03	EPA6 e	NA	4.40E+05	EPA6 e	4.40E+05
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	1.02E-03	EPA6 e	NA	4.40E+05	EPA6 e	4.40E+05
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	1.22E-03	EPA6 e	NA	4.50E+05	EPA6 e	4.50E+05
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	2.50E-03	EPA6 e	NA	1.50E+05	EPA6 e	1.50E+05
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	2.50E-03	EPA6 e	NA	4.50E+05	EPA6 e	4.50E+05
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	2.50E-03	EPA6 e	NA	1.50E+05	EPA6 e	1.50E+05
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	2.50E-03	EPA6 e	NA	4.50E+05	EPA6 e	4.50E+05
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	2.50E-03	EPA6 e	NA	1.50E+05	EPA6 e	1.50E+05
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	5.62E-03	EPA6 e	NA	1.20E+05	EPA6 e	1.20E+05
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	4.61E-03	EPA6 e	NA	4.30E+04	EPA6 e	4.60E+04
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	2.50E-03	EPA6 e	NA	1.50E+05	EPA6 e	1.50E+05
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	3.87E-03	EPA6 e	NA	4.60E+04	EPA6 e	4.60E+04
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	5.62E-03	EPA6 e	NA	6.10E+04	EPA6 e	6.10E+04
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	6.51E-03	EPA6 e	NA	8.10E+04	EPA6 e	8.10E+04
Dibenzofuran	132-64-9	1.22E-01	EPA6 calc c	NA	1.76E+02	EPA6 calc c	1.76E+02
Octachlorodibenzo(p)dioxin	3268-87-9	1.59E-03	EPA6 e	NA	8.60E+06	EPA6 e	8.60E+06
Octachlorodibenzofuran	39001-02-0	3.26E-04	EPA6 e	NA	1.30E+06	EPA6 e	1.30E+06
PCBs							
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	3.13E-03	EPA6 calc c	NA	1.02E+04	EPA6 calc c	1.02E+04
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	2.97E-03	EPA6 calc c	NA	7.13E+03	EPA6 calc c	7.13E+03
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	NA	NA	NA	NA	NA	NA
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	NA	NA	NA	NA	NA	NA
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	NA	NA	NA	NA	NA	NA
2',3,4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	2.97E-03	EPA6 calc c	NA	NA	NA	NA
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	2.02E-03	EPA6 calc c	NA	7.34E+04	EPA6 calc c	7.34E+04
3,3',4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	NA	NA	NA	NA	NA	NA
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	NA	NA	NA	NA	NA	NA
Polychlorinated biphenyls (PCBs)**	1336-36-3	2.31E-03	EPA6 calc c	NA	3.94E+03	EPA6 calc c	3.94E+03
Phthalates							
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	3.80E-02	EPA6 e	NA	1.77E+06	EPA6 e	1.77E+06
Butylbenzyl phthalate	85-68-7	1.09E-01	EPA6 e	NA	1.46E+03	EPA6 e	1.46E+03
Dibutyl phthalate	84-74-2	7.24E-02	EPA6 e	NA	4.16E+03	EPA6 e	4.16E+03
Diethyl phthalate	84-66-2	1.06E-01	EPA6 e	NA	5.42E+03	EPA6 e	5.42E+03
Dimethyl phthalate	131-11-3	4.40E+00	EPA6 e	NA	3.05E+01	EPA6 e	3.05E+01
n-Dioctyl phthalate	117-84-0	1.57E-04	EPA6 e	NA	6.28E+08	EPA6 e	6.28E+08
Light Polycyclic Aromatic Hydrocarbons							
2-Chloronaphthalene	91-58-7	1.72E-01	EPA6 e	NA	8.46E+00	EPA6 e	8.46E+00
2-Methyl naphthalene	91-57-6	2.27E-01	EPA6 calc c	NA	1.80E+00	EPA6 calc c	1.80E+00
5-Nitroacenaphthene	602-87-9	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	1.98E-01	EPA6 e	NA	4.66E+00	EPA6 e	4.66E+00
Acenaphthylene	208-96-8	1.72E-01	EPA6 calc c	NA	1.03E+01	EPA6 calc c	1.03E+01
Anthracene	120-12-7	1.01E-01	EPA6 e	NA	2.90E+01	EPA6 e	2.90E+01
Fluorene	86-73-7	1.49E-01	EPA6 calc c	NA	1.88E+01	EPA6 calc c	1.88E+01
Indene	95-13-6	NA	NA	NA	NA	NA	NA
Napthalene	91-20-3	4.35E-01	EPA6 e	NA	4.52E-01	EPA6 e	4.52E-01

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
Phenanthrene	85-01-8	9.08E-02	EPA6 e	NA	2.08E-02	EPA6 e	2.08E-02
Pyrene	129-00-0	4.98E-02	EPA6 e	NA	1.04E+06	EPA6 e	1.04E+06
Heavy Polycyclic Aromatic Hydrocarbons							
3-Methylcholanthrene	56-49-5	3.01E-03	EPA6 calc c	NA	1.68E+07	EPA6 calc c	1.68E+07
5-Methylchrysene	3697-24-3	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	56-55-3	2.02E-02	EPA6 e	NA	1.72E+04	EPA6 e	1.72E+04
Benzo(a)pyrene	50-32-8	1.11E-02	EPA6 e	NA	2.25E+05	EPA6 e	2.25E+05
Benzo(b)fluoranthene	205-99-2	1.01E-02	EPA6 e	NA	3.65E+04	EPA6 e	3.65E+04
Benzo(e)pyrene	192-97-2	2.05E-03	EPA6 calc c	NA	9.22E+06	EPA6 calc c	9.22E+06
Benzo(g,h,i)perylene	191-24-2	3.05E-03	EPA6 calc c	NA	2.91E+05	EPA6 calc c	2.91E+05
Benzo(j)fluoranthene	205-82-3	7.34E-03	EPA6 calc c	NA	NA	NA	NA
Benzo(k)fluoranthene	207-08-9	1.01E-02	EPA6 e	NA	5.40E+05	EPA6 e	5.40E+05
Benzo[a,i]pyrene	191-30-0	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	1.87E-02	EPA6 e	NA	5.97E+04	EPA6 e	5.97E+04
Dibenz(a,h)anthracene	53-70-3	6.36E-03	EPA6 e	NA	4.68E+07	EPA6 e	4.68E+07
Dibenz[a,h]acridine	226-36-8	NA	NA	NA	NA	NA	NA
Dibenz[a,j]acridine	224-42-0	NA	NA	NA	NA	NA	NA
Dibenzo(a,e)fluoranthene	5385-75-1	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)fluoranthene	no cas #	NA	NA	NA	NA	NA	NA
Dibenzo[a,e]pyrene	192-65-4	NA	NA	NA	NA	NA	NA
Dibenzo[a,h]pyrene	189-64-0	NA	NA	NA	NA	NA	NA
Dibenzo[a,i]pyrene	189-55-9	2.37E-03	EPA6 calc c	NA	NA	NA	NA
Fluoranthene	206-44-0	4.46E-02	EPA6 e	NA	1.56E+03	EPA6 e	1.56E+03
Hexachloronaphthalene	1335-87-1	1.59E-03	EPA6 calc c	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	193-39-5	3.90E-03	EPA6 e	NA	2.67E+08	EPA6 e	2.67E+08
Octachloronaphthalene	2234-13-1	7.54E-03	EPA6 calc c	NA	NA	NA	NA
Pentachloronaphthalene	1321-64-8	NA	NA	NA	NA	NA	NA
Tetrachloronaphthalene	1335-88-2	NA	NA	NA	NA	NA	NA
Trichloronaphthalene	1321-65-9	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
Light Substituted Benzene Compounds							
1,2,3-Trichlorobenzene	87-61-6	1.78E-01	EPA6 e	NA	4.01E-01	EPA6 e	4.01E-01
1,2,4-Trichlorobenzene	120-82-1	1.92E-01	EPA6 e	NA	3.78E-01	EPA6 e	3.78E-01
1,2,4-Trimethlyl benzene	25551-13-7	4.20E-01	EPA6 calc c	NA	NA	NA	NA
1,2,4-Trimethyl benzene	95-63-6	3.01E-01	EPA6 calc c	NA	7.52E-02	EPA6 calc c	7.52E-02
1,2-Dichlorobenzene	95-50-1	3.95E-01	EPA6 e	NA	1.24E-01	EPA6 e	1.24E-01
1,3,5-Trimethyl benzene	108-67-8	4.09E-01	EPA6 e	NA	3.14E-02	EPA6 e	3.14E-02
1,3-Dichlorobenzene	541-73-1	3.53E-01	EPA6 e	NA	8.02E-02	EPA6 e	8.02E-02
1,3-Dinitrobenzene	99-65-0	5.32E+00	EPA6 e	NA	1.74E+01	EPA6 e	1.74E+01
1,4-Dichlorobenzene	106-46-7	4.13E-01	EPA6 e	NA	8.60E-02	EPA6 e	8.60E-02
1,4-Dinitrobenzene	100-25-4	5.26E+00	EPA6 calc c	NA	NA	NA	NA
2,4,5-Trichorophenol	95-95-4	2.24E-01	EPA6 e	NA	1.31E+02	EPA6 e	1.31E+02
2,4,6-Trichlorophenol	88-06-2	2.77E-01	EPA6 e	NA	1.23E+02	EPA6 e	1.23E+02
2,4-Dichlorophenol	120-83-2	6.82E-01	EPA6 e	NA	4.01E+02	EPA6 e	4.01E+02
2,4-Dimethylphenol	105-67-9	1.68E+00	EPA6 e	NA	4.27E+03	EPA6 e	4.27E+03
2,4-Dinitrophenol	51-28-5	5.13E+00	EPA6 e	NA	4.80E+02	EPA6 e	4.80E+02
2,4-Dinitrotoluene	121-14-2	2.72E+00	EPA6 e	NA	5.10E+01	EPA6 e	5.10E+01
2,6-Dinitrotoluene	606-20-2	3.15E+00	EPA6 e	NA	4.41E+01	EPA6 e	4.41E+01
2-Chlorotoluene	95-49-8	3.50E-01	EPA6 calc c	NA	5.15E-01	EPA6 calc c	5.15E-01
2-Chorophenol	95-57-8	2.18E+00	EPA6 e	NA	6.76E-01	EPA6 e	6.76E-01
2-Nitrophenol	88-75-5	3.57E+00	EPA6 e	NA	3.08E-01	EPA6 e	3.08E-01
4,6-Dinitro-o-cresol	534-52-1	8.72E-01	EPA6 calc c	NA	4.33E+01	EPA6 calc c	4.33E+01
4-Chlorotoluene	106-43-4	4.61E-01	EPA6 calc c	NA	NA	NA	NA
4-Nitrophenol	100-02-7	3.05E+00	EPA6 e	NA	8.26E+02	EPA6 e	8.26E+02
alpha-Methylstyrene	98-83-9	3.86E-01	EPA6 calc c	NA	4.63E-02	EPA6 calc c	4.63E-02
Aniline	62-53-3	1.05E+01	EPA6 e	NA	2.72E-01	EPA6 e	2.72E-01
Benzotrichloride	98-07-7	7.95E-01	EPA6 calc c	NA	7.36E-02	EPA6 calc c	7.36E-02
Benzyl Chloride	100-44-7	2.39E+01	EPA6 e	NA	3.28E-04	EPA6 e	3.28E-04
Bromobenzene	108-86-1	7.24E-01	EPA6 calc c	NA	4.10E-02	EPA6 calc c	4.10E-02

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
Chlorobenzene	108-90-7	9.45E-01	EPA6 e	NA	1.19E-02	EPA6 e	1.19E-02
Cumene	98-82-8	3.16E-01	EPA6 e	NA	3.06E-02	EPA6 e	3.06E-02
m-Cresol	108-39-4	2.86E+00	EPA6 e	NA	7.64E+00	EPA6 e	7.64E+00
n-Butyl benzene	104-51-8	1.30E-01	EPA6 calc c	NA	1.57E-01	EPA6 calc c	1.57E-01
Nitrobenzene	98-95-3	3.38E+00	EPA6 e	NA	2.43E-01	EPA6 e	2.43E-01
n-Propyl benzene	103-65-1	2.85E-01	EPA6 calc c	NA	4.34E-02	EPA6 calc c	4.34E-02
o-Cresol	95-48-7	2.63E+00	EPA6 e	NA	4.89E+00	EPA6 e	4.89E+00
o-Dinitrobenzene	528-29-0	4.60E+00	EPA6 calc c	NA	NA	NA	NA
o-Nitroaniline	88-74-4	3.30E+00	EPA6 e	NA	4.47E+00	EPA6 e	4.47E+00
o-Toluidine	95-53-4	6.51E+00	EPA6 e	NA	6.16E-01	EPA6 e	6.16E-01
p-Chloroaniline	106-47-8	3.22E+00	EPA6 e	NA	4.66E+00	EPA6 e	4.66E+00
p-Cresol	106-44-5	2.93E+00	EPA6 e	NA	8.13E+00	EPA6 e	8.13E+00
Phenol	108-95-2	5.42E+00	EPA6 e	NA	3.52E+00	EPA6 e	3.52E+00
p-Nitrochlorobenzene	100-00-5	1.61E+00	EPA6 calc c	NA	NA	NA	NA
p-Toluidine	106-49-0	6.01E+00	EPA6 calc c	NA	2.67E-01	EPA6 calc c	2.67E-01
sec-Butyl benzene	135-98-8	NA	NA	NA	NA	NA	NA
tert-Butyl benzene	98-06-6	1.63E-01	EPA6 calc c	NA	1.12E-01	EPA6 calc c	1.12E-01
Toluene-2,6-diamine	823-40-5	5.59E+00	EPA6 calc c	NA	1.60E+05	EPA6 calc c	1.60E+05
Other Light Semivolatile Compounds							
1,1 Dimethyl hydrazine	57-14-7	1.75E+01	EPA6 calc c	NA	1.47E-01	EPA6 calc c	1.47E-01
1,1-Biphenyl	92-52-4	2.16E-01	EPA6 calc c	NA	2.88E+00	EPA6 calc c	2.88E+00
1,2 Diphenylhydrazine	122-66-7	7.74E-01	EPA6 e	NA	5.89E+02	EPA6 e	5.89E+02
1,2-Dimethylhydrazine	540-73-8	2.39E+02	EPA6 calc c	NA	NA	NA	NA
1,3-Propane sultone	1120-71-4	7.77E+01	EPA6 calc c	NA	NA	NA	NA
2,4-Toluene diisocyanate	584-84-9	NA	NA	NA	NA	NA	NA
2-Chloroacetophenone	532-27-4	1.23E+00	EPA6 calc c	NA	3.73E+01	EPA6 calc c	3.73E+01
2-Propenoic acid	79-10-7	2.19E+01	EPA6 calc c	NA	3.87E-01	EPA6 calc c	2.83E-01
4,4-Methylenedianiline	101-77-9	4.31E-01	EPA6 calc c	NA	7.93E+03	EPA6 calc c	7.93E+03
Acetophenone	98-86-2	4.37E+00	EPA6 e	NA	3.04E-01	EPA6 e	3.04E-01

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
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Benzoic acid	65-85-0	3.17E+00	NA	NA	1.69E+01	NA	1.69E+01
bis(2-Chloroethoxy)methane	111-91-1	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	111-44-4	6.85E+00	EPA6 e	NA	6.37E-02	EPA6 e	6.37E-02
Chlorocyclopentadiene	41851-50-7	1.53E+00	EPA6 calc c	NA	9.69E-04	EPA6 calc c	9.69E-04
Cyclohexanol	108-93-0	7.53E+00	EPA6 calc c	NA	1.99E-01	EPA6 calc c	1.99E-01
Dichloroisopropyl ether	108-60-1	1.25E+00	EPA6 calc c	NA	2.78E-01	EPA6 calc c	2.78E-01
Dichloromethyl ether	542-88-1	6.42E+01	EPA6 calc c	NA	2.45E-04	EPA6 calc c	2.45E-04
Dichloropentadiene	no cas #	NA	NA	NA	NA	NA	NA
Dimethyl sulfate	77-78-1	2.54E+01	EPA6 calc c	NA	3.05E-02	EPA6 calc c	3.05E-02
Dimethylaniline	121-69-7	1.25E+02	EPA6 calc c	NA	4.67E-04	EPA6 calc c	4.67E-04
di-n-propylnitrosamine	621-64-7	6.17E+00	EPA6 e	NA	3.04E+01	EPA6 e	3.04E+01
Diphenyl ether	101-84-8	1.43E-01	EPA6 calc c	NA	6.87E+00	EPA6 calc c	6.87E+00
Epichlorohydrin	106-89-8	2.77E+01	EPA6 e	NA	3.35E-03	EPA6 e	3.35E-03
Ethyl carbomate (urethane)	51-79-6	4.73E+01	EPA6 calc c	NA	NA	NA	NA
Ethyl methane sulfanate	62-50-0	3.63E+01	EPA6 e	NA	7.11E-01	EPA6 e	7.11E-01
Ethylene dibromide	106-93-4	3.77E+00	EPA6 e	NA	9.13E-03	EPA6 e	9.13E-03
Ethylene glycol	107-21-1	1.31E+02	EPA6 calc c	NA	3.31E+00	EPA6 calc c	3.31E+00
Ethylene glycol monobutyl ether	111-76-2	4.89E+00	EPA6 calc c	NA	4.82E+00	EPA6 calc c	4.82E+00
Ethylene glycol monoethyl ether acetate	111-15-9	1.70E+01	EPA6 calc c	NA	1.44E-01	EPA6 calc c	1.44E-01
Ethylene thiourea	96-45-7	9.10E+01	EPA6 calc c	NA	7.65E+01	EPA6 calc c	7.65E+01
Furfural	98-01-1	1.08E+01	EPA6 calc c	NA	1.59E-01	EPA6 calc c	1.59E-01
Maleic hydrazide	123-33-1	1.04E+02	EPA6 calc c	NA	1.39E-06	EPA6 calc c	1.39E-06
Malononitrile	109-77-3	3.67E+01	EPA6 calc c	NA	NA	NA	NA
Methyl styrene (mixed isomers)	25013-15-4	4.48E-01	EPA6 calc c	NA	NA	NA	NA
Methylhydrazine	60-34-4	1.57E+02	EPA6 calc c	NA	NA	NA	NA
N,N-Diphenylamine	122-39-4	3.67E-01	EPA6 calc c	NA	8.64E+02	EPA6 calc c	8.64E+02
Nitric acid, propyl ester	627-13-4	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	1.57E+00	EPA6 e	NA	3.77E-01	EPA6 e	3.77E-01
N-Nitrosomorpholine	59-89-2	1.05E+01	EPA6 calc c	NA	NA	NA	NA

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		Plant Uptake Factors					
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N-Nitroso-N,N-dimethylamine	62-75-9	7.24E+01	EPA6 calc c	NA	2.27E-02	EPA6 calc c	2.27E-02
o-Anisidine	90-04-0	8.05E+00	EPA6 calc c	NA	NA	NA	NA
Oxalic acid	144-62-7	NA	NA	NA	NA	NA	NA
Phthalic Anhydride	85-44-9	8.63E+01	EPA6 e	NA	2.03E+00	EPA6 e	2.03E+00
p-Phthalic acid	100-21-0	1.30E+01	EPA6 calc c	NA	4.05E+01	EPA6 calc c	4.05E+01
Pyridine	110-86-1	1.59E+01	EPA6 e	NA	4.22E-05	EPA6 e	4.22E-05
Quinoline	91-22-5	2.60E+00	EPA6 calc c	NA	3.01E+01	EPA6 calc c	3.01E+01
Quinone	106-51-4	2.97E+01	EPA6 calc c	NA	NA	NA	NA
Safrole	94-59-7	1.12E+00	EPA6 e	NA	3.20E+00	EPA6 e	3.20E+00
Tetrahydrofuran	109-99-9	2.14E+01	EPA6 e	NA	NA	EPA6 e	NA
Other Heavy Semivolatile Compounds							
1,2,4,5-Tetrachlorobenzene	95-94-3	8.06E-02	EPA6 e	NA	4.14E+00	EPA6 e	4.14E+00
1,3,5-Trinitrobenzene	99-35-4	8.05E+00	EPA6 e	NA	1.17E+01	EPA6 e	1.17E+01
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	1.51E-01	EPA6 calc c	NA	NA	NA	NA
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	1.41E+03	EPA6 calc c	NA	NA	NA	NA
2-sec-Butyl-4,6-dinitrophenol	88-85-7	5.93E-01	EPA6 calc c	NA	2.71E+02	EPA6 calc c	2.71E+02
3,3-Dichlorobenzidine	91-94-1	3.32E-01	EPA6 e	NA	1.73E+04	EPA6 e	1.73E+04
3,3'-Dimethoxybenzidine	119-90-4	3.48E+00	EPA6 e	NA	1.41E+04	EPA6 e	1.41E+04
4-Bromophenylphenyl ether	101-55-3	4.99E-02	EPA6 calc c	NA	1.01E+02	EPA6 calc c	1.01E+02
Ammonium perfluorooctanoate	3825-26-1	NA	NA	NA	NA	NA	NA
Azobenzene	103-33-3	2.40E-01	EPA6 calc c	NA	1.32E+02	EPA6 calc c	1.32E+02
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	NA	NA	NA	NA	NA	NA
Captan	133-06-2	1.70E+00	EPA6 calc c	NA	3.00E+00	EPA6 calc c	3.00E+00
Chlorobenzilate	510-15-6	1.14E-01	EPA6 e	NA	3.57E+04	EPA6 e	3.57E+04
Dibutylphosphate	107-66-4	NA	NA	NA	NA	NA	NA
Dimethyl aminoazobenzene	60-11-7	8.72E-02	EPA6 calc c	NA	NA	NA	NA
Hexachlorobenzene	118-74-1	2.56E-02	EPA6 e	NA	7.57E+01	EPA6 e	7.57E+01
Hexachlorobutadiene	87-68-3	7.14E-02	EPA6 e	NA	2.55E-01	EPA6 e	2.55E-01
Hexachlorocyclopentadiene	77-47-4	5.65E-02	EPA6 e	NA	5.47E-01	EPA6 e	5.47E-01

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
Hexachloroethane	67-72-1	1.93E-01	EPA6 e	NA	2.72E-01	EPA6 e	2.72E-01
Hexachlorophene	70-30-4	1.70E-03	EPA6 e	NA	1.23E+10	EPA6 e	1.23E+10
Hexamethylene-1,5-diisocyanate	822-06-0	7.11E+00	EPA6 calc c	NA	4.78E+00	EPA6 calc c	4.78E+00
Mirex	2385-85-5	4.03E-03	EPA6 calc c	NA	2.32E+03	EPA6 calc c	2.32E+03
Nitrofen	1836-75-5	2.46E-02	EPA6 calc c	NA	NA	NA	NA
Pentachlorobenzene	608-93-5	4.44E-02	EPA6 e	NA	6.04E-01	EPA6 e	6.04E-01
Pentachloronitrobenzene	82-68-8	8.06E-02	EPA6 e	NA	1.71E-01	EPA6 e	1.71E-01
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Pentachlorophenol*	87-86-5	4.48E-02	EPA6 e	NA	1.02E+03	EPA6 e	1.02E+03
Picric acid	88-89-1	2.60E+00	EPA6 calc c	NA	2.15E+07	EPA6 calc c	2.15E+07
Pronamide	23950-58-5	3.62E-01	EPA6 e	NA	3.38E+01	EPA6 e	3.38E+01
Strychnine	57-24-9	2.97E+00	EPA6 e	NA	1.29E+07	EPA6 e	1.29E+07
Terphenyls	26140-60-3	NA	NA	NA	NA	NA	NA
Tributyl phosphate	126-73-8	1.89E-01	EPA6 calc c	NA	6.80E+03	EPA6 calc c	6.80E+03
Trifluralin	1582-09-8	3.17E-02	EPA6 calc c	NA	6.84E+02	EPA6 calc c	6.84E+02
Triphenylamine	603-34-9	NA	NA	NA	NA	NA	NA
Herbicides and Organopesticides							
2,4,5-T	93-76-5	4.43E-01	EPA6 calc c	NA	2.44E+04	EPA6 calc c	2.44E+04

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))
2,4-D and esters	94-75-7	9.20E-01	EPA6 calc c	NA	4.03E+05	EPA6 calc c	4.03E+05
4,4-DDD	72-54-8	1.01E-02	EPA6 calc c	NA	2.67E+03	EPA6 calc c	2.67E+03
4,4-DDT	50-29-3	1.32E-02	EPA6 calc c	NA	1.06E+04	EPA6 calc c	1.06E+04
Aldrin	309-00-2	1.04E-02	EPA6 e	NA	1.58E+06	EPA6 e	1.58E+06
alpha-BHC	319-84-6	2.47E-01	EPA6 e	NA	9.17E+01	EPA6 e	9.17E+01
beta-BHC	319-85-7	2.36E-01	EPA6 e	NA	1.95E+03	EPA6 e	1.95E+03
Chlordane	57-74-9	1.43E-02	EPA6 e	NA	4.46E+03	EPA6 e	4.46E+03
DDE	72-55-9	9.37E-03	EPA6 e	NA	2.08E+03	EPA6 e	2.08E+03
Delta-BHC	319-86-8	1.57E-01	EPA6 calc c	NA	1.76E+03	EPA6 calc c	1.76E+03
Dieldrin	60-57-1	3.49E-02	EPA6 e	NA	6.50E+06	EPA6 e	6.50E+06
Endothall	145-73-3	1.23E+02	EPA6 calc c	NA	2.56E+01	EPA6 calc c	2.56E+01
Endrin	72-20-8	5.76E-02	EPA6 e	NA	7.62E+03	EPA6 e	7.62E+03
gamma-BHC(Lindane)	58-89-9	2.74E-01	EPA6 calc c	NA	3.28E+02	EPA6 calc c	3.28E+02
Heptachlor	76-44-8	4.89E-02	EPA6 e	NA	2.09E+03	EPA6 e	2.09E+03
Isodrin	465-73-6	NA	NA	NA	NA	NA	NA
Methoxychlor	72-43-5	9.38E-02	EPA6 e	NA	5.83E+02	EPA6 e	5.83E+02
Silvex (2,4,5-TP)	93-72-1	1.71E-01	EPA6 calc c	NA	1.96E-01	EPA6 calc c	1.96E-01
Toxaphene	8001-35-2	2.56E-02	EPA6 calc c	NA	8.94E+01	EPA6 calc c	8.94E+01

NA = Value not available
** = Varies with pH; values given for a pH of 7.0.
a = Illustrated Handbook of Physical - Chemical Properties and Environmental Fate f
b = RAIS database: http://risk.lsd.ornl.gov/rap_hp.shtml
c = Equations derived from EPA Region 6 Guidance Appendix A-3
d = Handbook of Environmental degradation Rates. 1991.
e = EPA Region 6 Hazardous Waste Combustion Guidance
f = "A Critical Review of Henry's Law Constants for Chemicals of Environmental In
g = Handbook of Environmental Fate and Exposure Data for Organic Chemicals
h = http://www.epa.gov/region09/waste/sfund/prg/.
i = http://esc.syrres.com/efdb/Chemfate.htm
j = Hansch and Leo 1985 in Syracuse 1996

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Plant Uptake Factors					
Constituent of Potential Concern	CAS Registry Number	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Bv_{ag} ((ug/g DW plant) /(ug/g air))	Source	Bv_{forage} ((ug/g DW plant) /(ug/g air))

k = Schwarzenbach et al. 1993

l = Tomlin 1994 in Syracuse 1996

m = http://www.speclab.com/compound/c959988.htm

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
Aromatic Halogenated Hydrocarbons								
2,3,4,6-Tetrachlorophenol	58-90-2	EPA6 calc c	2.09E-04	EPA6 calc c	6.61E-04	EPA6 calc c	7.93E-04	EPA6 calc c
4-Chloro-3-methylphenol	59-50-7	EPA6 calc c	1.00E-05	EPA6 calc c	3.16E-05	EPA6 calc c	3.79E-05	EPA6 calc c
Aromatic Nonhalogenated Hydrocarbons								
2-Nitrotoluene	88-72-2	EPA6 calc c	1.58E-06	EPA6 calc c	5.01E-06	EPA6 calc c	6.01E-06	EPA6 calc c
4-Nitrobiphenyl	92-93-3	NA	4.68E-05	EPA6 calc c	1.48E-04	EPA6 calc c	1.77E-04	EPA6 calc c
Benzaldehyde	100-52-7	EPA6 e	2.38E-07	EPA6 e	7.54E-07	EPA6 e	9.12E-07	EPA6 e
Benzene	71-43-2	EPA6 e	1.09E-06	EPA6 e	3.44E-06	EPA6 e	4.17E-06	EPA6 e
Benzyl alcohol	100-51-6	EPA6 e	1.00E-07	EPA6 e	3.16E-07	EPA6 e	3.83E-07	EPA6 e
Ethyl Benzene	100-41-4	EPA6 e	1.05E-05	EPA6 e	3.33E-05	EPA6 e	4.03E-05	EPA6 e
m-Xylene	108-38-3	EPA6 e	1.26E-05	EPA6 e	3.99E-05	EPA6 e	4.83E-05	EPA6 e
o-Xylene	95-47-6	EPA6 e	1.07E-05	EPA6 e	3.39E-05	EPA6 e	4.10E-05	EPA6 e
p-Xylene	106-42-3	EPA6 e	1.18E-05	EPA6 e	3.72E-05	EPA6 e	4.50E-05	EPA6 e
Styrene	100-42-5	EPA6 e	6.74E-06	EPA6 e	2.13E-05	EPA6 e	2.58E-05	EPA6 e
Toluene	108-88-3	EPA6 e	3.69E-06	EPA6 e	1.17E-05	EPA6 e	1.41E-05	EPA6 e
Non-aromatic Nonhalogenated Hydrocarbons								
1,2-Epoxybutane	106-88-7	EPA6 calc c	2.19E-07	EPA6 calc c	6.94E-07	EPA6 calc c	8.33E-07	EPA6 calc c
1,3-Butadiene	106-99-0	EPA6 calc c	7.76E-07	EPA6 calc c	2.45E-06	EPA6 calc c	2.95E-06	EPA6 calc c
1,4-Dioxane	123-91-1	EPA6 e	4.29E-09	EPA6 e	1.36E-08	EPA6 e	1.64E-08	EPA6 e
1-Methylpropyl alcohol	78-92-2	EPA6 calc c	3.24E-08	EPA6 calc c	1.02E-07	EPA6 calc c	1.23E-07	EPA6 calc c
1-Nitropropane	108-03-2	NA	5.89E-08	EPA6 calc c	1.86E-07	EPA6 calc c	2.23E-07	EPA6 calc c
2,2,4-Trimethlylpentane	540-84-1	EPA6 calc c	8.32E-04	EPA6 calc c	2.63E-03	EPA6 calc c	3.16E-03	EPA6 calc c
2-Butanone	78-93-3	EPA6 e	1.51E-08	EPA6 e	4.79E-08	EPA6 e	5.79E-08	EPA6 e
2-Butenaldehyde (2-Butenal)	4170-30-3	NA	NA	NA	NA	NA	NA	NA
2-Ethoxyethanol	110-80-5	EPA6 calc c	6.31E-09	EPA6 calc c	2.00E-08	EPA6 calc c	2.39E-08	EPA6 calc c
2-Heptanone	110-43-0	EPA6 calc c	7.59E-07	EPA6 calc c	2.40E-06	EPA6 calc c	2.88E-06	EPA6 calc c
2-Hexanone	591-78-6	EPA6 calc c	1.91E-07	EPA6 calc c	6.03E-07	EPA6 calc c	7.23E-07	EPA6 calc c
2-Methoxyethanol	109-86-4	EPA6 calc c	1.42E-08	EPA6 calc c	4.49E-08	EPA6 calc c	5.39E-08	EPA6 calc c
2-Methyl-2-propanol	75-65-0	EPA6 calc c	1.78E-08	EPA6 calc c	5.62E-08	EPA6 calc c	6.75E-08	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
2-Methyl-2-propenenitrile	126-98-7	EPA6 e	2.76E-08	EPA6 e	8.72E-08	EPA6 e	1.06E-07	EPA6 e
2-Methylaziridine	75-55-8	NA	NA	NA	NA	NA	NA	NA
2-Methylpropyl alcohol	78-83-1	EPA6 calc c	4.57E-08	EPA6 calc c	1.45E-07	EPA6 calc c	1.73E-07	EPA6 calc c
2-Pentanone	107-87-9	EPA6 calc c	6.46E-08	EPA6 calc c	2.04E-07	EPA6 calc c	2.45E-07	EPA6 calc c
2-Propanone (Acetone)	67-64-1	EPA6 e	4.77E-09	EPA6 e	1.15E-08	EPA6 e	1.82E-08	EPA6 e
2-Propene-1-ol	107-18-6	EPA6 calc c	1.17E-08	EPA6 calc c	3.72E-08	EPA6 calc c	4.46E-08	EPA6 calc c
2-Propyl alcohol	67-63-0	EPA6 calc c	8.91E-09	EPA6 calc c	2.82E-08	EPA6 calc c	3.38E-08	EPA6 calc c
3-Heptanone	106-35-4	NA	NA	NA	NA	NA	NA	NA
3-Methyl-1-butanol	123-51-3	NA	NA	NA	NA	NA	NA	NA
3-Methyl-2-butanone	563-80-4	NA	NA	NA	NA	NA	NA	NA
3-Pentanone	96-22-0	EPA6 calc c	7.76E-08	EPA6 calc c	2.45E-07	EPA6 calc c	2.95E-07	EPA6 calc c
4-Heptanone	123-19-3	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	108-10-1	EPA6 e	1.23E-07	EPA6 e	3.89E-07	EPA6 e	4.71E-07	EPA6 e
4-Methyl-3-penten-2-one	141-79-7	NA	NA	NA	NA	NA	NA	NA
5-Methyl-2-hexanone	110-12-3	NA	NA	NA	NA	NA	NA	NA
Acetaldehyde	75-07-0	EPA6 e	4.78E+09	EPA6 e	1.51E-08	EPA6 e	1.83E-08	EPA6 e
Acetamide	60-35-5	EPA6 calc c	4.37E-10	EPA6 calc c	1.38E-09	EPA6 calc c	1.66E-09	EPA6 calc c
Acetic acid	64-19-7	EPA6 calc c	5.37E-09	EPA6 calc c	1.70E-08	EPA6 calc c	2.04E-08	EPA6 calc c
Acetic acid ethyl ester	141-78-6	EPA6 calc c	4.27E-08	EPA6 calc c	1.35E-07	EPA6 calc c	1.62E-07	EPA6 calc c
Acetic acid n-butyl ester	123-86-4	EPA6 calc c	4.27E-07	EPA6 calc c	1.35E-06	EPA6 calc c	1.62E-06	EPA6 calc c
Acetonitrile	75-05-8	EPA6 e	3.63E-09	EPA6 e	1.15E-08	EPA6 e	1.39E-08	EPA6 e
Acrolein	107-02-8	EPA6 e	7.78E-09	EPA6 e	2.46E-08	EPA6 e	2.98E-08	EPA6 e
Acrylonitrile	107-13-1	EPA6 e	1.41E-08	EPA6 e	4.47E-08	EPA6 e	5.41E-08	EPA6 e
Bis(isopropyl)ether	108-20-3	NA	NA	NA	NA	NA	NA	NA
Butane	106-97-8	EPA6 calc c	6.17E-06	EPA6 calc c	1.95E-05	EPA6 calc c	2.34E-05	EPA6 calc c
Carbon disulfide	75-15-0	EPA6 e	7.94E-07	EPA6 e	2.51E-06	EPA6 e	3.04E-06	EPA6 e
Cyanogen	460-19-5	EPA6 calc c	5.10E-08	EPA6 calc c	1.61E-07	EPA6 calc c	1.94E-07	EPA6 calc c
Cyclohexane	110-82-7	EPA6 calc c	2.19E-05	EPA6 calc c	6.92E-05	EPA6 calc c	8.30E-05	EPA6 calc c
Cyclohexanone	108-94-1	EPA6 calc c	5.13E-08	EPA6 calc c	1.62E-07	EPA6 calc c	1.95E-07	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
Cyclohexene	110-83-8	EPA6 calc c	5.75E-06	EPA6 calc c	1.82E-05	EPA6 calc c	2.18E-05	EPA6 calc c
Cyclopentane	287-92-3	EPA6 calc c	7.94E-06	EPA6 calc c	2.51E-05	EPA6 calc c	3.01E-05	EPA6 calc c
Ethyl alcohol	64-17-5	EPA6 calc c	3.89E-09	EPA6 calc c	1.23E-08	EPA6 calc c	1.48E-08	EPA6 calc c
Ethyl ether	60-29-7	EPA6 calc c	6.17E-08	EPA6 calc c	1.95E-07	EPA6 calc c	2.34E-07	EPA6 calc c
Ethyl methacrylate	97-63-2	EPA6 e	3.09E-07	EPA6 e	9.77E-07	EPA6 e	1.18E-06	EPA6 e
Formaldehyde	50-00-0	EPA6 e	1.75E-08	EPA6 e	5.53E-08	EPA6 e	6.69E-08	EPA6 e
Formamide	75-12-7	EPA6 calc c	2.45E-10	EPA6 calc c	7.76E-10	EPA6 calc c	9.31E-10	EPA6 calc c
Formic acid	64-18-6	EPA6 e	2.30E-09	EPA6 e	7.28E-09	EPA6 e	8.82E-09	EPA6 e
Formic acid, methyl ester	107-31-3	NA	4.33E-09	EPA6 calc c	1.37E-08	EPA6 calc c	1.64E-08	EPA6 calc c
Glycidylaldehyde	765-34-4	EPA6 calc c	1.48E-09	EPA6 calc c	4.68E-09	EPA6 calc c	5.61E-09	EPA6 calc c
Methyl acetate	79-20-9	EPA6 calc c	1.20E-08	EPA6 calc c	3.80E-08	EPA6 calc c	4.56E-08	EPA6 calc c
Methyl alcohol	67-56-1	EPA6 e	1.30E-09	EPA6 e	4.30E-09	EPA6 e	5.21E-09	EPA6 e
Methyl isocyanate	624-83-9	NA	NA	NA	NA	NA	NA	NA
Methyl methacrylate	80-62-6	EPA6 calc c	4.90E-08	EPA6 calc c	1.55E-07	EPA6 calc c	1.86E-07	EPA6 calc c
Methyl tert-butyl ether	1634-04-4	EPA6 calc c	6.92E-08	EPA6 calc c	2.19E-07	EPA6 calc c	2.63E-07	EPA6 calc c
Methylacetylene	74-99-7	NA	6.92E-08	EPA6 calc c	2.19E-07	EPA6 calc c	2.63E-07	EPA6 calc c
Methylcyclohexane	108-87-2	EPA6 calc c	1.00E-04	EPA6 calc c	3.16E-04	EPA6 calc c	3.79E-04	EPA6 calc c
N,N-Dimethylacetamide	127-19-5	NA	NA	NA	NA	NA	NA	NA
n-Butyl alcohol	71-36-3	EPA6 calc c	6.03E-08	EPA6 calc c	1.91E-07	EPA6 calc c	2.29E-07	EPA6 calc c
n-Heptane	142-82-5	EPA6 calc c	3.63E-04	EPA6 calc c	1.15E-03	EPA6 calc c	1.38E-03	EPA6 calc c
n-Hexane	110-54-3	EPA6 calc c	1.02E-04	EPA6 calc c	3.24E-04	EPA6 calc c	3.88E-04	EPA6 calc c
Nitromethane	75-52-5	NA	3.55E-09	EPA6 calc c	1.12E-08	EPA6 calc c	1.35E-08	EPA6 calc c
n-Nonane	111-84-2	EPA6 calc c	3.55E-03	EPA6 calc c	1.12E-02	EPA6 calc c	1.35E-02	EPA6 calc c
n-Octane	111-65-9	EPA6 calc c	7.94E-05	EPA6 calc c	2.51E-04	EPA6 calc c	3.01E-04	EPA6 calc c
n-Pentane	109-66-0	EPA6 calc c	1.29E-05	EPA6 calc c	4.07E-05	EPA6 calc c	4.89E-05	EPA6 calc c
n-Propionaldehyde	123-38-6	EPA6 calc c	3.09E-08	EPA6 calc c	9.77E-08	EPA6 calc c	1.17E-07	EPA6 calc c
n-Propyl alcohol	71-23-8	NA	NA	NA	NA	NA	NA	NA
n-Valeraldehyde	110-62-3	NA	NA	NA	NA	NA	NA	NA
Oxirane	75-21-8	EPA6 e	3.98E-09	EPA6 e	1.26E-08	EPA6 e	1.52E-08	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	**CAS Registry Number**	**Source**	**Ba_{milk} (day/kg FW)**	**Source**	**Ba_{beef} (day/kg FW)**	**Source**	**Ba_{pork} (day/kg FW)**	**Source**
p-Cymene	99-87-6	EPA6 calc c	1.00E-04	EPA6 calc c	3.16E-04	EPA6 calc c	3.79E-04	EPA6 calc c
Phosgene	75-44-5	NA	NA	NA	NA	NA	NA	NA
Propargyl alcohol	107-19-7	NA	NA	NA	NA	NA	NA	NA
Propionic acid	79-09-4	EPA6 calc c	1.70E-08	EPA6 calc c	5.37E-08	EPA6 calc c	6.44E-08	EPA6 calc c
Propionitrile	107-12-0	EPA6 calc c	1.15E-08	EPA6 calc c	3.63E-08	EPA6 calc c	4.36E-08	EPA6 calc c
Propylene glycol monomethyl ether	107-98-2	EPA6 calc c	5.25E-09	EPA6 calc c	1.66E-08	EPA6 calc c	1.99E-08	EPA6 calc c
p-tert-Butyltoluene	98-51-1	NA	NA	NA	NA	NA	NA	NA
Triethylamine	121-44-8	NA	NA	NA	NA	NA	NA	NA
Trimethylamine	75-50-3	EPA6 calc c	1.15E-08	EPA6 calc c	3.63E-08	EPA6 calc c	4.36E-08	EPA6 calc c
Vinyl acetate	108-05-4	EPA6 e	3.97E-08	EPA6 e	1.26E-07	EPA6 e	1.52E-07	EPA6 e
Non-aromatic Halogenated Hydrocarbons								
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-Tetrachloroethane	630-20-6	EPA6 e	3.39E-06	EPA6 e	1.07E-05	EPA6 e	1.30E-05	EPA6 e
1,1,1-Trichloroethane	71-55-6	EPA6 e	2.10E-06	EPA6 e	6.63E-06	EPA6 e	8.03E-06	EPA6 e
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	EPA6 calc c	4.27E-05	EPA6 calc c	1.35E-04	EPA6 calc c	1.62E-04	EPA6 calc c
1,1,2,2-Tetrachloroethane	79-34-5	EPA6 e	3.50E-04	EPA6 e	1.11E-03	EPA6 e	1.34E-03	EPA6 e
1,1,2,2-Tetrachloroethene	127-18-4	EPA6 e	2.79E-06	EPA6 e	8.82E-06	EPA6 e	1.07E-05	EPA6 e
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	EPA6 calc c	1.15E-05	EPA6 calc c	3.63E-05	EPA6 calc c	4.36E-05	EPA6 calc c
1,1,2-Trichloroethane	79-00-5	EPA6 e	9.93E-07	EPA6 e	3.14E-06	EPA6 e	3.80E-06	EPA6 e
1,1,2-Trichloroethylene	79-01-6	EPA6 e	2.15E-06	EPA6 e	6.81E-06	EPA6 e	8.24E-06	EPA6 e
1,1-Dichloroethane	75-34-3	EPA6 e	4.93E-07	EPA6 e	1.56E-06	EPA6 e	1.89E-06	EPA6 e
1,1-Dichloroethene	75-35-4	EPA6 e	1.05E-06	EPA6 e	3.32E-06	EPA6 e	4.01E-06	EPA6 e
1,2,3-Trichloropropane	96-18-4	EPA6 e	1.41E-06	EPA6 e	4.47E-06	EPA6 e	5.41E-06	EPA6 e
1,2-dibromo-3-chloropropane	96-12-8	EPA6 e	1.74E-06	EPA6 e	5.50E-06	EPA6 e	6.65E-06	EPA6 e
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	EPA6 e	2.30E-07	EPA6 e	7.28E-07	EPA6 e	8.82E-07	EPA6 e
1,2-Dichloroethylene	540-59-0	EPA6 calc c	2.40E-08	EPA6 calc c	7.59E-08	EPA6 calc c	9.10E-08	EPA6 calc c
1,2-Dichloropropane	78-87-5	EPA6 e	1.41E-06	EPA6 e	4.47E-06	EPA6 e	5.41E-06	EPA6 e
1,3-Dichloropropene	542-75-6	EPA6 e	4.45E-07	EPA6 e	1.41E-06	EPA6 e	1.70E-06	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
1,4-Dichloro-2-butene	764-41-0	EPA6 calc c	5.92E-08	EPA6 calc c	1.87E-07	EPA6 calc c	2.25E-07	EPA6 calc c
1-Chloroethene	75-01-4	EPA6 e	1.11E-07	EPA6 e	3.52E-07	EPA6 e	4.26E-07	EPA6 e
2,2-Dichloropropionic acid	75-99-0	EPA6 calc c	4.76E-08	EPA6 calc c	1.51E-07	EPA6 calc c	1.81E-07	EPA6 calc c
2-Chloropropane	75-29-6	EPA6 calc c	6.31E-07	EPA6 calc c	2.00E-06	EPA6 calc c	2.39E-06	EPA6 calc c
3-Chloropropene (allyl chloride)	107-05-1	EPA6 calc c	7.15E-08	EPA6 calc c	2.26E-07	EPA6 calc c	2.71E-07	EPA6 calc c
Bromochloromethane	74-97-5	EPA6 calc c	2.04E-07	EPA6 calc c	6.46E-07	EPA6 calc c	7.75E-07	EPA6 calc c
Bromodichloromethane	75-27-4	EPA6 e	8.42E-07	EPA6 e	2.66E-06	EPA6 e	3.22E-06	EPA6 e
Bromoethene	593-60-2	EPA6 calc c	9.26E-08	EPA6 calc c	2.93E-07	EPA6 calc c	3.51E-07	EPA6 calc c
Bromoform	75-25-2	EPA6 e	1.78E-06	EPA6 e	5.63E-06	EPA6 e	6.81E-06	EPA6 e
Bromomethane	74-83-9	EPA6 e	1.03E-07	EPA6 e	3.27E-07	EPA6 e	3.95E-07	EPA6 e
Carbon tetrachloride	56-23-5	EPA6 e	4.14E-06	EPA6 e	1.30E-05	EPA6 e	1.58E-05	EPA6 e
Chlordibromomethane	124-48-1	EPA6 e	1.19E-06	EPA6 e	3.77E-06	EPA6 e	4.56E-06	EPA6 e
Chlorodifluoromethane	75-45-6	EPA6 e	9.53E-08	EPA6 e	3.01E-07	EPA6 e	3.65E-07	EPA6 e
Chloroethane	75-00-3	EPA6 e	1.00E-05	EPA6 e	3.16E-05	EPA6 e	3.83E-05	EPA6 e
Chloroform	67-66-3	EPA6 e	7.07E-07	EPA6 e	2.23E-06	EPA6 e	2.71E-06	EPA6 e
Chloromethane	74-87-3	EPA6 e	6.36E-08	EPA6 e	2.01E-07	EPA6 e	2.43E-07	EPA6 e
Chloropentafluoroethane	76-15-3	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	EPA6 e	7.63E-07	EPA6 e	2.41E-06	EPA6 e	2.92E-06	EPA6 e
cis-1,3-Dichloropropene	10061-01-5	NA	NA	NA	NA	NA	NA	NA
Cyanogen bromide	506-68-3	NA	NA	NA	NA	NA	NA	NA
Cyanogen chloride	506-77-4	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	75-71-8	EPA6 e	1.15E-06	EPA6 e	3.63E-06	EPA6 e	4.40E-06	EPA6 e
Dichlorofluoromethane	75-43-4	NA	NA	NA	NA	NA	NA	NA
Dichloromethane	75-09-2	EPA6 e	1.43E-07	EPA6 e	4.52E-07	EPA6 e	5.47E-07	EPA6 e
Difluorodibromomethane	75-61-6	NA	NA	NA	NA	NA	NA	NA
Hexafluoroacetone	684-16-2	NA	NA	NA	NA	NA	NA	NA
Iodomethane	74-88-4	EPA6 calc c	3.89E-07	EPA6 calc c	1.23E-06	EPA6 calc c	1.48E-06	EPA6 calc c
Methylene bromide	74-95-3	EPA6 e	3.31E-07	EPA6 e	1.05E-06	EPA6 e	1.27E-06	EPA6 e
Pentachloroethane	76-01-7	EPA6 calc c	8.91E-06	EPA6 calc c	2.82E-05	EPA6 calc c	3.38E-05	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
trans-1,2-Dichloroethene	156-60-5	EPA6 e	7.63E-07	EPA6 e	2.41E-06	EPA6 e	2.92E-06	EPA6 e
trans-1,3-Dichloropropene	10061-02-6	NA	9.12E-07	EPA6 calc c	2.88E-06	EPA6 calc c	3.46E-06	EPA6 calc c
Trichloroacetic acid	76-03-9	EPA6 calc c	1.70E-07	EPA6 calc c	5.37E-07	EPA6 calc c	6.44E-07	EPA6 calc c
Trichlorofluoroethane	27154-33-2	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	75-69-4	EPA6 e	2.70E-06	EPA6 e	8.54E-06	EPA6 e	1.03E-05	EPA6 e
Trifluorobromomethane	75-63-8	NA	5.75E-07	EPA6 calc c	1.82E-06	EPA6 calc c	2.18E-06	EPA6 calc c
Dioxin and Furan Compounds								
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	EPA6 e	1.00E-03	EPA6 e	5.40E-03	EPA6 e	6.57E-03	EPA6 e
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	EPA6 e	1.00E-03	EPA6 e	5.43E-03	EPA6 e	6.57E-03	EPA6 e
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	EPA6 e	3.00E-03	EPA6 e	1.63E-02	EPA6 e	1.97E-02	EPA6 e
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	EPA6 e	6.00E-03	EPA6 e	3.26E-02	EPA6 e	3.94E-02	EPA6 e
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	EPA6 e	7.00E-03	EPA6 e	3.80E-02	EPA6 e	4.60E-02	EPA6 e
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	EPA6 e	5.00E-03	EPA6 e	2.71E-02	EPA6 e	3.29E-02	EPA6 e
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	EPA6 e	6.00E-03	EPA6 e	3.26E-02	EPA6 e	3.94E-02	EPA6 e
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	EPA6 e	5.00E-03	EPA6 e	2.71E-02	EPA6 e	3.29E-02	EPA6 e
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	EPA6 e	6.00E-03	EPA6 e	3.26E-02	EPA6 e	3.94E-02	EPA6 e
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	EPA6 e	1.00E-02	EPA6 e	5.43E-02	EPA6 e	6.57E-02	EPA6 e
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	EPA6 e	2.00E-03	EPA6 e	1.09E-02	EPA6 e	1.31E-02	EPA6 e
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	EPA6 e	5.00E-03	EPA6 e	2.71E-02	EPA6 e	3.29E-02	EPA6 e
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	EPA6 e	9.00E-03	EPA6 e	4.89E-02	EPA6 e	5.91E-02	EPA6 e
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	EPA6 e	1.00E-02	EPA6 e	5.43E-02	EPA6 e	6.57E-02	EPA6 e
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	EPA6 e	3.00E-03	EPA6 e	1.63E-02	EPA6 e	1.97E-02	EPA6 e
Dibenzofuran	132-64-9	EPA6 calc c	1.70E-04	EPA6 calc c	5.37E-04	EPA6 calc c	6.44E-04	EPA6 calc c
Octachlorodibenzo(p)dioxin	3268-87-9	EPA6 e	1.00E-03	EPA6 e	5.43E-03	EPA6 e	6.57E-03	EPA6 e
Octachlorodibenzofuran	39001-02-0	EPA6 e	1.00E-03	EPA6 e	5.43E-03	EPA6 e	6.57E-03	EPA6 e
PCBs								
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	EPA6 calc c	9.55E-02	EPA6 calc c	3.02E-01	EPA6 calc c	3.62E-01	EPA6 calc c
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	EPA6 calc c	1.05E-01	EPA6 calc c	3.31E-01	EPA6 calc c	3.97E-01	EPA6 calc c
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	NA	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	NA
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	NA	NA	NA	NA	NA	NA	NA
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	NA	NA	NA	NA	NA	NA	NA
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	NA
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	NA	NA	NA	NA	NA	NA	NA
2',3,4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	NA
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	NA	1.05E-01	EPA6 calc c	3.31E-01	EPA6 calc c	3.97E-01	EPA6 calc c
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	EPA6 calc c	2.03E-01	EPA6 calc c	6.43E-01	EPA6 calc c	7.71E-01	EPA6 calc c
3,3',4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	NA
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	NA	NA	NA	NA	NA	NA	NA
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	NA	NA	NA	NA	NA	NA	NA
Polychlorinated biphenyls (PCBs)**	1336-36-3	EPA6 calc c	1.62E-01	EPA6 calc c	5.11E-01	EPA6 calc c	6.13E-01	EPA6 calc c
Phthalates								
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	EPA6 e	1.27E-03	EPA6 e	4.03E-03	EPA6 e	4.88E-03	EPA6 e
Butylbenzyl phthalate	85-68-7	EPA6 e	2.06E-04	EPA6 e	6.50E-04	EPA6 e	7.87E-04	EPA6 e
Dibutyl phthalate	84-74-2	EPA6 e	4.17E-04	EPA6 e	1.32E-03	EPA6 e	1.60E-03	EPA6 e
Diethyl phthalate	84-66-2	EPA6 e	2.17E-04	EPA6 e	6.87E-04	EPA6 e	8.31E-04	EPA6 e
Dimethyl phthalate	131-11-3	EPA6 e	3.42E-07	EPA6 e	1.08E-06	EPA6 e	1.31E-06	EPA6 e
n-Dioctyl phthalate	117-84-0	EPA6 e	1.70E+01	EPA6 e	5.37E+01	EPA6 e	6.50E+01	EPA6 e
Light Polycyclic Aromatic Hydrocarbons								
2-Chloronaphthalene	91-58-7	EPA6 e	9.33E-05	EPA6 e	2.95E-04	EPA6 e	3.57E-04	EPA6 e
2-Methyl naphthalene	91-57-6	EPA6 calc c	5.75E-05	EPA6 calc c	1.82E-04	EPA6 calc c	2.18E-04	EPA6 calc c
5-Nitroacenaphthene	602-87-9	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	EPA6 e	7.32E-05	EPA6 e	2.31E-04	EPA6 e	2.80E-04	EPA6 e
Acenaphthylene	208-96-8	EPA6 calc c	9.33E-05	EPA6 calc c	2.95E-04	EPA6 calc c	3.54E-04	EPA6 calc c
Anthracene	120-12-7	EPA6 e	2.34E-04	EPA6 e	7.41E-04	EPA6 e	8.98E-04	EPA6 e
Fluorene	86-73-7	EPA6 calc c	1.20E-04	EPA6 calc c	3.80E-04	EPA6 calc c	4.56E-04	EPA6 calc c
Indene	95-13-6	NA	NA	NA	NA	NA	NA	NA
Napthalene	91-20-3	EPA6 e	1.87E-05	EPA6 e	5.92E-05	EPA6 e	7.16E-05	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
Phenanthrene	85-01-8	EPA6 e	2.82E-04	EPA6 e	8.92E-04	EPA6 e	1.08E-03	EPA6 e
Pyrene	129-00-0	EPA6 e	7.98E-04	EPA6 e	2.52E-03	EPA6 e	3.06E-03	EPA6 e
Heavy Polycyclic Aromatic Hydrocarbons								
3-Methylcholanthrene	56-49-5	EPA6 calc c	1.02E-01	EPA6 calc c	3.24E-01	EPA6 calc c	3.88E-01	EPA6 calc c
5-Methylchrysene	3697-24-3	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	56-55-3	EPA6 e	3.79E-03	EPA6 e	1.20E-02	EPA6 e	1.45E-02	EPA6 e
Benzo(a)pyrene	50-32-8	EPA6 e	1.07E-02	EPA6 e	3.38E-02	EPA6 e	4.10E-02	EPA6 e
Benzo(b)fluoranthene	205-99-2	EPA6 e	1.27E-02	EPA6 e	4.00E-02	EPA6 e	4.84E-02	EPA6 e
Benzo(e)pyrene	192-97-2	EPA6 calc c	2.00E-01	EPA6 calc c	6.31E-01	EPA6 calc c	7.57E-01	EPA6 calc c
Benzo(g,h,i)perylene	191-24-2	EPA6 calc c	1.00E-01	EPA6 calc c	3.16E-01	EPA6 calc c	3.79E-01	EPA6 calc c
Benzo(j)fluoranthene	205-82-3	EPA6 calc c	2.19E-02	EPA6 calc c	6.92E-02	EPA6 calc c	8.30E-02	EPA6 calc c
Benzo(k)fluoranthene	207-08-9	EPA6 e	1.26E-02	EPA6 e	3.98E-02	EPA6 e	4.82E-02	EPA6 e
Benzo[a,i]pyrene	191-30-0	NA	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	EPA6 e	4.36E-03	EPA6 e	1.38E-02	EPA6 e	1.67E-02	EPA6 e
Dibenz(a,h)anthracene	53-70-3	EPA6 e	2.80E-02	EPA6 e	8.86E-02	EPA6 e	1.07E-01	EPA6 e
Dibenz[a,h]acridine	226-36-8	NA	NA	NA	NA	NA	NA	NA
Dibenz[a,j]acridine	224-42-0	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,e)fluoranthene	5385-75-1	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)fluoranthene	no cas #	NA	NA	NA	NA	NA	NA	NA
Dibenzo[a,e]pyrene	192-65-4	NA	NA	NA	NA	NA	NA	NA
Dibenzo[a,h]pyrene	189-64-0	NA	NA	NA	NA	NA	NA	NA
Dibenzo[a,i]pyrene	189-55-9	NA	1.55E-01	EPA6 calc c	4.90E-01	EPA6 calc c	5.88E-01	EPA6 calc c
Fluoranthene	206-44-0	EPA6 e	9.65E-04	EPA6 e	3.05E-03	EPA6 e	3.69E-03	EPA6 e
Hexachloronaphthalene	1335-87-1	NA	3.09E-01	EPA6 calc c	9.77E-01	EPA6 calc c	1.17E+00	EPA6 calc c
Indeno(1,2,3-cd)pyrene	193-39-5	EPA6 e	6.53E-02	EPA6 e	2.07E-01	EPA6 e	2.50E-01	EPA6 e
Octachloronaphthalene	2234-13-1	NA	2.09E-02	EPA6 calc c	6.61E-02	EPA6 calc c	7.93E-02	EPA6 calc c
Pentachloronaphthalene	1321-64-8	NA	NA	NA	NA	NA	NA	NA
Tetrachloronaphthalene	1335-88-2	NA	NA	NA	NA	NA	NA	NA
Trichloronaphthalene	1321-65-9	NA	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
Light Substituted Benzene Compounds								
1,2,3-Trichlorobenzene	87-61-6	EPA6 e	8.82E-05	EPA6 e	2.79E-04	EPA6 e	3.38E-04	EPA6 e
1,2,4-Trichlorobenzene	120-82-1	EPA6 e	7.73E-05	EPA6 e	2.45E-04	EPA6 e	2.96E-04	EPA6 e
1,2,4-Trimethlyl benzene	25551-13-7	NA	2.00E-05	EPA6 calc c	6.31E-05	EPA6 calc c	7.57E-05	EPA6 calc c
1,2,4-Trimethyl benzene	95-63-6	EPA6 calc c	3.55E-05	EPA6 calc c	1.12E-04	EPA6 calc c	1.35E-04	EPA6 calc c
1,2-Dichlorobenzene	95-50-1	EPA6 e	2.21E-05	EPA6 e	7.00E-05	EPA6 e	8.48E-05	EPA6 e
1,3,5-Trimethyl benzene	108-67-8	EPA6 e	2.09E-05	EPA6 e	6.61E-05	EPA6 e	8.00E-05	EPA6 e
1,3-Dichlorobenzene	541-73-1	EPA6 e	2.69E-05	EPA6 e	8.52E-05	EPA6 e	1.03E-04	EPA6 e
1,3-Dinitrobenzene	99-65-0	EPA6 e	2.46E-07	EPA6 e	7.79E-07	EPA6 e	9.43E-07	EPA6 e
1,4-Dichlorobenzene	106-46-7	EPA6 e	2.05E-05	EPA6 e	6.49E-05	EPA6 e	7.86E-05	EPA6 e
1,4-Dinitrobenzene	100-25-4	NA	2.51E-07	EPA6 calc c	7.94E-07	EPA6 calc c	9.53E-07	EPA6 calc c
2,4,5-Trichorophenol	95-95-4	EPA6 e	5.89E-05	EPA6 e	1.86E-04	EPA6 e	2.25E-04	EPA6 e
2,4,6-Trichlorophenol	88-06-2	EPA6 e	4.09E-05	EPA6 e	1.29E-04	EPA6 e	1.57E-04	EPA6 e
2,4-Dichlorophenol	120-83-2	EPA6 e	8.62E-06	EPA6 e	2.73E-05	EPA6 e	3.30E-05	EPA6 e
2,4-Dimethylphenol	105-67-9	EPA6 e	1.82E-06	EPA6 e	5.75E-06	EPA6 e	6.96E-06	EPA6 e
2,4-Dinitrophenol	51-28-5	EPA6 e	2.62E-07	EPA6 e	8.29E-07	EPA6 e	1.00E-06	EPA6 e
2,4-Dinitrotoluene	121-14-2	EPA6 e	7.86E-07	EPA6 e	2.49E-06	EPA6 e	3.01E-06	EPA6 e
2,6-Dinitrotoluene	606-20-2	EPA6 e	6.12E-07	EPA6 e	1.93E-06	EPA6 e	2.34E-06	EPA6 e
2-Chlorotoluene	95-49-8	EPA6 calc c	2.73E-05	EPA6 calc c	8.64E-05	EPA6 calc c	1.04E-04	EPA6 calc c
2-Chorophenol	95-57-8	EPA6 e	1.15E-06	EPA6 e	3.64E-06	EPA6 e	4.41E-06	EPA6 e
2-Nitrophenol	88-75-5	EPA6 e	4.90E-07	EPA6 e	1.55E-06	EPA6 e	1.88E-06	EPA6 e
4,6-Dinitro-o-cresol	534-52-1	EPA6 calc c	5.62E-06	EPA6 calc c	1.78E-05	EPA6 calc c	2.13E-05	EPA6 calc c
4-Chlorotoluene	106-43-4	NA	1.70E-05	EPA6 calc c	5.37E-05	EPA6 calc c	6.44E-05	EPA6 calc c
4-Nitrophenol	100-02-7	EPA6 e	6.46E-07	EPA6 e	2.04E-06	EPA6 e	2.47E-06	EPA6 e
alpha-Methylstyrene	98-83-9	EPA6 calc c	2.31E-05	EPA6 calc c	7.30E-05	EPA6 calc c	8.76E-05	EPA6 calc c
Aniline	62-53-3	EPA6 e	7.59E-08	EPA6 e	2.40E-07	EPA6 e	2.90E-07	EPA6 e
Benzotrichloride	98-07-7	EPA6 calc c	6.61E-06	EPA6 calc c	2.09E-05	EPA6 calc c	2.51E-05	EPA6 calc c
Benzyl Chloride	100-44-7	EPA6 e	1.83E-08	EPA6 e	5.78E-08	EPA6 e	6.99E-08	EPA6 e
Bromobenzene	108-86-1	EPA6 calc c	7.76E-06	EPA6 calc c	2.45E-05	EPA6 calc c	2.95E-05	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	**CAS Registry Number**	**Source**	**Ba_{milk} (day/kg FW)**	**Source**	**Ba_{beef} (day/kg FW)**	**Source**	**Ba_{pork} (day/kg FW)**	**Source**
Chlorobenzene	108-90-7	EPA6 e	4.89E-06	EPA6 e	1.55E-05	EPA6 e	1.87E-05	EPA6 e
Cumene	98-82-8	EPA6 e	3.26E-05	EPA6 e	1.03E-04	EPA6 e	1.25E-04	EPA6 e
m-Cresol	108-39-4	EPA6 e	7.23E-07	EPA6 e	2.29E-06	EPA6 e	2.77E-06	EPA6 e
n-Butyl benzene	104-51-8	EPA6 calc c	1.51E-04	EPA6 calc c	4.79E-04	EPA6 calc c	5.74E-04	EPA6 calc c
Nitrobenzene	98-95-3	EPA6 e	5.40E-07	EPA6 e	1.71E-06	EPA6 e	2.07E-06	EPA6 e
n-Propyl benzene	103-65-1	EPA6 calc c	3.89E-05	EPA6 calc c	1.23E-04	EPA6 calc c	1.48E-04	EPA6 calc c
o-Cresol	95-48-7	EPA6 e	8.34E-07	EPA6 e	2.64E-06	EPA6 e	3.19E-06	EPA6 e
o-Dinitrobenzene	528-29-0	NA	3.16E-07	EPA6 calc c	1.00E-06	EPA6 calc c	1.20E-06	EPA6 calc c
o-Nitroaniline	88-74-4	EPA6 e	5.62E-07	EPA6 e	1.78E-06	EPA6 e	2.15E-06	EPA6 e
o-Toluidine	95-53-4	EPA6 e	1.74E-07	EPA6 e	5.50E-07	EPA6 e	6.65E-07	EPA6 e
p-Chloroaniline	106-47-8	EPA6 e	5.88E-07	EPA6 e	1.86E-06	EPA6 e	2.25E-06	EPA6 e
p-Cresol	106-44-5	EPA6 e	6.91E-07	EPA6 e	2.19E-06	EPA6 e	2.65E-06	EPA6 e
Phenol	108-95-2	EPA6 e	2.38E-07	EPA6 e	7.54E-07	EPA6 e	9.12E-07	EPA6 e
p-Nitrochlorobenzene	100-00-5	NA	1.95E-06	EPA6 calc c	6.17E-06	EPA6 calc c	7.40E-06	EPA6 calc c
p-Toluidine	106-49-0	EPA6 calc c	2.00E-07	EPA6 calc c	6.31E-07	EPA6 calc c	7.57E-07	EPA6 calc c
sec-Butyl benzene	135-98-8	NA	NA	NA	NA	NA	NA	NA
tert-Butyl benzene	98-06-6	EPA6 calc c	1.02E-04	EPA6 calc c	3.24E-04	EPA6 calc c	3.88E-04	EPA6 calc c
Toluene-2,6-diamine	823-40-5	EPA6 calc c	2.26E-07	EPA6 calc c	7.16E-07	EPA6 calc c	8.59E-07	EPA6 calc c
Other Light Semivolatile Compounds								
1,1 Dimethyl hydrazine	57-14-7	EPA6 calc c	3.13E-08	EPA6 calc c	9.89E-08	EPA6 calc c	1.19E-07	EPA6 calc c
1,1-Biphenyl	92-52-4	EPA6 calc c	6.31E-05	EPA6 calc c	2.00E-04	EPA6 calc c	2.39E-04	EPA6 calc c
1,2 Diphenylhydrazine	122-66-7	EPA6 e	6.92E-06	EPA6 e	2.19E-05	EPA6 e	2.65E-05	EPA6 e
1,2-Dimethylhydrazine	540-73-8	NA	3.40E-10	EPA6 calc c	1.08E-09	EPA6 calc c	1.29E-09	EPA6 calc c
1,3-Propane sultone	1120-71-4	NA	2.38E-09	EPA6 calc c	7.53E-09	EPA6 calc c	9.04E-09	EPA6 calc c
2,4-Toluene diisocyanate	584-84-9	NA	NA	NA	NA	NA	NA	NA
2-Chloroacetophenone	532-27-4	EPA6 calc c	3.12E-06	EPA6 calc c	9.88E-06	EPA6 calc c	1.19E-05	EPA6 calc c
2-Propenoic acid	79-10-7	EPA6 calc c	2.14E-08	EPA6 calc c	6.76E-08	EPA6 calc c	8.11E-08	EPA6 calc c
4,4-Methylenedianiline	101-77-9	EPA6 calc c	1.90E-05	EPA6 calc c	6.02E-05	EPA6 calc c	7.22E-05	EPA6 calc c
Acetophenone	98-86-2	EPA6 e	3.47E-07	EPA6 e	1.10E-06	EPA6 e	1.33E-06	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
Benzoic acid	65-85-0	NA	6.04E-07	NA	1.91E-06	NA	2.31E-06	NA
bis(2-Chloroethoxy)methane	111-91-1	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	111-44-4	EPA6 e	1.59E-07	EPA6 e	5.02E-07	EPA6 e	6.08E-07	EPA6 e
Chlorocyclopentadiene	41851-50-7	EPA6 calc c	2.14E-06	EPA6 calc c	6.76E-06	EPA6 calc c	8.11E-06	EPA6 calc c
Cyclohexanol	108-93-0	EPA6 calc c	1.35E-07	EPA6 calc c	4.27E-07	EPA6 calc c	5.12E-07	EPA6 calc c
Dichloroisopropyl ether	108-60-1	EPA6 calc c	3.02E-06	EPA6 calc c	9.55E-06	EPA6 calc c	1.15E-05	EPA6 calc c
Dichloromethyl ether	542-88-1	EPA6 calc c	3.31E-09	EPA6 calc c	1.05E-08	EPA6 calc c	1.26E-08	EPA6 calc c
Dichloropentadiene	no cas #	NA	NA	NA	NA	NA	NA	NA
Dimethyl sulfate	77-78-1	EPA6 calc c	1.65E-08	EPA6 calc c	5.23E-08	EPA6 calc c	6.27E-08	EPA6 calc c
Dimethylaniline	121-69-7	EPA6 calc c	1.05E-09	EPA6 calc c	3.31E-09	EPA6 calc c	3.97E-09	EPA6 calc c
di-n-propylnitrosamine	621-64-7	EPA6 e	1.91E-07	EPA6 e	6.03E-07	EPA6 e	7.30E-07	EPA6 e
Diphenyl ether	101-84-8	EPA6 calc c	1.29E-04	EPA6 calc c	4.07E-04	EPA6 calc c	4.89E-04	EPA6 calc c
Epichlorohydrin	106-89-8	EPA6 e	1.41E-08	EPA6 e	4.47E-08	EPA6 e	5.41E-08	EPA6 e
Ethyl carbomate (urethane)	51-79-6	NA	5.62E-09	EPA6 calc c	1.78E-08	EPA6 calc c	2.13E-08	EPA6 calc c
Ethyl methane sulfanate	62-50-0	EPA6 e	8.90E-09	EPA6 e	2.81E-08	EPA6 e	3.41E-08	EPA6 e
Ethylene dibromide	106-93-4	EPA6 e	4.47E-07	EPA6 e	1.41E-06	EPA6 e	1.71E-06	EPA6 e
Ethylene glycol	107-21-1	EPA6 calc c	9.67E-10	EPA6 calc c	3.06E-09	EPA6 calc c	3.67E-09	EPA6 calc c
Ethylene glycol monobutyl ether	111-76-2	EPA6 calc c	2.85E-07	EPA6 calc c	9.00E-07	EPA6 calc c	1.08E-06	EPA6 calc c
Ethylene glycol monoethyl ether acetate	111-15-9	EPA6 calc c	3.31E-08	EPA6 calc c	1.05E-07	EPA6 calc c	1.25E-07	EPA6 calc c
Ethylene thiourea	96-45-7	EPA6 calc c	1.81E-09	EPA6 calc c	5.73E-09	EPA6 calc c	6.88E-09	EPA6 calc c
Furfural	98-01-1	EPA6 calc c	7.24E-08	EPA6 calc c	2.29E-07	EPA6 calc c	2.75E-07	EPA6 calc c
Maleic hydrazide	123-33-1	EPA6 calc c	1.45E-09	EPA6 calc c	4.57E-09	EPA6 calc c	5.49E-09	EPA6 calc c
Malononitrile	109-77-3	NA	8.71E-09	EPA6 calc c	2.75E-08	EPA6 calc c	3.31E-08	EPA6 calc c
Methyl styrene (mixed isomers)	25013-15-4	NA	1.78E-05	EPA6 calc c	5.62E-05	EPA6 calc c	6.75E-05	EPA6 calc c
Methylhydrazine	60-34-4	NA	7.08E-10	EPA6 calc c	2.24E-09	EPA6 calc c	2.69E-09	EPA6 calc c
N,N-Diphenylamine	122-39-4	EPA6 calc c	2.51E-05	EPA6 calc c	7.94E-05	EPA6 calc c	9.53E-05	EPA6 calc c
Nitric acid, propyl ester	627-13-4	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	EPA6 e	2.04E-06	EPA6 e	6.46E-06	EPA6 e	7.82E-06	EPA6 e
N-Nitrosomorpholine	59-89-2	NA	7.59E-08	EPA6 calc c	2.40E-07	EPA6 calc c	2.88E-07	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
N-Nitroso-N,N-dimethylamine	62-75-9	EPA6 calc c	2.69E-09	EPA6 calc c	8.51E-09	EPA6 calc c	1.02E-08	EPA6 calc c
o-Anisidine	90-04-0	NA	1.20E-07	EPA6 calc c	3.80E-07	EPA6 calc c	4.56E-07	EPA6 calc c
Oxalic acid	144-62-7	NA	NA	NA	NA	NA	NA	NA
Phthalic Anhydride	85-44-9	EPA6 e	1.99E-09	EPA6 e	6.28E-09	EPA6 e	7.60E-09	EPA6 e
p-Phthalic acid	100-21-0	EPA6 calc c	5.28E-08	EPA6 calc c	1.67E-07	EPA6 calc c	2.00E-07	EPA6 calc c
Pyridine	110-86-1	EPA6 e	3.72E-08	EPA6 e	1.18E-07	EPA6 e	1.42E-07	EPA6 e
Quinoline	91-22-5	EPA6 calc c	8.51E-07	EPA6 calc c	2.69E-06	EPA6 calc c	3.23E-06	EPA6 calc c
Quinone	106-51-4	NA	1.26E-08	EPA6 calc c	3.98E-08	EPA6 calc c	4.78E-08	EPA6 calc c
Safrole	94-59-7	EPA6 e	3.63E-06	EPA6 e	1.15E-05	EPA6 e	1.39E-05	EPA6 e
Tetrahydrofuran	109-99-9	EPA6 e	2.22E-08	EPA6 e	7.03E-08	EPA6 e	8.51E-08	EPA6 e
Other Heavy Semivolatile Compounds								
1,2,4,5-Tetrachlorobenzene	95-94-3	EPA6 e	3.47E-04	EPA6 e	1.10E-03	EPA6 e	1.33E-03	EPA6 e
1,3,5-Trinitrobenzene	99-35-4	EPA6 e	1.20E-07	EPA6 e	3.80E-07	EPA6 e	4.60E-07	EPA6 e
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	NA	1.17E-04	EPA6 calc c	3.72E-04	EPA6 calc c	4.46E-04	EPA6 calc c
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	NA	1.58E-11	EPA6 calc c	5.01E-11	EPA6 calc c	6.01E-11	EPA6 calc c
2-sec-Butyl-4,6-dinitrophenol	88-85-7	EPA6 calc c	1.10E-05	EPA6 calc c	3.47E-05	EPA6 calc c	4.16E-05	EPA6 calc c
3,3-Dichlorobenzidine	91-94-1	EPA6 e	2.99E-05	EPA6 e	9.44E-05	EPA6 e	1.14E-04	EPA6 e
3,3'-Dimethoxybenzidine	119-90-4	EPA6 e	5.13E-07	EPA6 e	1.62E-06	EPA6 e	1.96E-06	EPA6 e
4-Bromophenylphenyl ether	101-55-3	EPA6 calc c	7.94E-04	EPA6 calc c	2.51E-03	EPA6 calc c	3.01E-03	EPA6 calc c
Ammonium perfluorooctanoate	3825-26-1	NA	NA	NA	NA	NA	NA	NA
Azobenzene	103-33-3	EPA6 calc c	5.25E-05	EPA6 calc c	1.66E-04	EPA6 calc c	1.99E-04	EPA6 calc c
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	NA	NA	NA	NA	NA	NA	NA
Captan	133-06-2	EPA6 calc c	1.78E-06	EPA6 calc c	5.62E-06	EPA6 calc c	6.75E-06	EPA6 calc c
Chlorobenzilate	510-15-6	EPA6 e	1.91E-04	EPA6 e	6.03E-04	EPA6 e	7.29E-04	EPA6 e
Dibutylphosphate	107-66-4	NA	NA	NA	NA	NA	NA	NA
Dimethyl aminoazobenzene	60-11-7	NA	3.02E-04	EPA6 calc c	9.55E-04	EPA6 calc c	1.15E-03	EPA6 calc c
Hexachlorobenzene	118-74-1	EPA6 e	2.53E-03	EPA6 e	7.99E-03	EPA6 e	9.68E-03	EPA6 e
Hexachlorobutadiene	87-68-3	EPA6 e	4.28E-04	EPA6 e	1.35E-03	EPA6 e	1.64E-03	EPA6 e
Hexachlorocyclopentadiene	77-47-4	EPA6 e	6.41E-04	EPA6 e	2.03E-03	EPA6 e	2.45E-03	EPA6 e

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
Hexachloroethane	67-72-1	EPA6 e	7.67E-05	EPA6 e	2.43E-04	EPA6 e	2.94E-04	EPA6 e
Hexachlorophene	70-30-4	EPA6 e	2.75E-01	EPA6 e	8.71E-01	EPA6 e	1.05E+00	EPA6 e
Hexamethylene-1,5-diisocyanate	822-06-0	EPA6 calc c	1.49E-07	EPA6 calc c	4.71E-07	EPA6 calc c	5.66E-07	EPA6 calc c
Mirex	2385-85-5	EPA6 calc c	6.17E-02	EPA6 calc c	1.95E-01	EPA6 calc c	2.34E-01	EPA6 calc c
Nitrofen	1836-75-5	NA	2.69E-03	EPA6 calc c	8.51E-03	EPA6 calc c	1.02E-02	EPA6 calc c
Pentachlorobenzene	608-93-5	EPA6 e	9.72E-04	EPA6 e	3.07E-03	EPA6 e	3.72E-03	EPA6 e
Pentachloronitrobenzene	82-68-8	EPA6 e	3.47E-04	EPA6 e	1.10E-03	EPA6 e	1.33E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Pentachlorophenol*	87-86-5	EPA6 e	9.55E-04	EPA6 e	3.02E-03	EPA6 e	3.66E-03	EPA6 e
Picric acid	88-89-1	EPA6 calc c	8.51E-07	EPA6 calc c	2.69E-06	EPA6 calc c	3.23E-06	EPA6 calc c
Pronamide	23950-58-5	EPA6 e	2.57E-05	EPA6 e	8.13E-05	EPA6 e	9.84E-05	EPA6 e
Strychnine	57-24-9	EPA6 e	6.76E-07	EPA6 e	2.14E-06	EPA6 e	2.59E-06	EPA6 e
Terphenyls	26140-60-3	NA	NA	NA	NA	NA	NA	NA
Tributyl phosphate	126-73-8	EPA6 calc c	7.94E-05	EPA6 calc c	2.51E-04	EPA6 calc c	3.01E-04	EPA6 calc c
Trifluralin	1582-09-8	EPA6 calc c	1.74E-03	EPA6 calc c	5.50E-03	EPA6 calc c	6.59E-03	EPA6 calc c
Triphenylamine	603-34-9	NA	NA	NA	NA	NA	NA	NA
Herbicides and Organopesticides								
2,4,5-T	93-76-5	EPA6 calc c	1.82E-05	EPA6 calc c	5.75E-05	EPA6 calc c	6.91E-05	EPA6 calc c

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source
2,4-D and esters	94-75-7	EPA6 calc c	5.13E-06	EPA6 calc c	1.62E-05	EPA6 calc c	1.95E-05	EPA6 calc c
4,4-DDD	72-54-8	EPA6 calc c	1.26E-02	EPA6 calc c	3.98E-02	EPA6 calc c	4.78E-02	EPA6 calc c
4,4-DDT	50-29-3	EPA6 calc c	7.94E-03	EPA6 calc c	2.51E-02	EPA6 calc c	3.01E-02	EPA6 calc c
Aldrin	309-00-2	EPA6 e	1.20E-02	EPA6 e	3.79E-02	EPA6 e	4.59E-02	EPA6 e
alpha-BHC	319-84-6	EPA6 e	5.00E-05	EPA6 e	1.58E-04	EPA6 e	1.92E-04	EPA6 e
beta-BHC	319-85-7	EPA6 e	5.41E-05	EPA6 e	1.71E-04	EPA6 e	2.07E-04	EPA6 e
Chlordane	57-74-9	EPA6 e	6.88E-03	EPA6 e	2.17E-02	EPA6 e	2.63E-02	EPA6 e
DDE	72-55-9	EPA6 e	1.43E-02	EPA6 e	4.53E-02	EPA6 e	5.49E-02	EPA6 e
Delta-BHC	319-86-8	EPA6 calc c	1.10E-04	EPA6 calc c	3.47E-04	EPA6 calc c	4.16E-04	EPA6 calc c
Dieldrin	60-57-1	EPA6 e	1.48E-03	EPA6 e	4.67E-03	EPA6 e	5.65E-03	EPA6 e
Endothall	145-73-3	EPA6 calc c	1.07E-09	EPA6 calc c	3.39E-09	EPA6 calc c	4.07E-09	EPA6 calc c
Endrin	72-20-8	EPA6 e	6.19E-04	EPA6 e	1.96E-03	EPA6 e	2.37E-03	EPA6 e
gamma-BHC(Lindane)	58-89-9	EPA6 calc c	4.17E-05	EPA6 calc c	1.32E-04	EPA6 calc c	1.58E-04	EPA6 calc c
Heptachlor	76-44-8	EPA6 e	8.22E-04	EPA6 e	2.60E-03	EPA6 e	3.15E-03	EPA6 e
Isodrin	465-73-6	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	72-43-5	EPA6 e	2.67E-04	EPA6 e	8.43E-04	EPA6 e	1.02E-03	EPA6 e
Silvex (2,4,5-TP)	93-72-1	EPA6 calc c	9.38E-05	EPA6 calc c	2.97E-04	EPA6 calc c	3.56E-04	EPA6 calc c
Toxaphene	8001-35-2	EPA6 calc c	2.51E-03	EPA6 calc c	7.94E-03	EPA6 calc c	9.53E-03	EPA6 calc c

NA = Value not available
** = Varies with pH; values given for a pH of 7.0.
a = Illustrated Handbook of Physical - Chemical Properties and Environmental Fate i
b = RAIS database: http://risk.lsd.ornl.gov/rap_hp.shtml
c = Equations derived from EPA Region 6 Guidance Appendix A-3
d = Handbook of Environmental degradation Rates. 1991.
e = EPA Region 6 Hazardous Waste Combustion Guidance
f = "A Critical Review of Henry's Law Constants for Chemicals of Environmental In
g = Handbook of Environmental Fate and Exposure Data for Organic Chemicals
h = http://www.epa.gov/region09/waste/sfund/prg/.
i = http://esc.syrres.com/efdb/Chemfate.htm
j = Hansch and Leo 1985 in Syracuse 1996

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

			Bioconcentration / Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)	Source

k = Schwarzenbach et al. 1993
l = Tomlin 1994 in Syracuse 1996
m = http://www.speclab.com/compound/c959988.htm

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
Aromatic Halogenated Hydrocarbons								
2,3,4,6-Tetrachlorophenol	58-90-2	2.09E-01	EPA6 calc c	5.22E-04	EPA6 calc c	NA	NA	NA
4-Chloro-3-methylphenol	59-50-7	1.00E-02	EPA6 calc c	2.50E-05	EPA6 calc c	1.34E+02	EPA6 calc c	NA
Aromatic Nonhalogenated Hydrocarbons								
2-Nitrotoluene	88-72-2	1.58E-03	EPA6 calc c	3.96E-06	EPA6 calc c	3.30E+01	EPA6 calc c	NA
4-Nitrobiphenyl	92-93-3	4.68E-02	EPA6 calc c	1.17E-04	EPA6 calc c	4.32E+02	EPA6 calc c	NA
Benzaldehyde	100-52-7	2.38E-04	EPA6 e	5.95E-07	EPA6 e	7.81E+00	EPA6 e	NA
Benzene	71-43-2	1.09E-03	EPA6 e	2.72E-06	EPA6 e	2.48E+01	EPA6 e	NA
Benzyl alcohol	100-51-6	1.00E-04	EPA6 e	2.50E-07	EPA6 e	4.04E+00	EPA6 e	NA
Ethyl Benzene	100-41-4	1.05E-02	EPA6 e	2.63E-05	EPA6 e	1.39E+02	EPA6 e	NA
m-Xylene	108-38-3	1.26E-02	EPA6 e	3.15E-05	EPA6 e	1.60E+02	EPA6 e	NA
o-Xylene	95-47-6	1.07E-02	EPA6 e	2.68E-05	EPA6 e	1.41E+02	EPA6 e	NA
p-Xylene	106-42-3	1.18E-02	EPA6 e	2.93E-05	EPA6 e	1.51E+02	EPA6 e	NA
Styrene	100-42-5	6.74E-03	EPA6 e	1.68E-05	EPA6 e	9.91E+01	EPA6 e	NA
Toluene	108-88-3	3.69E-03	EPA6 e	9.22E-06	EPA6 e	6.27E+01	EPA6 e	NA
Non-aromatic Nonhalogenated Hydrocarbons								
1,2-Epoxybutane	106-88-7	2.19E-04	EPA6 calc c	5.48E-07	EPA6 calc c	7.34E+00	EPA6 calc c	NA
1,3-Butadiene	106-99-0	7.76E-04	EPA6 calc c	1.94E-06	EPA6 calc c	1.92E+01	EPA6 calc c	NA
1,4-Dioxane	123-91-1	4.29E-06	EPA6 e	1.07E-08	EPA6 e	3.69E-01	EPA6 e	NA
1-Methylpropyl alcohol	78-92-2	3.24E-05	EPA6 calc c	8.08E-08	EPA6 calc c	1.71E+00	EPA6 calc c	NA
1-Nitropropane	108-03-2	5.89E-05	EPA6 calc c	1.47E-07	EPA6 calc c	2.70E+00	EPA6 calc c	NA
2,2,4-Trimethylpentane	540-84-1	8.32E-01	EPA6 calc c	2.08E-03	EPA6 calc c	NA	EPA6 calc c	NA
2-Butanone	78-93-3	1.51E-05	EPA6 e	3.78E-08	EPA6 e	9.61E-01	EPA6 e	NA
2-Butenaldehyde (2-Butenal)	4170-30-3	NA	NA	NA	NA	NA	NA	NA
2-Ethoxyethanol	110-80-5	6.31E-06	EPA6 calc c	1.58E-08	EPA6 calc c	4.94E-01	EPA6 calc c	NA
2-Heptanone	110-43-0	7.59E-04	EPA6 calc c	1.89E-06	EPA6 calc c	1.88E+01	EPA6 calc c	NA
2-Hexanone	591-78-6	1.91E-04	EPA6 calc c	4.76E-07	EPA6 calc c	6.59E+00	EPA6 calc c	NA
2-Methoxyethanol	109-86-4	1.42E-05	EPA6 calc c	3.54E-08	EPA6 calc c	9.16E-01	EPA6 calc c	NA
2-Methyl-2-propanol	75-65-0	1.78E-05	EPA6 calc c	4.44E-08	EPA6 calc c	1.09E+00	EPA6 calc c	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
2-Methyl-2-propenenitrile	126-98-7	2.76E-05	EPA6 e	6.88E-08	EPA6 e	1.52E+00	EPA6 e	NA
2-Methylaziridine	75-55-8	NA	NA	NA	NA	NA	NA	NA
2-Methylpropyl alcohol	78-83-1	4.57E-05	EPA6 calc c	1.14E-07	EPA6 calc c	2.23E+00	EPA6 calc c	NA
2-Pentanone	107-87-9	6.46E-05	EPA6 calc c	1.61E-07	EPA6 calc c	2.89E+00	EPA6 calc c	NA
2-Propanone (Acetone)	67-64-1	4.77E-06	EPA6 e	1.19E-08	EPA6 e	4.00E-01	EPA6 e	NA
2-Propene-1-ol	107-18-6	1.17E-05	EPA6 calc c	2.93E-08	EPA6 calc c	7.93E-01	EPA6 calc c	NA
2-Propyl alcohol	67-63-0	8.91E-06	EPA6 calc c	2.23E-08	EPA6 calc c	6.43E-01	EPA6 calc c	NA
3-Heptanone	106-35-4	NA	NA	NA	NA	NA	NA	NA
3-Methyl-1-butanol	123-51-3	NA	NA	NA	NA	NA	NA	NA
3-Methyl-2-butanone	563-80-4	NA	NA	NA	NA	NA	NA	NA
3-Pentanone	96-22-0	7.76E-05	EPA6 calc c	1.94E-07	EPA6 calc c	3.33E+00	EPA6 calc c	NA
4-Heptanone	123-19-3	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	108-10-1	1.23E-04	EPA6 e	3.07E-07	EPA6 e	4.73E+00	EPA6 e	NA
4-Methyl-3-penten-2-one	141-79-7	NA	NA	NA	NA	NA	NA	NA
5-Methyl-2-hexanone	110-12-3	NA	NA	NA	NA	NA	NA	NA
Acetaldehyde	75-07-0	4.78E-06	EPA6 e	1.19E-08	EPA6 e	4.00E-01	EPA6 e	NA
Acetamide	60-35-5	4.37E-07	EPA6 calc c	1.09E-09	EPA6 calc c	6.49E-02	EPA6 calc c	NA
Acetic acid	64-19-7	5.37E-06	EPA6 calc c	1.34E-08	EPA6 calc c	4.37E-01	EPA6 calc c	NA
Acetic acid ethyl ester	141-78-6	4.27E-05	EPA6 calc c	1.06E-07	EPA6 calc c	2.11E+00	EPA6 calc c	NA
Acetic acid n-butyl ester	123-86-4	4.27E-04	EPA6 calc c	1.06E-06	EPA6 calc c	1.22E+01	EPA6 calc c	NA
Acetonitrile	75-05-8	3.63E-06	EPA6 e	9.06E-09	EPA6 e	3.25E-01	EPA6 e	NA
Acrolein	107-02-8	7.78E-06	EPA6 e	1.94E-08	EPA6 e	5.80E-01	EPA6 e	NA
Acrylonitrile	107-13-1	1.41E-05	EPA6 e	3.53E-08	EPA6 e	4.80E+01	EPA6 e	NA
Bis(isopropyl)ether	108-20-3	NA	NA	NA	NA	NA	NA	NA
Butane	106-97-8	6.17E-03	EPA6 calc c	1.54E-05	EPA6 calc c	9.26E+01	EPA6 calc c	NA
Carbon disulfide	75-15-0	7.94E-04	EPA6 e	1.98E-06	EPA6 e	1.95E+01	EPA6 e	NA
Cyanogen	460-19-5	5.10E-05	EPA6 calc c	1.27E-07	EPA6 calc c	2.42E+00	EPA6 calc c	NA
Cyclohexane	110-82-7	2.19E-02	EPA6 calc c	5.46E-05	EPA6 calc c	2.42E+02	EPA6 calc c	NA
Cyclohexanone	108-94-1	5.13E-05	EPA6 calc c	1.28E-07	EPA6 calc c	2.43E+00	EPA6 calc c	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
Cyclohexene	110-83-8	5.75E-03	EPA6 calc c	1.44E-05	EPA6 calc c	8.78E+01	EPA6 calc c	NA
Cyclopentane	287-92-3	7.94E-03	EPA6 calc c	1.98E-05	EPA6 calc c	1.12E+02	EPA6 calc c	NA
Ethyl alcohol	64-17-5	3.89E-06	EPA6 calc c	9.71E-09	EPA6 calc c	3.42E-01	EPA6 calc c	NA
Ethyl ether	60-29-7	6.17E-05	EPA6 calc c	1.54E-07	EPA6 calc c	2.80E+00	EPA6 calc c	NA
Ethyl methacrylate	97-63-2	3.09E-04	EPA6 e	7.71E-07	EPA6 e	9.51E+00	EPA6 e	NA
Formaldehyde	50-00-0	1.75E-05	EPA6 e	4.36E-08	EPA6 e	1.07E+00	EPA6 e	NA
Formamide	75-12-7	2.45E-07	EPA6 calc c	6.13E-10	EPA6 calc c	4.19E-02	EPA6 calc c	NA
Formic acid	64-18-6	2.30E-06	EPA6 e	5.75E-09	EPA6 e	2.30E-01	EPA6 e	NA
Formic acid, methyl ester	107-31-3	4.33E-06	EPA6 calc c	1.08E-08	EPA6 calc c	3.71E-01	EPA6 calc c	NA
Glycidylaldehyde	765-34-4	1.48E-06	EPA6 calc c	3.69E-09	EPA6 calc c	1.64E-01	EPA6 calc c	NA
Methyl acetate	79-20-9	1.20E-05	EPA6 calc c	3.00E-08	EPA6 calc c	8.07E-01	EPA6 calc c	NA
Methyl alcohol	67-56-1	1.55E-06	EPA6 e	3.39E-09	EPA6 e	1.70E-01	EPA6 e	NA
Methyl isocyanate	624-83-9	NA	NA	NA	NA	NA	NA	NA
Methyl methacrylate	80-62-6	4.90E-05	EPA6 calc c	1.22E-07	EPA6 calc c	2.35E+00	EPA6 calc c	NA
Methyl tert-butyl ether	1634-04-4	6.92E-05	EPA6 calc c	1.73E-07	EPA6 calc c	3.05E+00	EPA6 calc c	NA
Methylacetylene	74-99-7	6.92E-05	EPA6 calc c	1.73E-07	EPA6 calc c	3.05E+00	EPA6 calc c	NA
Methylcyclohexane	108-87-2	1.00E-01	EPA6 calc c	2.50E-04	EPA6 calc c	NA	NA	NA
N,N-Dimethylacetamide	127-19-5	NA	NA	NA	NA	NA	NA	NA
n-Butyl alcohol	71-36-3	6.03E-05	EPA6 calc c	1.50E-07	EPA6 calc c	2.75E+00	EPA6 calc c	NA
n-Heptane	142-82-5	3.63E-01	EPA6 calc c	9.06E-04	EPA6 calc c	NA	NA	NA
n-Hexane	110-54-3	1.02E-01	EPA6 calc c	2.55E-04	EPA6 calc c	NA	NA	NA
Nitromethane	75-52-5	3.55E-06	EPA6 calc c	8.86E-09	EPA6 calc c	NA	NA	NA
n-Nonane	111-84-2	3.55E+00	EPA6 calc c	8.86E-03	EPA6 calc c	NA	NA	NA
n-Octane	111-65-9	7.94E-02	EPA6 calc c	1.98E-04	EPA6 calc c	NA	NA	NA
n-Pentane	109-66-0	1.29E-02	EPA6 calc c	3.22E-05	EPA6 calc c	1.62E+02	EPA6 calc c	NA
n-Propionaldehyde	123-38-6	3.09E-05	EPA6 calc c	7.72E-08	EPA6 calc c	1.65E+00	EPA6 calc c	NA
n-Propyl alcohol	71-23-8	NA	NA	NA	NA	NA	NA	NA
n-Valeraldehyde	110-62-3	NA	NA	NA	NA	NA	NA	NA
Oxirane	75-21-8	3.98E-06	EPA6 e	9.94E-09	EPA6 e	3.48E-01	EPA6 e	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
p-Cymene	99-87-6	1.00E-01	EPA6 calc c	2.50E-04	EPA6 calc c	NA	NA	NA
Phosgene	75-44-5	NA	NA	NA	NA	NA	NA	NA
Propargyl alcohol	107-19-7	NA	NA	NA	NA	NA	NA	NA
Propionic acid	79-09-4	1.70E-05	EPA6 calc c	4.24E-08	EPA6 calc c	1.05E+00	EPA6 calc c	NA
Propionitrile	107-12-0	1.15E-05	EPA6 calc c	2.87E-08	EPA6 calc c	7.79E-01	EPA6 calc c	NA
Propylene glycol monomethyl ether	107-98-2	5.25E-06	EPA6 calc c	1.31E-08	EPA6 calc c	4.30E-01	EPA6 calc c	NA
p-tert-Butyltoluene	98-51-1	NA	NA	NA	NA	NA	NA	NA
Triethylamine	121-44-8	NA	NA	NA	NA	NA	NA	NA
Trimethylamine	75-50-3	1.15E-05	EPA6 calc c	2.87E-08	EPA6 calc c	7.79E-01	EPA6 calc c	NA
Vinyl acetate	108-05-4	3.97E-05	EPA6 e	9.92E-08	EPA6 e	2.00E+00	EPA6 e	NA
Non-aromatic Halogenated Hydrocarbons								
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-Tetrachloroethane	630-20-6	3.39E-03	EPA6 e	8.46E-06	EPA6 e	5.87E+01	EPA6 e	NA
1,1,1-Trichloroethane	71-55-6	2.10E-03	EPA6 e	5.24E-06	EPA6 e	4.08E+01	EPA6 e	NA
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	4.27E-02	EPA6 calc c	1.06E-04	EPA6 calc c	4.03E+02	EPA6 calc c	NA
1,1,2,2-Tetrachloroethane	79-34-5	3.50E-01	EPA6 e	8.73E-04	EPA6 e	NA	EPA6 e	4.33E+03
1,1,2,2-Tetrachloroethene	127-18-4	2.79E-03	EPA6 e	6.96E-06	EPA6 e	5.06E+01	EPA6 e	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	1.15E-02	EPA6 calc c	2.87E-05	EPA6 calc c	1.48E+02	EPA6 calc c	NA
1,1,2-Trichloroethane	79-00-5	9.93E-04	EPA6 e	2.48E-06	EPA6 e	2.31E+01	EPA6 e	NA
1,1,2-Trichloroethylene	79-01-6	2.15E-03	EPA6 e	5.37E-06	EPA6 e	4.16E+01	EPA6 e	NA
1,1-Dichloroethane	75-34-3	4.92E-04	EPA6 e	1.23E-06	EPA6 e	1.36E+01	EPA6 e	NA
1,1-Dichloroethene	75-35-4	1.05E-03	EPA6 e	2.62E-06	EPA6 e	2.41E+01	EPA6 e	NA
1,2,3-Trichloropropane	96-18-4	1.41E-03	EPA6 e	3.53E-06	EPA6 e	3.02E+01	EPA6 e	NA
1,2-dibromo-3-chloropropane	96-12-8	1.74E-03	EPA6 e	4.34E-06	EPA6 e	3.54E+01	EPA6 e	NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	2.30E-04	EPA6 e	5.75E-07	EPA6 e	7.61E+00	EPA6 e	NA
1,2-Dichloroethylene	540-59-0	2.40E-05	EPA6 calc c	5.99E-08	EPA6 calc c	1.36E+00	EPA6 calc c	NA
1,2-Dichloropropane	78-87-5	1.41E-03	EPA6 e	3.53E-06	EPA6 e	3.02E+01	EPA6 e	NA
1,3-Dichloropropene	542-75-6	4.45E-04	EPA6 e	1.11E-06	EPA6 e	1.25E+01	EPA6 e	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
1,4-Dichloro-2-butene	764-41-0	5.92E-05	EPA6 calc c	1.48E-07	EPA6 calc c	2.71E+00	EPA6 calc c	NA
1-Chloroethene	75-01-4	1.11E-04	EPA6 e	2.78E-07	EPA6 e	4.37E+00	EPA6 e	NA
2,2-Dichloropropionic acid	75-99-0	4.76E-05	EPA6 calc c	1.19E-07	EPA6 calc c	2.30E+00	EPA6 calc c	NA
2-Chloropropane	75-29-6	6.31E-04	EPA6 calc c	1.58E-06	EPA6 calc c	1.64E+01	EPA6 calc c	NA
3-Chloropropene (allyl chloride)	107-05-1	7.15E-05	EPA6 calc c	1.79E-07	EPA6 calc c	3.13E+00	EPA6 calc c	NA
Bromochloromethane	74-97-5	2.04E-04	EPA6 calc c	5.10E-07	EPA6 calc c	6.94E+00	EPA6 calc c	NA
Bromodichloromethane	75-27-4	8.42E-04	EPA6 e	2.10E-06	EPA6 e	2.04E+01	EPA6 e	NA
Bromoethene	593-60-2	9.26E-05	EPA6 calc c	2.31E-07	EPA6 calc c	3.81E+00	EPA6 calc c	NA
Bromoform	75-25-2	1.78E-03	EPA6 e	4.44E-06	EPA6 e	3.60E+01	EPA6 e	NA
Bromomethane	74-83-9	1.03E-04	EPA6 e	2.58E-07	EPA6 e	4.14E+00	EPA6 e	NA
Carbon tetrachloride	56-23-5	4.14E-03	EPA6 e	1.05E-05	EPA6 e	3.00E+01	EPA6 e	NA
Chlordibromomethane	124-48-1	1.19E-03	EPA6 e	2.97E-06	EPA6 e	2.65E+01	EPA6 e	NA
Chlorodifluoromethane	75-45-6	9.53E-05	EPA6 e	2.38E-07	EPA6 e	3.89E+00	EPA6 e	NA
Chloroethane	75-00-3	1.00E-02	EPA6 e	2.50E-05	EPA6 e	1.34E+02	EPA6 e	NA
Chloroform	67-66-3	7.07E-04	EPA6 e	1.76E-06	EPA6 e	3.59E+00	EPA6 e	NA
Chloromethane	74-87-3	6.35E-05	EPA6 e	1.59E-07	EPA6 e	2.86E+00	EPA6 e	NA
Chloropentafluoroethane	76-15-3	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	7.63E-04	EPA6 e	1.90E-06	EPA6 e	1.89E+01	EPA6 e	NA
cis-1,3-Dichloropropene	10061-01-5	NA	NA	NA	NA	NA	NA	NA
Cyanogen bromide	506-68-3	NA	NA	NA	NA	NA	NA	NA
Cyanogen chloride	506-77-4	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	75-71-8	1.15E-03	EPA6 e	2.87E-06	EPA6 e	2.58E+01	EPA6 e	NA
Dichlorofluoromethane	75-43-4	NA	NA	NA	NA	NA	NA	NA
Dichloromethane	75-09-2	1.43E-04	EPA6 e	3.57E-07	EPA6 e	5.30E+00	EPA6 e	NA
Difluorodibromomethane	75-61-6	NA	NA	NA	NA	NA	NA	NA
Hexafluoroacetone	684-16-2	NA	NA	NA	NA	NA	NA	NA
Iodomethane	74-88-4	3.89E-04	EPA6 calc c	9.71E-07	EPA6 calc c	1.13E+01	EPA6 calc c	NA
Methylene bromide	74-95-3	3.31E-04	EPA6 e	8.27E-07	EPA6 e	1.00E+01	EPA6 e	NA
Pentachloroethane	76-01-7	8.91E-03	EPA6 calc c	2.23E-05	EPA6 calc c	1.22E+02	EPA6 calc c	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
trans-1,2-Dichloroethene	156-60-5	7.63E-04	EPA6 e	1.90E-06	EPA6 e	1.89E+01	EPA6 e	NA
trans-1,3-Dichloropropene	10061-02-6	9.12E-04	EPA6 calc c	2.28E-06	EPA6 calc c	2.17E+01	EPA6 calc c	NA
Trichloroacetic acid	76-03-9	1.70E-04	EPA6 calc c	4.24E-07	EPA6 calc c	6.04E+00	EPA6 calc c	NA
Trichlorofluoroethane	27154-33-2	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	75-69-4	2.70E-03	EPA6 e	6.74E-06	EPA6 e	4.94E+01	EPA6 e	NA
Trifluorobromomethane	75-63-8	5.75E-04	EPA6 calc c	1.44E-06	EPA6 calc c	1.53E+01	EPA6 calc c	NA
Dioxin and Furan Compounds								
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	2.55E-02	EPA6 e	8.58E-03	EPA6 e	NA	EPA6 e	NA
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	2.09E-02	EPA6 e	7.04E-03	EPA6 e	NA	EPA6 e	NA
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	2.42E-02	EPA6 e	1.06E-02	EPA6 e	NA	EPA6 e	NA
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	4.53E-02	EPA6 e	4.03E-02	EPA6 e	NA	EPA6 e	NA
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	4.51E-02	EPA6 e	3.48E-02	EPA6 e	NA	EPA6 e	NA
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	3.70E-02	EPA6 e	2.57E-02	EPA6 e	NA	EPA6 e	NA
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	4.53E-02	EPA6 e	3.56E-02	EPA6 e	NA	EPA6 e	NA
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	2.33E-02	EPA6 e	1.39E-02	EPA6 e	NA	EPA6 e	NA
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	NA	EPA6 e	NA	EPA6 e	NA	EPA6 e	NA
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	4.71E-02	EPA6 e	5.50E-02	EPA6 e	NA	EPA6 e	NA
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	NA	EPA6 e	NA	EPA6 e	NA	EPA6 e	NA
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	2.11E-02	EPA6 e	1.74E-02	EPA6 e	NA	EPA6 e	NA
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	5.61E-02	EPA6 e	7.32E-02	EPA6 e	NA	EPA6 e	NA
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	5.42E-02	EPA6 e	7.30E-02	EPA6 e	NA	EPA6 e	NA
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	3.61E-02	EPA6 e	5.63E-02	EPA6 e	NA	EPA6 e	NA
Dibenzofuran	132-64-9	1.70E-01	EPA6 calc c	4.24E-04	EPA6 calc c	NA	NA	NA
Octachlorodibenzo(p)dioxin	3268-87-9	9.90E-03	EPA6 e	1.10E-03	EPA6 e	NA	EPA6 e	NA
Octachlorodibenzofuran	39001-02-0	7.92E-03	EPA6 e	4.40E-04	EPA6 e	NA	EPA6 e	NA
PCBs								
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	9.55E+01	EPA6 calc c	2.38E-01	EPA6 calc c	NA	NA	NA
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	1.05E+02	EPA6 calc c	2.61E-01	EPA6 calc c	NA	NA	NA
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	NA	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	NA
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	NA	NA	NA	NA	NA	NA	NA
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	NA	NA	NA	NA	NA	NA	NA
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	NA
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	NA	NA	NA	NA	NA	NA	NA
2',3,4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	NA
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	1.05E+02	EPA6 calc c	2.61E-01	EPA6 calc c	NA	NA	NA
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	2.03E+02	EPA6 calc c	5.07E-01	EPA6 calc c	NA	NA	NA
3,3',4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA	NA	NA	NA	NA
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	NA	NA	NA	NA	NA	NA	NA
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	NA	NA	NA	NA	NA	NA	NA
Polychlorinated biphenyls (PCBs)**	1336-36-3	1.62E+02	EPA6 calc c	4.04E-01	EPA6 calc c	NA	NA	2.10E+04
Phthalates								
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	1.27E+00	EPA6 e	3.18E-03	EPA6 e	NA	EPA6 e	3.60E+02
Butylbenzyl phthalate	85-68-7	2.06E-01	EPA6 e	5.13E-04	EPA6 e	NA	EPA6 e	2.35E+03
Dibutyl phthalate	84-74-2	4.17E-01	EPA6 e	1.04E-03	EPA6 e	NA	EPA6 e	5.58E+03
Diethyl phthalate	84-66-2	2.17E-01	EPA6 e	5.42E-04	EPA6 e	NA	EPA6 e	2.45E+03
Dimethyl phthalate	131-11-3	3.42E-04	EPA6 e	8.53E-07	EPA6 e	1.03E+01	EPA6 e	NA
n-Dioctyl phthalate	117-84-0	1.70E+04	EPA6 e	4.24E+01	EPA6 e	NA	EPA6 e	3.88E+03
Light Polycyclic Aromatic Hydrocarbons								
2-Chloronaphthalene	91-58-7	9.33E-02	EPA6 e	2.33E-04	EPA6 e	NA	EPA6 e	9.60E+02
2-Methyl naphthalene	91-57-6	5.75E-02	EPA6 calc c	1.44E-04	EPA6 calc c	5.05E+02	EPA6 calc c	NA
5-Nitroacenaphthene	602-87-9	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	7.32E-02	EPA6 e	1.83E-04	EPA6 e	6.07E+02	EPA6 e	NA
Acenaphthylene	208-96-8	9.33E-02	EPA6 calc c	2.33E-04	EPA6 calc c	NA	NA	NA
Anthracene	120-12-7	2.34E-01	EPA6 e	5.85E-04	EPA6 e	NA	EPA6 e	2.60E+03
Fluorene	86-73-7	1.20E-01	EPA6 calc c	3.00E-04	EPA6 calc c	NA	NA	NA
Indene	95-13-6	NA	NA	NA	NA	NA	NA	NA
Napthalene	91-20-3	1.87E-02	EPA6 e	4.67E-05	EPA6 e	2.15E+02	EPA6 e	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
Phenanthrene	85-01-8	2.82E-01	EPA6 e	7.04E-04	EPA6 e	NA	EPA6 e	3.30E+03
Pyrene	129-00-0	7.98E-01	EPA6 e	1.99E-03	EPA6 e	NA	EPA6 e	1.19E+04
Heavy Polycyclic Aromatic Hydrocarbons								
3-Methylcholanthrene	56-49-5	1.02E+02	EPA6 calc c	2.55E-01	EPA6 calc c	NA	NA	NA
5-Methylchrysene	3697-24-3	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	56-55-3	3.79E+00	EPA6 e	9.46E-03	EPA6 e	NA	EPA6 e	5.10E+03
Benzo(a)pyrene	50-32-8	1.07E+01	EPA6 e	2.67E-02	EPA6 e	NA	EPA6 e	9.95E+03
Benzo(b)fluoranthene	205-99-2	1.27E+01	EPA6 e	3.16E-02	EPA6 e	NA	EPA6 e	9.95E+03
Benzo(e)pyrene	192-97-2	2.00E+02	EPA6 calc c	4.98E-01	EPA6 calc c	NA	NA	NA
Benzo(g,h,i)perylene	191-24-2	1.00E+02	EPA6 calc c	2.50E-01	EPA6 calc c	NA	NA	NA
Benzo(j)fluoranthene	205-82-3	2.19E+01	EPA6 calc c	5.46E-02	EPA6 calc c	NA	NA	NA
Benzo(k)fluoranthene	207-08-9	1.26E+01	EPA6 e	3.14E-02	EPA6 e	NA	EPA6 e	9.95E+03
Benzo[a,i]pyrene	191-30-0	NA	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	4.35E+00	EPA6 e	1.09E-02	EPA6 e	NA	EPA6 e	6.03E+03
Dibenz(a,h)anthracene	53-70-3	2.80E+01	EPA6 e	7.00E-02	EPA6 e	NA	EPA6 e	1.28E+04
Dibenz[a,h]acridine	226-36-8	NA	NA	NA	NA	NA	NA	NA
Dibenz[a,j]acridine	224-42-0	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,e)fluoranthene	5385-75-1	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)fluoranthene	no cas #	NA	NA	NA	NA	NA	NA	NA
Dibenzo[a,e]pyrene	192-65-4	NA	NA	NA	NA	NA	NA	NA
Dibenzo[a,h]pyrene	189-64-0	NA	NA	NA	NA	NA	NA	NA
Dibenzo[a,i]pyrene	189-55-9	1.55E+02	EPA6 calc c	3.87E-01	EPA6 calc c	NA	NA	NA
Fluoranthene	206-44-0	9.65E-01	EPA6 e	2.41E-03	EPA6 e	NA	EPA6 e	1.57E+04
Hexachloronaphthalene	1335-87-1	3.09E+02	EPA6 calc c	7.72E-01	EPA6 calc c	NA	NA	NA
Indeno(1,2,3-cd)pyrene	193-39-5	6.53E+01	EPA6 e	1.63E-01	EPA6 e	NA	EPA6 e	1.31E+04
Octachloronaphthalene	2234-13-1	2.09E+01	EPA6 calc c	5.22E-02	EPA6 calc c	NA	NA	NA
Pentachloronaphthalene	1321-64-8	NA	NA	NA	NA	NA	NA	NA
Tetrachloronaphthalene	1335-88-2	NA	NA	NA	NA	NA	NA	NA
Trichloronaphthalene	1321-65-9	NA	NA	NA	NA	NA	NA	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
Light Substituted Benzene Compounds								
1,2,3-Trichlorobenzene	87-61-6	8.82E-02	EPA6 e	2.20E-04	EPA6 e	NA	EPA6 e	8.76E+02
1,2,4-Trichlorobenzene	120-82-1	7.73E-02	EPA6 e	1.93E-04	EPA6 e	6.33E+02	EPA6 e	NA
1,2,4-Trimethlyl benzene	25551-13-7	2.00E-02	EPA6 calc c	4.98E-05	EPA6 calc c	2.26E+02	EPA6 calc c	NA
1,2,4-Trimethyl benzene	95-63-6	3.55E-02	EPA6 calc c	8.86E-05	EPA6 calc c	3.50E+02	EPA6 calc c	NA
1,2-Dichlorobenzene	95-50-1	2.21E-02	EPA6 e	5.53E-05	EPA6 e	2.45E+02	EPA6 e	NA
1,3,5-Trimethyl benzene	108-67-8	2.09E-02	EPA6 e	5.22E-05	EPA6 e	2.34E+02	EPA6 e	NA
1,3-Dichlorobenzene	541-73-1	2.69E-02	EPA6 e	6.72E-05	EPA6 e	2.84E+02	EPA6 e	NA
1,3-Dinitrobenzene	99-65-0	2.46E-04	EPA6 e	6.15E-07	EPA6 e	7.40E+01	EPA6 e	NA
1,4-Dichlorobenzene	106-46-7	2.05E-02	EPA6 e	5.12E-05	EPA6 e	2.31E+02	EPA6 e	NA
1,4-Dinitrobenzene	100-25-4	2.51E-04	EPA6 calc c	6.27E-07	EPA6 calc c	8.13E+00	EPA6 calc c	NA
2,4,5-Trichorophenol	95-95-4	5.89E-02	EPA6 e	1.47E-04	EPA6 e	5.14E+02	EPA6 e	NA
2,4,6-Trichlorophenol	88-06-2	4.09E-02	EPA6 e	1.02E-04	EPA6 e	3.90E+02	EPA6 e	NA
2,4-Dichlorophenol	120-83-2	8.62E-03	EPA6 e	2.15E-05	EPA6 e	1.19E+02	EPA6 e	NA
2,4-Dimethylphenol	105-67-9	1.82E-03	EPA6 e	4.54E-06	EPA6 e	3.66E+01	EPA6 e	NA
2,4-Dinitrophenol	51-28-5	2.62E-04	EPA6 e	6.54E-07	EPA6 e	8.40E+00	EPA6 e	NA
2,4-Dinitrotoluene	121-14-2	7.86E-04	EPA6 e	1.96E-06	EPA6 e	5.92E+00	EPA6 e	NA
2,6-Dinitrotoluene	606-20-2	6.12E-04	EPA6 e	1.53E-06	EPA6 e	5.92E+00	EPA6 e	NA
2-Chlorotoluene	95-49-8	2.73E-02	EPA6 calc c	6.82E-05	EPA6 calc c	2.87E+02	EPA6 calc c	NA
2-Chorophenol	95-57-8	1.15E-03	EPA6 e	2.88E-06	EPA6 e	2.59E+01	EPA6 e	NA
2-Nitrophenol	88-75-5	4.90E-04	EPA6 e	1.22E-06	EPA6 e	1.35E+01	EPA6 e	NA
4,6-Dinitro-o-cresol	534-52-1	5.62E-03	EPA6 calc c	1.40E-05	EPA6 calc c	8.63E+01	EPA6 calc c	NA
4-Chlorotoluene	106-43-4	1.70E-02	EPA6 calc c	4.24E-05	EPA6 calc c	2.00E+02	EPA6 calc c	NA
4-Nitrophenol	100-02-7	6.46E-04	EPA6 e	1.61E-06	EPA6 e	1.67E+01	EPA6 e	NA
alpha-Methylstyrene	98-83-9	2.31E-02	EPA6 calc c	5.77E-05	EPA6 calc c	2.53E+02	EPA6 calc c	NA
Aniline	62-53-3	7.59E-05	EPA6 e	1.89E-07	EPA6 e	3.27E+00	EPA6 e	NA
Benzotrichloride	98-07-7	6.61E-03	EPA6 calc c	1.65E-05	EPA6 calc c	9.75E+01	EPA6 calc c	NA
Benzyl Chloride	100-44-7	1.83E-05	EPA6 e	4.56E-08	EPA6 e	1.11E+00	EPA6 e	NA
Bromobenzene	108-86-1	7.76E-03	EPA6 calc c	1.94E-05	EPA6 calc c	1.10E+02	EPA6 calc c	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
Chlorobenzene	108-90-7	4.89E-03	EPA6 e	1.22E-05	EPA6 e	7.76E+01	EPA6 e	NA
Cumene	98-82-8	3.26E-02	EPA6 e	8.13E-05	EPA6 e	3.28E+02	EPA6 e	NA
m-Cresol	108-39-4	7.23E-04	EPA6 e	1.86E-06	EPA6 e	1.81E+01	EPA6 e	NA
n-Butyl benzene	104-51-8	1.51E-01	EPA6 calc c	3.78E-04	EPA6 calc c	NA	NA	NA
Nitrobenzene	98-95-3	5.40E-04	EPA6 e	1.35E-06	EPA6 e	5.92E+00	EPA6 e	NA
n-Propyl benzene	103-65-1	3.89E-02	EPA6 calc c	9.71E-05	EPA6 calc c	3.75E+02	EPA6 calc c	NA
o-Cresol	95-48-7	8.34E-04	EPA6 e	2.08E-06	EPA6 e	2.02E+01	EPA6 e	NA
o-Dinitrobenzene	528-29-0	3.16E-04	EPA6 calc c	7.89E-07	EPA6 calc c	9.68E+00	EPA6 calc c	NA
o-Nitroaniline	88-74-4	5.62E-04	EPA6 e	1.40E-06	EPA6 e	1.50E+01	EPA6 e	NA
o-Toluidine	95-53-4	1.74E-04	EPA6 e	4.34E-07	EPA6 e	6.14E+00	EPA6 e	NA
p-Chloroaniline	106-47-8	5.88E-04	EPA6 e	1.47E-06	EPA6 e	1.55E+01	EPA6 e	NA
p-Cresol	106-44-5	6.91E-04	EPA6 e	1.73E-06	EPA6 e	1.75E+01	EPA6 e	NA
Phenol	108-95-2	2.38E-04	EPA6 e	5.95E-07	EPA6 e	7.81E+00	EPA6 e	NA
p-Nitrochlorobenzene	100-00-5	1.95E-03	EPA6 calc c	4.87E-06	EPA6 calc c	3.86E+01	EPA6 calc c	NA
p-Toluidine	106-49-0	2.00E-04	EPA6 calc c	4.98E-07	EPA6 calc c	6.82E+00	EPA6 calc c	NA
sec-Butyl benzene	135-98-8	NA	NA	NA	NA	NA	NA	NA
tert-Butyl benzene	98-06-6	1.02E-01	EPA6 calc c	2.55E-04	EPA6 calc c	NA	NA	NA
Toluene-2,6-diamine	823-40-5	2.26E-04	EPA6 calc c	5.65E-07	EPA6 calc c	7.51E+00	EPA6 calc c	NA
Other Light Semivolatile Compounds								
1,1 Dimethyl hydrazine	57-14-7	3.13E-05	EPA6 calc c	7.81E-08	EPA6 calc c	1.67E+00	EPA6 calc c	NA
1,1-Biphenyl	92-52-4	6.31E-02	EPA6 calc c	1.58E-04	EPA6 calc c	5.42E+02	EPA6 calc c	NA
1,2 Diphenylhydrazine	122-66-7	6.92E-03	EPA6 e	1.73E-05	EPA6 e	1.01E+02	EPA6 e	NA
1,2-Dimethylhydrazine	540-73-8	3.40E-07	EPA6 calc c	8.50E-10	EPA6 calc c	5.37E-02	EPA6 calc c	NA
1,3-Propane sultone	1120-71-4	2.38E-06	EPA6 calc c	5.95E-09	EPA6 calc c	2.36E-01	EPA6 calc c	NA
2,4-Toluene diisocyanate	584-84-9	NA	NA	NA	NA	NA	NA	NA
2-Chloroacetophenone	532-27-4	3.12E-03	EPA6 calc c	7.80E-06	EPA6 calc c	5.52E+01	EPA6 calc c	NA
2-Propenoic acid	79-10-7	2.14E-05	EPA6 calc c	5.34E-08	EPA6 calc c	1.25E+00	EPA6 calc c	NA
4,4-Methylenedianiline	101-77-9	1.90E-02	EPA6 calc c	4.75E-05	EPA6 calc c	2.18E+02	EPA6 calc c	NA
Acetophenone	98-86-2	3.47E-04	EPA6 e	8.66E-07	EPA6 e	1.04E+01	EPA6 e	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
Benzoic acid	65-85-0	6.04E-04	NA	1.51E-06	NA	1.58E+01	EPA6 calc c	NA
bis(2-Chloroethoxy)methane	111-91-1	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	111-44-4	1.59E-04	EPA6 e	3.97E-07	EPA6 e	5.74E+00	EPA6 e	NA
Chlorocyclopentadiene	41851-50-7	2.14E-03	EPA6 calc c	5.34E-06	EPA6 calc c	4.14E+01	EPA6 calc c	NA
Cyclohexanol	108-93-0	1.35E-04	EPA6 calc c	3.37E-07	EPA6 calc c	5.07E+00	EPA6 calc c	NA
Dichloroisopropyl ether	108-60-1	3.02E-03	EPA6 calc c	7.54E-06	EPA6 calc c	5.38E+01	EPA6 calc c	NA
Dichloromethyl ether	542-88-1	3.31E-06	EPA6 calc c	8.27E-09	EPA6 calc c	3.03E-01	EPA6 calc c	1.10E+00
Dichloropentadiene	no cas #	NA	NA	NA	NA	NA	NA	NA
Dimethyl sulfate	77-78-1	1.65E-05	EPA6 calc c	4.13E-08	EPA6 calc c	1.03E+00	EPA6 calc c	NA
Dimethylaniline	121-69-7	1.05E-06	EPA6 calc c	2.61E-09	EPA6 calc c	1.26E-01	EPA6 calc c	NA
di-n-propylnitrosamine	621-64-7	1.91E-04	EPA6 e	4.76E-07	EPA6 e	6.59E+00	EPA6 e	NA
Diphenyl ether	101-84-8	1.29E-01	EPA6 calc c	3.22E-04	EPA6 calc c	NA	NA	NA
Epichlorohydrin	106-89-8	1.41E-05	EPA6 e	3.53E-08	EPA6 e	9.13E-01	EPA6 e	NA
Ethyl carbomate (urethane)	51-79-6	5.62E-06	EPA6 calc c	1.40E-08	EPA6 calc c	4.53E-01	EPA6 calc c	NA
Ethyl methane sulfanate	62-50-0	8.90E-06	EPA6 e	2.22E-08	EPA6 e	6.42E-01	EPA6 e	NA
Ethylene dibromide	106-93-4	4.47E-04	EPA6 e	1.12E-06	EPA6 e	1.26E+01	EPA6 e	NA
Ethylene glycol	107-21-1	9.67E-07	EPA6 calc c	2.41E-09	EPA6 calc c	1.19E-01	EPA6 calc c	NA
Ethylene glycol monobutyl ether	111-76-2	2.85E-04	EPA6 calc c	7.11E-07	EPA6 calc c	8.94E+00	EPA6 calc c	NA
Ethylene glycol monoethyl ether acetate	111-15-9	3.31E-05	EPA6 calc c	8.25E-08	EPA6 calc c	1.74E+00	EPA6 calc c	NA
Ethylene thiourea	96-45-7	1.81E-06	EPA6 calc c	4.53E-09	EPA6 calc c	1.92E-01	EPA6 calc c	NA
Furfural	98-01-1	7.24E-05	EPA6 calc c	1.81E-07	EPA6 calc c	3.16E+00	EPA6 calc c	NA
Maleic hydrazide	123-33-1	1.45E-06	EPA6 calc c	3.61E-09	EPA6 calc c	1.61E-01	EPA6 calc c	NA
Malononitrile	109-77-3	8.71E-06	EPA6 calc c	2.17E-08	EPA6 calc c	6.32E-01	EPA6 calc c	NA
Methyl styrene (mixed isomers)	25013-15-4	1.78E-02	EPA6 calc c	4.44E-05	EPA6 calc c	2.07E+02	EPA6 calc c	NA
Methylhydrazine	60-34-4	7.08E-07	EPA6 calc c	1.77E-09	EPA6 calc c	9.38E-02	EPA6 calc c	NA
N,N-Diphenylamine	122-39-4	2.51E-02	EPA6 calc c	6.27E-05	EPA6 calc c	2.69E+02	EPA6 calc c	NA
Nitric acid, propyl ester	627-13-4	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-butylamine	924-16-3	2.04E-03	EPA6 e	5.10E-06	EPA6 e	4.00E+01	EPA6 e	NA
N-Nitrosomorpholine	59-89-2	7.59E-05	EPA6 calc c	1.90E-07	EPA6 calc c	3.27E+00	EPA6 calc c	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
N-Nitroso-N,N-dimethylamine	62-75-9	2.69E-06	EPA6 calc c	6.72E-09	EPA6 calc c	2.59E-01	EPA6 calc c	NA
o-Anisidine	90-04-0	1.20E-04	EPA6 calc c	3.00E-07	EPA6 calc c	4.64E+00	EPA6 calc c	NA
Oxalic acid	144-62-7	NA	NA	NA	NA	NA	NA	NA
Phthalic Anhydride	85-44-9	1.99E-06	EPA6 e	4.96E-09	EPA6 e	2.05E-01	EPA6 e	NA
p-Phthalic acid	100-21-0	5.28E-05	EPA6 calc c	1.32E-07	EPA6 calc c	2.48E+00	EPA6 calc c	NA
Pyridine	110-86-1	3.72E-05	EPA6 e	9.28E-08	EPA6 e	1.90E+00	EPA6 e	NA
Quinoline	91-22-5	8.51E-04	EPA6 calc c	2.12E-06	EPA6 calc c	2.05E+01	EPA6 calc c	NA
Quinone	106-51-4	1.26E-05	EPA6 calc c	3.14E-08	EPA6 calc c	8.36E-01	EPA6 calc c	NA
Safrole	94-59-7	3.63E-03	EPA6 e	9.06E-06	EPA6 e	6.19E+01	EPA6 e	NA
Tetrahydrofuran	109-99-9	2.22E-05	EPA6 e	5.55E-08	EPA6 e	1.29E+00	EPA6 e	NA
Other Heavy Semivolatile Compounds								
1,2,4,5-Tetrachlorobenzene	95-94-3	3.47E-01	EPA6 e	8.66E-04	EPA6 e	NA	EPA6 e	4.30E+03
1,3,5-Trinitrobenzene	99-35-4	1.20E-04	EPA6 e	3.00E-07	EPA6 e	4.64E+00	EPA6 e	NA
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	1.17E-01	EPA6 calc c	2.93E-04	EPA6 calc c	NA	NA	NA
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	1.58E-08	EPA6 calc c	3.96E-11	EPA6 calc c	5.22E-03	EPA6 calc c	NA
2-sec-Butyl-4,6-dinitrophenol	88-85-7	1.10E-02	EPA6 calc c	2.74E-05	EPA6 calc c	1.43E+02	EPA6 calc c	NA
3,3-Dichlorobenzidine	91-94-1	2.99E-02	EPA6 e	7.45E-05	EPA6 e	3.07E+02	EPA6 e	NA
3,3'-Dimethoxybenzidine	119-90-4	5.13E-04	EPA6 e	1.28E-06	EPA6 e	1.40E+01	EPA6 e	NA
4-Bromophenylphenyl ether	101-55-3	7.94E-01	EPA6 calc c	1.98E-03	EPA6 calc c	NA	NA	NA
Ammonium perfluorooctanoate	3825-26-1	NA	NA	NA	NA	NA	NA	NA
Azobenzene	103-33-3	5.25E-02	EPA6 calc c	1.31E-04	EPA6 calc c	4.71E+02	EPA6 calc c	NA
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	NA	NA	NA	NA	NA	NA	NA
Captan	133-06-2	1.78E-03	EPA6 calc c	4.44E-06	EPA6 calc c	3.60E+01	EPA6 calc c	NA
Chlorobenzilate	510-15-6	1.91E-01	EPA6 e	4.76E-04	EPA6 e	NA	EPA6 e	2.03E+03
Dibutylphosphate	107-66-4	NA	NA	NA	NA	NA	NA	NA
Dimethyl aminoazobenzene	60-11-7	3.02E-01	EPA6 calc c	7.54E-04	EPA6 calc c	NA	NA	NA
Hexachlorobenzene	118-74-1	2.53E+00	EPA6 e	6.31E-03	EPA6 e	NA	EPA6 e	5.52E+04
Hexachlorobutadiene	87-68-3	4.27E-01	EPA6 e	1.07E-03	EPA6 e	NA	EPA6 e	5.69E+03
Hexachlorocyclopentadiene	77-47-4	6.41E-01	EPA6 e	1.60E-03	EPA6 e	NA	EPA6 e	5.25E+02

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
Hexachloroethane	67-72-1	7.67E-02	EPA6 e	1.92E-04	EPA6 e	6.29E+02	EPA6 e	NA
Hexachlorophene	70-30-4	2.75E+02	EPA6 e	6.88E-01	EPA6 e	NA	EPA6 e	4.66E+03
Hexamethylene-1,5-diisocyanate	822-06-0	1.49E-04	EPA6 calc c	3.72E-07	EPA6 calc c	5.47E+00	EPA6 calc c	NA
Mirex	2385-85-5	6.17E+01	EPA6 calc c	1.54E-01	EPA6 calc c	NA	NA	NA
Nitrofen	1836-75-5	2.69E+00	EPA6 calc c	6.72E-03	EPA6 calc c	NA	NA	NA
Pentachlorobenzene	608-93-5	9.72E-01	EPA6 e	2.43E-03	EPA6 e	NA	EPA6 e	3.61E+04
Pentachloronitrobenzene	82-68-8	3.47E-01	EPA6 e	8.66E-04	EPA6 e	NA	EPA6 e	4.65E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Pentachlorophenol*	87-86-5	9.55E-01	EPA6 e	2.39E-03	EPA6 e	NA	EPA6 e	3.97E+02
Picric acid	88-89-1	8.51E-04	EPA6 calc c	2.12E-06	EPA6 calc c	2.05E+01	EPA6 calc c	NA
Pronamide	23950-58-5	2.57E-02	EPA6 e	6.42E-05	EPA6 e	2.74E+02	EPA6 e	NA
Strychnine	57-24-9	6.76E-04	EPA6 e	1.69E-06	EPA6 e	1.72E+01	EPA6 e	NA
Terphenyls	26140-60-3	NA	NA	NA	NA	NA	NA	NA
Tributyl phosphate	126-73-8	7.94E-02	EPA6 calc c	1.98E-04	EPA6 calc c	NA	NA	NA
Trifluralin	1582-09-8	1.74E+00	EPA6 calc c	4.34E-03	EPA6 calc c	NA	NA	NA
Triphenylamine	603-34-9	NA	NA	NA	NA	NA	NA	NA
Herbicides and Organopesticides								
2,4,5-T	93-76-5	1.82E-02	EPA6 calc c	4.54E-05	EPA6 calc c	2.11E+02	EPA6 calc c	NA

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)
2,4-D and esters	94-75-7	5.13E-03	EPA6 calc c	1.28E-05	EPA6 calc c	8.05E+01	EPA6 calc c	NA
4,4-DDD	72-54-8	1.26E+01	EPA6 calc c	3.14E-02	EPA6 calc c	NA	NA	NA
4,4-DDT	50-29-3	7.94E+00	EPA6 calc c	1.98E-02	EPA6 calc c	NA	NA	NA
Aldrin	309-00-2	1.20E+01	EPA6 e	2.99E-02	EPA6 e	NA	EPA6 e	5.82E+05
alpha-BHC	319-84-6	5.00E-02	EPA6 e	1.25E-04	EPA6 e	4.54E+02	EPA6 e	NA
beta-BHC	319-85-7	5.41E-02	EPA6 e	1.35E-04	EPA6 e	4.82E+02	EPA6 e	NA
Chlordane	57-74-9	6.88E+00	EPA6 e	1.72E-02	EPA6 e	6.07E-01	EPA6 e	NA
DDE	72-55-9	1.43E+01	EPA6 e	3.58E-02	EPA6 e	NA	EPA6 e	5.53E+05
Delta-BHC	319-86-8	1.10E-01	EPA6 calc c	2.74E-04	EPA6 calc c	NA	NA	NA
Dieldrin	60-57-1	1.48E+00	EPA6 e	3.68E-03	EPA6 e	NA	EPA6 e	2.86E+04
Endothall	145-73-3	1.07E-06	EPA6 calc c	2.68E-09	EPA6 calc c	1.28E-01	EPA6 calc c	NA
Endrin	72-20-8	6.19E-01	EPA6 e	1.55E-03	EPA6 e	NA	EPA6 e	8.55E+03
gamma-BHC(Lindane)	58-89-9	4.17E-02	EPA6 calc c	1.04E-04	EPA6 calc c	3.96E+02	EPA6 calc c	NA
Heptachlor	76-44-8	8.22E-01	EPA6 e	2.05E-03	EPA6 e	5.52E+03	EPA6 e	NA
Isodrin	465-73-6	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	72-43-5	2.67E-01	EPA6 e	6.66E-04	EPA6 e	NA	EPA6 e	3.16E+03
Silvex (2,4,5-TP)	93-72-1	9.38E-02	EPA6 calc c	2.34E-04	EPA6 calc c	NA	NA	NA
Toxaphene	8001-35-2	2.51E+00	EPA6 calc c	6.27E-03	EPA6 calc c	NA	NA	NA

NA = Value not available
** = Varies with pH; values given for a pH of 7.0.
a = Illustrated Handbook of Physical - Chemical Properties and Environmental Fate f
b = RAIS database: http://risk.lsd.ornl.gov/rap_hp.shtml
c = Equations derived from EPA Region 6 Guidance Appendix A-3
d = Handbook of Environmental degradation Rates. 1991.
e = EPA Region 6 Hazardous Waste Combustion Guidance
f = "A Critical Review of Henry's Law Constants for Chemicals of Environmental In
g = Handbook of Environmental Fate and Exposure Data for Organic Chemicals
h = http://www.epa.gov/region09/waste/sfund/prg/.
i = http://esc.syrres.com/efdb/Chemfate.htm
j = Hansch and Leo 1985 in Syracuse 1996

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors						
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)

k = Schwarzenbach et al. 1993

l = Tomlin 1994 in Syracuse 1996

m = http://www.speclab.com/compound/c959988.htm

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	$BSAF_{fish}$ (unitless)	Source		
Aromatic Halogenated Hydrocarbons						
2,3,4,6-Tetrachlorophenol	58-90-2	NA	NA	NA		
4-Chloro-3-methylphenol	59-50-7	NA	NA	NA		
Aromatic Nonhalogenated Hydrocarbons						
2-Nitrotoluene	88-72-2	NA	NA	NA		
4-Nitrobiphenyl	92-93-3	NA	NA	NA		
Benzaldehyde	100-52-7	EPA6 e	NA	EPA6 e		
Benzene	71-43-2	EPA6 e	NA	EPA6 e		
Benzyl alcohol	100-51-6	EPA6 e	NA	EPA6 e		
Ethyl Benzene	100-41-4	EPA6 e	NA	EPA6 e		
m-Xylene	108-38-3	EPA6 e	NA	EPA6 e		
o-Xylene	95-47-6	EPA6 e	NA	EPA6 e		
p-Xylene	106-42-3	EPA6 e	NA	EPA6 e		
Styrene	100-42-5	EPA6 e	NA	EPA6 e		
Toluene	108-88-3	EPA6 e	NA	EPA6 e		
Non-aromatic Nonhalogenated Hydrocarbons						
1,2-Epoxybutane	106-88-7	NA	NA	NA		
1,3-Butadiene	106-99-0	NA	NA	NA		
1,4-Dioxane	123-91-1	EPA6 e	NA	EPA6 e		
1-Methylpropyl alcohol	78-92-2	NA	NA	NA		
1-Nitropropane	108-03-2	NA	NA	NA		
2,2,4-Trimethlylpentane	540-84-1	NA	NA	NA		
2-Butanone	78-93-3	EPA6 e	NA	EPA6 e		
2-Butenaldehyde (2-Butenal)	4170-30-3	NA	NA	NA		
2-Ethoxyethanol	110-80-5	NA	NA	NA		
2-Heptanone	110-43-0	NA	NA	NA		
2-Hexanone	591-78-6	NA	NA	NA		
2-Methoxyethanol	109-86-4	NA	NA	NA		
2-Methyl-2-propanol	75-65-0	NA	NA	NA		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	$BSAF_{fish}$ (unitless)	Source		
2-Methyl-2-propenenitrile	126-98-7	EPA6 e	NA	EPA6 e		
2-Methylaziridine	75-55-8	NA	NA	NA		
2-Methylpropyl alcohol	78-83-1	NA	NA	NA		
2-Pentanone	107-87-9	NA	NA	NA		
2-Propanone (Acetone)	67-64-1	EPA6 e	NA	EPA6 e		
2-Propene-1-ol	107-18-6	NA	NA	NA		
2-Propyl alcohol	67-63-0	NA	NA	NA		
3-Heptanone	106-35-4	NA	NA	NA		
3-Methyl-1-butanol	123-51-3	NA	NA	NA		
3-Methyl-2-butanone	563-80-4	NA	NA	NA		
3-Pentanone	96-22-0	NA	NA	NA		
4-Heptanone	123-19-3	NA	NA	NA		
4-Methyl-2-pentanone	108-10-1	EPA6 e	NA	EPA6 e		
4-Methyl-3-penten-2-one	141-79-7	NA	NA	NA		
5-Methyl-2-hexanone	110-12-3	NA	NA	NA		
Acetaldehyde	75-07-0	EPA6 e	NA	EPA6 e		
Acetamide	60-35-5	NA	NA	NA		
Acetic acid	64-19-7	NA	NA	NA		
Acetic acid ethyl ester	141-78-6	NA	NA	NA		
Acetic acid n-butyl ester	123-86-4	NA	NA	NA		
Acetonitrile	75-05-8	EPA6 e	NA	EPA6 e		
Acrolein	107-02-8	EPA6 e	NA	EPA6 e		
Acrylonitrile	107-13-1	EPA6 e	NA	EPA6 e		
Bis(isopropyl)ether	108-20-3	NA	NA	NA		
Butane	106-97-8	NA	NA	NA		
Carbon disulfide	75-15-0	EPA6 e	NA	EPA6 e		
Cyanogen	460-19-5	NA	NA	NA		
Cyclohexane	110-82-7	NA	NA	NA		
Cyclohexanone	108-94-1	NA	NA	NA		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	$BSAF_{fish}$ (unitless)	Source		
Cyclohexene	110-83-8	NA	NA	NA		
Cyclopentane	287-92-3	NA	NA	NA		
Ethyl alcohol	64-17-5	NA	NA	NA		
Ethyl ether	60-29-7	NA	NA	NA		
Ethyl methacrylate	97-63-2	EPA6 e	NA	EPA6 e		
Formaldehyde	50-00-0	EPA6 e	NA	EPA6 e		
Formamide	75-12-7	NA	NA	NA		
Formic acid	64-18-6	EPA6 e	NA	EPA6 e		
Formic acid, methyl ester	107-31-3	NA	NA	NA		
Glycidylaldehyde	765-34-4	NA	NA	NA		
Methyl acetate	79-20-9	NA	NA	NA		
Methyl alcohol	67-56-1	EPA6 e	NA	EPA6 e		
Methyl isocyanate	624-83-9	NA	NA	NA		
Methyl methacrylate	80-62-6	NA	NA	NA		
Methyl tert-butyl ether	1634-04-4	NA	NA	NA		
Methylacetylene	74-99-7	NA	NA	NA		
Methylcyclohexane	108-87-2	NA	NA	NA		
N,N-Dimethylacetamide	127-19-5	NA	NA	NA		
n-Butyl alcohol	71-36-3	NA	NA	NA		
n-Heptane	142-82-5	NA	NA	NA		
n-Hexane	110-54-3	NA	NA	NA		
Nitromethane	75-52-5	NA	NA	NA		
n-Nonane	111-84-2	NA	NA	NA		
n-Octane	111-65-9	NA	NA	NA		
n-Pentane	109-66-0	NA	NA	NA		
n-Propionaldehyde	123-38-6	NA	NA	NA		
n-Propyl alcohol	71-23-8	NA	NA	NA		
n-Valeraldehyde	110-62-3	NA	NA	NA		
Oxirane	75-21-8	EPA6 e	NA	EPA6 e		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	**CAS Registry Number**	**Source**	**$BSAF_{fish}$ (unitless)**	**Source**		
p-Cymene	99-87-6	NA	NA	NA		
Phosgene	75-44-5	NA	NA	NA		
Propargyl alcohol	107-19-7	NA	NA	NA		
Propionic acid	79-09-4	NA	NA	NA		
Propionitrile	107-12-0	NA	NA	NA		
Propylene glycol monomethyl ether	107-98-2	NA	NA	NA		
p-tert-Butyltoluene	98-51-1	NA	NA	NA		
Triethylamine	121-44-8	NA	NA	NA		
Trimethylamine	75-50-3	NA	NA	NA		
Vinyl acetate	108-05-4	EPA6 e	NA	EPA6 e		
Non-aromatic Halogenated Hydrocarbons						
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	NA	NA	NA		
1,1,1,2-Tetrachloroethane	630-20-6	EPA6 e	NA	EPA6 e		
1,1,1-Trichloroethane	71-55-6	EPA6 e	NA	EPA6 e		
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	NA	NA	NA		
1,1,2,2-Tetrachloroethane	79-34-5	EPA6 e	NA	EPA6 e		
1,1,2,2-Tetrachloroethene	127-18-4	EPA6 e	NA	EPA6 e		
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NA	NA	NA		
1,1,2-Trichloroethane	79-00-5	EPA6 e	NA	EPA6 e		
1,1,2-Trichloroethylene	79-01-6	EPA6 e	NA	EPA6 e		
1,1-Dichloroethane	75-34-3	EPA6 e	NA	EPA6 e		
1,1-Dichloroethene	75-35-4	EPA6 e	NA	EPA6 e		
1,2,3-Trichloropropane	96-18-4	EPA6 e	NA	EPA6 e		
1,2-dibromo-3-chloropropane	96-12-8	EPA6 e	NA	EPA6 e		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	NA	NA	NA		
1,2-Dichloroethane	107-06-2	EPA6 e	NA	EPA6 e		
1,2-Dichloroethylene	540-59-0	NA	NA	NA		
1,2-Dichloropropane	78-87-5	EPA6 e	NA	EPA6 e		
1,3-Dichloropropene	542-75-6	EPA6 e	NA	EPA6 e		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	$BSAF_{fish}$ (unitless)	Source		
1,4-Dichloro-2-butene	764-41-0	NA	NA	NA		
1-Chloroethene	75-01-4	EPA6 e	NA	EPA6 e		
2,2-Dichloropropionic acid	75-99-0	NA	NA	NA		
2-Chloropropane	75-29-6	NA	NA	NA		
3-Chloropropene (allyl chloride)	107-05-1	NA	NA	NA		
Bromochloromethane	74-97-5	NA	NA	NA		
Bromodichloromethane	75-27-4	EPA6 e	NA	EPA6 e		
Bromoethene	593-60-2	NA	NA	NA		
Bromoform	75-25-2	EPA6 e	NA	EPA6 e		
Bromomethane	74-83-9	EPA6 e	NA	EPA6 e		
Carbon tetrachloride	56-23-5	EPA6 e	NA	EPA6 e		
Chlordibromomethane	124-48-1	EPA6 e	NA	EPA6 e		
Chlorodifluoromethane	75-45-6	EPA6 e	NA	EPA6 e		
Chloroethane	75-00-3	EPA6 e	NA	EPA6 e		
Chloroform	67-66-3	EPA6 e	NA	EPA6 e		
Chloromethane	74-87-3	EPA6 e	NA	EPA6 e		
Chloropentafluoroethane	76-15-3	NA	NA	NA		
cis-1,2-Dichloroethene	156-59-2	EPA6 e	NA	EPA6 e		
cis-1,3-Dichloropropene	10061-01-5	NA	NA	NA		
Cyanogen bromide	506-68-3	NA	NA	NA		
Cyanogen chloride	506-77-4	NA	NA	NA		
Dichlorodifluoromethane	75-71-8	EPA6 e	NA	EPA6 e		
Dichlorofluoromethane	75-43-4	NA	NA	NA		
Dichloromethane	75-09-2	EPA6 e	NA	EPA6 e		
Difluorodibromomethane	75-61-6	NA	NA	NA		
Hexafluoroacetone	684-16-2	NA	NA	NA		
Iodomethane	74-88-4	NA	NA	NA		
Methylene bromide	74-95-3	EPA6 e	NA	EPA6 e		
Pentachloroethane	76-01-7	NA	NA	NA		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	$BSAF_{fish}$ (unitless)	Source		
trans-1,2-Dichloroethene	156-60-5	EPA6 e	NA	EPA6 e		
trans-1,3-Dichloropropene	10061-02-6	NA	NA	NA		
Trichloroacetic acid	76-03-9	NA	NA	NA		
Trichlorofluoroethane	27154-33-2	NA	NA	NA		
Trichlorofluoromethane	75-69-4	EPA6 e	NA	EPA6 e		
Trifluorobromomethane	75-63-8	NA	NA	NA		
Dioxin and Furan Compounds						
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	EPA6 e	5.00E-03	EPA6 e		
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	EPA6 e	5.00E-03	EPA6 e		
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	EPA6 e	5.00E-03	EPA6 e		
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	EPA6 e	4.00E-02	EPA6 e		
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	EPA6 e	4.00E-02	EPA6 e		
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	EPA6 e	4.00E-02	EPA6 e		
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	EPA6 e	4.00E-02	EPA6 e		
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	EPA6 e	4.00E-02	EPA6 e		
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	EPA6 e	4.00E-02	EPA6 e		
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	EPA6 e	9.00E-02	EPA6 e		
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	EPA6 e	9.00E-02	EPA6 e		
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	EPA6 e	4.00E-02	EPA6 e		
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	EPA6 e	9.00E-02	EPA6 e		
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	EPA6 e	9.00E-02	EPA6 e		
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	EPA6 e	9.00E-02	EPA6 e		
Dibenzofuran	132-64-9	NA	NA	NA		
Octachlorodibenzo(p)dioxin	3268-87-9	EPA6 e	1.00E-04	EPA6 e		
Octachlorodibenzofuran	39001-02-0	EPA6 e	1.00E-04	EPA6 e		
PCBs						
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	NA	NA	NA		
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	NA	NA	NA		
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	NA	NA	NA		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	**CAS Registry Number**	**Source**	**$BSAF_{fish}$ (unitless)**	**Source**		
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	NA	NA	NA		
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	NA	NA	NA		
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	NA	NA	NA		
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	NA	NA	NA		
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	NA	NA	NA		
2',3,4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA		
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	NA	NA	NA		
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	NA	NA	NA		
3,3',4,4',5-Pentachlorobiphenyl	no cas #	NA	NA	NA		
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	NA	NA	NA		
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	NA	NA			
Polychlorinated biphenyls (PCBs)**	1336-36-3	RAIS b	NA	NA		
Phthalates						
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	EPA6 e	NA	EPA6 e		
Butylbenzyl phthalate	85-68-7	EPA6 e	NA	EPA6 e		
Dibutyl phthalate	84-74-2	EPA6 e	NA	EPA6 e		
Diethyl phthalate	84-66-2	EPA6 e	NA	EPA6 e		
Dimethyl phthalate	131-11-3	EPA6 e	NA	EPA6 e		
n-Dioctyl phthalate	117-84-0	EPA6 e	NA	EPA6 e		
Light Polycyclic Aromatic Hydrocarbons						
2-Chloronaphthalene	91-58-7	EPA6 e	NA	EPA6 e		
2-Methyl naphthalene	91-57-6	NA	NA	NA		
5-Nitroacenaphthene	602-87-9	NA	NA	NA		
Acenaphthene	83-32-9	EPA6 e	NA	EPA6 e		
Acenaphthylene	208-96-8	NA	NA	NA		
Anthracene	120-12-7	EPA6 e	NA	EPA6 e		
Fluorene	86-73-7	NA	NA	NA		
Indene	95-13-6	NA	NA	NA		
Napthalene	91-20-3	EPA6 e	NA	EPA6 e		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	$BSAF_{fish}$ (unitless)	Source		
Phenanthrene	85-01-8	EPA6 e	NA	EPA6 e		
Pyrene	129-00-0	EPA6 e	NA	EPA6 e		
Heavy Polycyclic Aromatic Hydrocarbons						
3-Methylcholanthrene	56-49-5	NA	NA	NA		
5-Methylchrysene	3697-24-3	NA	NA	NA		
Benzo(a)anthracene	56-55-3	EPA6 e	NA	EPA6 e		
Benzo(a)pyrene	50-32-8	EPA6 e	NA	EPA6 e		
Benzo(b)fluoranthene	205-99-2	EPA6 e	NA	EPA6 e		
Benzo(e)pyrene	192-97-2	NA	NA	NA		
Benzo(g,h,i)perylene	191-24-2	NA	NA	NA		
Benzo(j)fluoranthene	205-82-3	NA	NA	NA		
Benzo(k)fluoranthene	207-08-9	EPA6 e	NA	EPA6 e		
Benzo[a,i]pyrene	191-30-0	NA	NA	NA		
Chrysene	218-01-9	EPA6 e	NA	EPA6 e		
Dibenz(a,h)anthracene	53-70-3	EPA6 e	NA	EPA6 e		
Dibenz[a,h]acridine	226-36-8	NA	NA	NA		
Dibenz[a,j]acridine	224-42-0	NA	NA	NA		
Dibenzo(a,e)fluoranthene	5385-75-1	NA	NA	NA		
Dibenzo(a,h)fluoranthene	no cas #	NA	NA	NA		
Dibenzo[a,e]pyrene	192-65-4	NA	NA	NA		
Dibenzo[a,h]pyrene	189-64-0	NA	NA	NA		
Dibenzo[a,i]pyrene	189-55-9	NA	NA	NA		
Fluoranthene	206-44-0	EPA6 e	NA	EPA6 e		
Hexachloronaphthalene	1335-87-1	NA	NA	NA		
Indeno(1,2,3-cd)pyrene	193-39-5	EPA6 e	NA	EPA6 e		
Octachloronaphthalene	2234-13-1	NA	NA	NA		
Pentachloronaphthalene	1321-64-8	NA	NA	NA		
Tetrachloronaphthalene	1335-88-2	NA	NA	NA		
Trichloronaphthalene	1321-65-9	NA	NA	NA		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	**CAS Registry Number**	**Source**	**$BSAF_{fish}$ (unitless)**	**Source**		
Light Substituted Benzene Compounds						
1,2,3-Trichlorobenzene	87-61-6	EPA6 e	NA	EPA6 e		
1,2,4-Trichlorobenzene	120-82-1	EPA6 e	NA	EPA6 e		
1,2,4-Trimethlyl benzene	25551-13-7	NA	NA	NA		
1,2,4-Trimethyl benzene	95-63-6	NA	NA	NA		
1,2-Dichlorobenzene	95-50-1	EPA6 e	NA	EPA6 e		
1,3,5-Trimethyl benzene	108-67-8	EPA6 e	NA	EPA6 e		
1,3-Dichlorobenzene	541-73-1	EPA6 e	NA	EPA6 e		
1,3-Dinitrobenzene	99-65-0	EPA6 e	NA	EPA6 e		
1,4-Dichlorobenzene	106-46-7	EPA6 e	NA	EPA6 e		
1,4-Dinitrobenzene	100-25-4	NA	NA	NA		
2,4,5-Trichorophenol	95-95-4	EPA6 e	NA	EPA6 e		
2,4,6-Trichlorophenol	88-06-2	EPA6 e	NA	EPA6 e		
2,4-Dichlorophenol	120-83-2	EPA6 e	NA	EPA6 e		
2,4-Dimethylphenol	105-67-9	EPA6 e	NA	EPA6 e		
2,4-Dinitrophenol	51-28-5	EPA6 e	NA	EPA6 e		
2,4-Dinitrotoluene	121-14-2	EPA6 e	NA	EPA6 e		
2,6-Dinitrotoluene	606-20-2	EPA6 e	NA	EPA6 e		
2-Chlorotoluene	95-49-8	NA	NA	NA		
2-Chorophenol	95-57-8	EPA6 e	NA	EPA6 e		
2-Nitrophenol	88-75-5	EPA6 e	NA	EPA6 e		
4,6-Dinitro-o-cresol	534-52-1	NA	NA	NA		
4-Chlorotoluene	106-43-4	NA	NA	NA		
4-Nitrophenol	100-02-7	EPA6 e	NA	EPA6 e		
alpha-Methylstyrene	98-83-9	NA	NA	NA		
Aniline	62-53-3	EPA6 e	NA	EPA6 e		
Benzotrichloride	98-07-7	NA	NA	NA		
Benzyl Chloride	100-44-7	EPA6 e	NA	EPA6 e		
Bromobenzene	108-86-1	NA	NA	NA		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	**CAS Registry Number**	**Source**	**$BSAF_{fish}$ (unitless)**	**Source**		
Chlorobenzene	108-90-7	EPA6 e	NA	EPA6 e		
Cumene	98-82-8	EPA6 e	NA	EPA6 e		
m-Cresol	108-39-4	EPA6 e	NA	EPA6 e		
n-Butyl benzene	104-51-8	NA	NA	NA		
Nitrobenzene	98-95-3	EPA6 e	NA	EPA6 e		
n-Propyl benzene	103-65-1	NA	NA	NA		
o-Cresol	95-48-7	EPA6 e	NA	EPA6 e		
o-Dinitrobenzene	528-29-0	NA	NA	NA		
o-Nitroaniline	88-74-4	EPA6 e	NA	EPA6 e		
o-Toluidine	95-53-4	EPA6 e	NA	EPA6 e		
p-Chloroaniline	106-47-8	EPA6 e	NA	EPA6 e		
p-Cresol	106-44-5	EPA6 e	NA	EPA6 e		
Phenol	108-95-2	EPA6 e	NA	EPA6 e		
p-Nitrochlorobenzene	100-00-5	NA	NA	NA		
p-Toluidine	106-49-0	NA	NA	NA		
sec-Butyl benzene	135-98-8	NA	NA	NA		
tert-Butyl benzene	98-06-6	NA	NA	NA		
Toluene-2,6-diamine	823-40-5	NA	NA	NA		
Other Light Semivolatile Compounds						
1,1 Dimethyl hydrazine	57-14-7	NA	NA	NA		
1,1-Biphenyl	92-52-4	NA	NA	NA		
1,2 Diphenylhydrazine	122-66-7	EPA6 e	NA	EPA6 e		
1,2-Dimethylhydrazine	540-73-8	NA	NA	NA		
1,3-Propane sultone	1120-71-4	NA	NA	NA		
2,4-Toluene diisocyanate	584-84-9	NA	NA	NA		
2-Chloroacetophenone	532-27-4	NA	NA	NA		
2-Propenoic acid	79-10-7	NA	NA	NA		
4,4-Methylenedianiline	101-77-9	NA	NA	NA		
Acetophenone	98-86-2	EPA6 e	NA	EPA6 e		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	$BSAF_{fish}$ (unitless)	Source		
Benzoic acid	65-85-0	NA	NA	NA		
bis(2-Chloroethoxy)methane	111-91-1	NA	NA	NA		
bis(2-Chloroethyl) ether	111-44-4	EPA6 e	NA	EPA6 e		
Chlorocyclopentadiene	41851-50-7	NA	NA	NA		
Cyclohexanol	108-93-0	NA	NA	NA		
Dichloroisopropyl ether	108-60-1	NA	NA	NA		
Dichloromethyl ether	542-88-1	RAIS b	NA	NA		
Dichloropentadiene	no cas #	NA	NA	NA		
Dimethyl sulfate	77-78-1	NA	NA	NA		
Dimethylaniline	121-69-7	NA	NA	NA		
di-n-propylnitrosamine	621-64-7	EPA6 e	NA	EPA6 e		
Diphenyl ether	101-84-8	NA	NA	NA		
Epichlorohydrin	106-89-8	EPA6 e	NA	EPA6 e		
Ethyl carbomate (urethane)	51-79-6	NA	NA	NA		
Ethyl methane sulfanate	62-50-0	EPA6 e	NA	EPA6 e		
Ethylene dibromide	106-93-4	EPA6 e	NA	EPA6 e		
Ethylene glycol	107-21-1	NA	NA	NA		
Ethylene glycol monobutyl ether	111-76-2	NA	NA	NA		
Ethylene glycol monoethyl ether acetate	111-15-9	NA	NA	NA		
Ethylene thiourea	96-45-7	NA	NA	NA		
Furfural	98-01-1	NA	NA	NA		
Maleic hydrazide	123-33-1	NA	NA	NA		
Malononitrile	109-77-3	NA	NA	NA		
Methyl styrene (mixed isomers)	25013-15-4	NA	NA	NA		
Methylhydrazine	60-34-4	NA	NA	NA		
N,N-Diphenylamine	122-39-4	NA	NA	NA		
Nitric acid, propyl ester	627-13-4	NA	NA	NA		
N-Nitrosodi-n-butylamine	924-16-3	EPA6 e	NA	EPA6 e		
N-Nitrosomorpholine	59-89-2	NA	NA	NA		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	**CAS Registry Number**	**Source**	**$BSAF_{fish}$ (unitless)**	**Source**		
N-Nitroso-N,N-dimethylamine	62-75-9	NA	NA	NA		
o-Anisidine	90-04-0	NA	NA	NA		
Oxalic acid	144-62-7	NA	NA	NA		
Phthalic Anhydride	85-44-9	EPA6 e	NA	EPA6 e		
p-Phthalic acid	100-21-0	NA	NA	NA		
Pyridine	110-86-1	EPA6 e	NA	EPA6 e		
Quinoline	91-22-5	NA	NA	NA		
Quinone	106-51-4	NA	NA	NA		
Safrole	94-59-7	EPA6 e	NA	EPA6 e		
Tetrahydrofuran	109-99-9	EPA6 e	NA	EPA6 e		
Other Heavy Semivolatile Compounds						
1,2,4,5-Tetrachlorobenzene	95-94-3	EPA6 e	NA	EPA6 e		
1,3,5-Trinitrobenzene	99-35-4	EPA6 e	NA	EPA6 e		
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	NA	NA	NA		
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	NA	NA	NA		
2-sec-Butyl-4,6-dinitrophenol	88-85-7	NA	NA	NA		
3,3-Dichlorobenzidine	91-94-1	EPA6 e	NA	EPA6 e		
3,3'-Dimethoxybenzidine	119-90-4	EPA6 e	NA	EPA6 e		
4-Bromophenylphenyl ether	101-55-3	NA	NA	NA		
Ammonium perfluorooctanoate	3825-26-1	NA	NA	NA		
Azobenzene	103-33-3	NA	NA	NA		
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	NA	NA	NA		
Captan	133-06-2	NA	NA	NA		
Chlorobenzilate	510-15-6	EPA6 e	NA	EPA6 e		
Dibutylphosphate	107-66-4	NA	NA	NA		
Dimethyl aminoazobenzene	60-11-7	NA	NA	NA		
Hexachlorobenzene	118-74-1	EPA6 e	NA	EPA6 e		
Hexachlorobutadiene	87-68-3	EPA6 e	NA	EPA6 e		
Hexachlorocyclopentadiene	77-47-4	EPA6 e	NA	EPA6 e		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	**CAS Registry Number**	**Source**	**$BSAF_{fish}$ (unitless)**	**Source**		
Hexachloroethane	67-72-1	EPA6 e	NA	EPA6 e		
Hexachlorophene	70-30-4	EPA6 e	NA	EPA6 e		
Hexamethylene-1,5-diisocyanate	822-06-0	NA	NA	NA		
Mirex	2385-85-5	NA	NA	NA		
Nitrofen	1836-75-5	NA	NA	NA		
Pentachlorobenzene	608-93-5	EPA6 e	NA	EPA6 e		
Pentachloronitrobenzene	82-68-8	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Pentachlorophenol*	87-86-5	EPA6 e	NA	EPA6 e		
Picric acid	88-89-1	NA	NA	NA		
Pronamide	23950-58-5	EPA6 e	NA	EPA6 e		
Strychnine	57-24-9	EPA6 e	NA	EPA6 e		
Terphenyls	26140-60-3	NA	NA	NA		
Tributyl phosphate	126-73-8	NA	NA	NA		
Trifluralin	1582-09-8	NA	NA	NA		
Triphenylamine	603-34-9	NA	NA	NA		
Herbicides and Organopesticides						
2,4,5-T	93-76-5	NA	NA	NA		

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	$BSAF_{fish}$ (unitless)	Source		
2,4-D and esters	94-75-7	NA	NA	NA		
4,4-DDD	72-54-8	NA	NA	NA		
4,4-DDT	50-29-3	NA	NA	NA		
Aldrin	309-00-2	EPA6 e	NA	EPA6 e		
alpha-BHC	319-84-6	EPA6 e	NA	EPA6 e		
beta-BHC	319-85-7	EPA6 e	NA	EPA6 e		
Chlordane	57-74-9	EPA6 e	NA	EPA6 e		
DDE	72-55-9	EPA6 e	NA	EPA6 e		
Delta-BHC	319-86-8	NA	NA	NA		
Dieldrin	60-57-1	EPA6 e	NA	EPA6 e		
Endothall	145-73-3	NA	NA	NA		
Endrin	72-20-8	EPA6 e	NA	EPA6 e		
gamma-BHC(Lindane)	58-89-9	NA	NA	NA		
Heptachlor	76-44-8	EPA6 e	NA	EPA6 e		
Isodrin	465-73-6	NA	NA	NA		
Methoxychlor	72-43-5	EPA6 e	NA	EPA6 e		
Silvex (2,4,5-TP)	93-72-1	NA	NA	NA		
Toxaphene	8001-35-2	NA	NA	NA		

NA = Value not available
** = Varies with pH; values given for a pH of 7.0.
a = Illustrated Handbook of Physical - Chemical Properties and Environmental Fate f
b = RAIS database: http://risk.lsd.ornl.gov/rap_hp.shtml
c = Equations derived from EPA Region 6 Guidance Appendix A-3
d = Handbook of Environmental degradation Rates. 1991.
e = EPA Region 6 Hazardous Waste Combustion Guidance
f = "A Critical Review of Henry's Law Constants for Chemicals of Environmental In
g = Handbook of Environmental Fate and Exposure Data for Organic Chemicals
h = http://www.epa.gov/region09/waste/sfund/prg/.
i = http://esc.syrres.com/efdb/Chemfate.htm
j = Hansch and Leo 1985 in Syracuse 1996

Table B1-1. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Organic COPCs

		Bioconcentration / Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	$BSAF_{fish}$ (unitless)	Source		

k = Schwarzenbach et al. 1993
l = Tomlin 1994 in Syracuse 1996
m = http://www.speclab.com/compound/c959988.htm

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Mol. Wt.		Diffusivity				Partitioning Coefficients				
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	D_a (cm^2/s)	Source	D_w (cm^2/s)	Source	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)
Metals												
Aluminum	7429-90-5	26.98	NA	2.11E-01	EPA6 a	2.45E-05	EPA6 a	1.50E+03	EPA6 a	1.50E+03	EPA6 a	1.50E+03
Antimony	7440-36-0	121.75	6.8	7.73E-02	EPA6 a	8.96E-06	EPA6 a	4.50E+01	EPA6 a	4.50E+01	EPA6 a	4.50E+01
Arsenic*	7440-38-2	74.92	4.9	1.07E-01	EPA6 a	1.24E-05	EPA6 a	2.50E+01	EPA6 a	2.50E+01	EPA6 a	2.50E+01
Arsenic*	7440-38-2	74.92	6.8	1.07E-01	EPA6 a	1.24E-05	EPA6 a	2.90E+01	EPA6 a	2.90E+01	EPA6 a	2.90E+01
Arsenic*	7440-38-2	74.92	8	1.07E-01	EPA6 a	1.24E-05	EPA6 a	3.10E+01	EPA6 a	3.10E+01	EPA6 a	3.10E+01
Barium*	7440-39-3	137.33	4.9	7.14E-02	EPA6 a	8.27E-06	EPA6 a	1.10E+01	EPA6 a	1.10E+01	EPA6 a	1.10E+01
Barium*	7440-39-3	137.33	6.8	7.14E-02	EPA6 a	8.27E-06	EPA6 a	4.10E+01	EPA6 a	4.10E+01	EPA6 a	4.10E+01
Barium*	7440-39-3	137.33	8	7.14E-02	EPA6 a	8.27E-06	EPA6 a	5.20E+01	EPA6 a	5.20E+01	EPA6 a	5.20E+01
Beryllium*	7440-41-7	9.01	4.9	4.39E-01	EPA6 a	5.08E-05	EPA6 a	2.30E+01	EPA6 a	2.30E+01	EPA6 a	2.30E+01
Beryllium*	7440-41-7	9.01	6.8	4.39E-01	EPA6 a	5.08E-05	EPA6 a	7.90E+02	EPA6 a	7.90E+02	EPA6 a	7.90E+02
Beryllium*	7440-41-7	9.01	8	4.39E-01	EPA6 a	5.08E-05	EPA6 a	1.00E+05	EPA6 a	1.00E+05	EPA6 a	1.00E+05
Bismuth	7440-69-9	208.98	NA	5.40E-02	EPA6 calc d	6.25E-06	EPA6 calc d	2.00E+02	Baes b	2.00E+02	Baes b	2.00E+02
Boron	7440-42-8	10.81	NA	3.89E-01	EPA6 calc d	4.50E-05	EPA6 calc d	3.00E+00	Baes b	3.00E+00	Baes b	3.00E+00
Cadmium*	7440-43-9	112.41	4.9	8.16E-02	EPA6 a	9.45E-06	EPA6 a	1.50E+01	EPA6 a	1.50E+01	EPA6 a	1.50E+01
Cadmium*	7440-43-9	112.41	6.8	8.16E-02	EPA6 a	9.45E-06	EPA6 a	7.50E+01	EPA6 a	7.50E+01	EPA6 a	7.50E+01
Cadmium*	7440-43-9	112.41	8	8.16E-02	EPA6 a	9.45E-06	EPA6 a	4.30E+03	EPA6 a	4.30E+03	EPA6 a	4.30E+03
Calcium	7440-70-2	40.08	NA	1.62E-01	EPA6 calc d	1.88E-05	EPA6 calc d	4.00E+00	Baes b	4.00E+00	Baes b	4.00E+00
Chromium (and VI)*	18540-29-9	52.00	4.9	1.36E-01	EPA6 a	1.58E-05	EPA6 a	3.10E+01	EPA6 a	3.10E+01	EPA6 a	3.10E+01
Chromium (and VI)*	18540-29-9	52.00	6.8	1.36E-01	EPA6 a	1.58E-05	EPA6 a	1.90E+01	EPA6 a	1.90E+01	EPA6 a	1.90E+01
Chromium (and VI)*	18540-29-9	52.00	8	1.36E-01	EPA6 a	1.58E-05	EPA6 a	1.40E+01	EPA6 a	1.40E+01	EPA6 a	1.40E+01
Chromium (total)*	7440-47-3	52.00	4.9	1.01E-01	EPA6 a	4.63E-05	EPA6 a	1.20E+03	EPA6 a	1.20E+03	EPA6 a	1.20E+03
Chromium (total)*	7440-47-3	52.00	6.8	1.01E-01	EPA6 a	4.63E-05	EPA6 a	1.80E+06	EPA6 a	1.80E+06	EPA6 a	1.80E+06
Chromium (total)*	7440-47-3	52.00	8	1.01E-01	EPA6 a	4.63E-05	EPA6 a	4.30E+06	EPA6 a	4.30E+06	EPA6 a	4.30E+06
Cobalt	7440-48-4	58.93	NA	1.25E-01	EPA6 calc d	1.45E-05	EPA6 calc d	4.50E+01	Baes b	4.50E+01	Baes b	4.50E+01
Copper	7440-50-8	63.55	NA	1.19E-01	EPA6 calc d	1.38E-05	EPA6 calc d	3.50E+01	Baes b	3.50E+01	Baes b	3.50E+01
Iron	7439-89-6	55.85	NA	1.30E-01	EPA6 calc d	1.51E-05	EPA6 calc d	2.50E+01	Baes b	2.50E+01	Baes b	2.50E+01
Lead	7439-92-1	207.20	NA	5.43E-02	EPA6 a	6.28E-06	EPA6 a	9.00E+02	Baes b	9.00E+02	Baes b	9.00E+02

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Mol. Wt.		Diffusivity				Partitioning Coefficients				
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	D_a (cm^2/s)	Source	D_w (cm^2/s)	Source	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)
Lithium	7439-93-2	6.94	NA	5.22E-01	EPA6 calc d	6.05E-05	EPA6 calc d	3.00E+02	Baes b	3.00E+02	Baes b	3.00E+02
Magnesium	7439-95-4	24.31	NA	2.26E-01	EPA6 calc d	2.62E-05	EPA6 calc d	4.50E+00	Baes b	4.50E+00	Baes b	4.50E+00
Manganese	7439-96-5	54.94	NA	1.31E-01	EPA6 calc d	1.52E-05	EPA6 calc d	6.50E+01	Baes b	6.50E+01	Baes b	6.50E+01
Mercury	7439-97-6	200.59	NA	1.09E-02	EPA6 a	3.01E-05	EPA6 a	1.00E+03	EPA6 a	1.00E+03	EPA6 a	3.00E+03
Molybdenum	7439-98-7	95.94	NA	9.07E-02	EPA6 calc d	1.05E-05	EPA6 calc d	2.00E+01	Baes b	2.00E+01	Baes b	2.00E+01
Nickel*	7440-02-0	58.69	4.9	1.26E-01	EPA6 a	1.46E-05	EPA6 a	1.60E+01	EPA6 a	1.60E+01	EPA6 a	1.60E+01
Nickel*	7440-02-0	58.69	6.8	1.26E-01	EPA6 a	1.46E-05	EPA6 a	6.50E+01	EPA6 a	6.50E+01	EPA6 a	6.50E+01
Nickel*	7440-02-0	58.69	8	1.26E-01	EPA6 a	1.46E-05	EPA6 a	1.90E+03	EPA6 a	1.90E+03	EPA6 a	1.90E+03
Potassium	7440-09-7	39.10	NA	1.65E-01	EPA6 calc d	1.91E-05	EPA6 calc d	5.50E+00	Baes b	5.50E+00	Baes b	5.50E+00
Rhodium	7440-16-6	102.91	NA	8.65E-02	EPA6 calc d	1.00E-05	EPA6 calc d	6.00E+01	Baes b	6.00E+01	Baes b	6.00E+01
Selenium*	7782-49-2	78.96	4.9	1.03E-01	EPA6 a	1.20E-05	EPA6 a	1.80E+01	EPA6 a	1.80E+01	EPA6 a	1.80E+01
Selenium*	7782-49-2	78.96	6.8	1.03E-01	EPA6 a	1.20E-05	EPA6 a	5.00E+00	EPA6 a	5.00E+00	EPA6 a	5.00E+00
Selenium*	7782-49-2	78.96	8	1.03E-01	EPA6 a	1.20E-05	EPA6 a	2.20E+00	EPA6 a	2.20E+00	EPA6 a	2.20E+00
Silicon	7440-21-3	28.09	NA	2.06E-01	EPA6 calc d	2.38E-05	EPA6 calc d	3.00E+01	Baes b	3.00E+01	Baes b	3.00E+01
Silver*	7440-22-4	107.87	4.9	8.38E-02	EPA6 a	9.71E-06	EPA6 a	1.00E-01	EPA6 a	1.00E-01	EPA6 a	1.00E-01
Silver*	7440-22-4	107.87	6.8	8.38E-02	EPA6 a	9.71E-06	EPA6 a	8.30E+00	EPA6 a	8.30E+00	EPA6 a	8.30E+00
Silver*	7440-22-4	107.87	8	8.38E-02	EPA6 a	9.71E-06	EPA6 a	1.10E+02	EPA6 a	1.10E+02	EPA6 a	1.10E+02
Sodium	7440-23-5	22.99	NA	2.35E-01	EPA6 calc d	2.72E-05	EPA6 calc d	1.00E+02	Baes b	1.00E+02	Baes b	1.00E+02
Tantalum	7440-25-7	180.95	NA	5.94E-02	EPA6 calc d	6.88E-06	EPA6 calc d	6.50E+02	Baes b	6.50E+02	Baes b	6.50E+02
Thallium*	7440-28-0	204.38	4.9	5.48E-02	EPA6 a	6.34E-06	EPA6 a	4.40E+01	EPA6 a	4.40E+01	EPA6 a	4.40E+01
Thallium*	7440-28-0	204.38	6.8	5.48E-02	EPA6 a	6.34E-06	EPA6 a	7.10E+01	EPA6 a	7.10E+01	EPA6 a	7.10E+01
Thallium*	7440-28-0	204.38	8	5.48E-02	EPA6 a	6.34E-06	EPA6 a	9.60E+01	EPA6 a	9.60E+01	EPA6 a	9.60E+01
Tin	7440-31-5	118.71	NA	7.87E-02	EPA6 calc d	9.11E-06	EPA6 calc d	2.50E+02	Baes b	2.50E+02	Baes b	2.50E+02
Tungsten	7440-33-7	183.84	NA	5.88E-02	EPA6 calc d	6.80E-06	EPA6 calc d	1.50E+02	Baes b	1.50E+02	Baes b	1.50E+02
Uranium	7440-61-1	238.03	NA	4.95E-02	EPA6 calc d	5.73E-06	EPA6 calc d	4.50E+02	Baes b	4.50E+02	Baes b	4.50E+02
Vanadium	7440-62-2	50.94	NA	1.38E-01	EPA6 calc d	1.60E-05	EPA6 calc d	1.00E+03	Baes b	1.00E+03	Baes b	1.00E+03
Yttrium	7440-65-5	88.91	NA	9.54E-02	EPA6 calc d	1.10E-05	EPA6 calc d	5.00E+02	Baes b	5.00E+02	Baes b	5.00E+02
Zinc	7440-66-6	65.38	6.8	1.17E-01	EPA6 a	1.36E-05	EPA6 a	6.20E+01	EPA6 a	6.20E+01	EPA6 a	6.20E+01

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Mol. Wt.		Diffusivity				Partitioning Coefficients				
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	pH	D_a (cm^2/s)	Source	D_w (cm^2/s)	Source	Kd_s (cm^3/g)	Source	Kd_{sw} (L/kg)	Source	Kd_{bs} (cm^3/g)
Zirconium	7440-67-7	91.22	NA	9.38E-02	EPA6 calc d	1.09E-05	EPA6 calc d	3.00E+03	Baes b	3.00E+03	Baes b	3.00E+03
Non-Metal and Anions												
Ammonia/Ammonium	7664-41-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	24959-67-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	16887-00-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide	57-12-5	26.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride	16984-48-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydroxide	14280-30-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodine	7553-56-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	14797-55-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite	14797-65-0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	14265-44-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	14808-79-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Criteria Pollutants												
Carbon dioxide	124-38-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen dioxide	10102-44-0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ozone	10028-15-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Particulate matter	no cas #	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfur dioxide	7446-09-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

* These metals have varying dissociation constants depending on pH.
a = EPA Region 6 Hazardous Waste Combustion Facility Guidance
b = Baes et al
c = Ng et al
d = Calculation from EPA Region 6 Hazardous Waste Combustion Facility Guidance
e = Br_{ag} is a weighted average of $Br_{ag(fruit)}$ and $Br_{ag(veg)}$

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Plant Uptake Factors							
Constituent of Potential Concern	CAS Registry Number	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(fruit)}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(veg)}$ ((ug/g DW plant) /(ug/g soil))[e]	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))
Metals									
Aluminum	7429-90-5	EPA6 a	6.50E-04	Baes b	6.50E-04	Baes b	1.49E-03	EPA calc d	1.08E-03
Antimony	7440-36-0	EPA6 a	3.00E-02	Baes b	3.00E-02	Baes b	7.25E-02	EPA calc d	5.16E-02
Arsenic*	7440-38-2	EPA6 a	8.00E-03	EPA6 a	NA	NA	NA	NA	6.33E-03
Arsenic*	7440-38-2	EPA6 a	8.00E-03	EPA6 a	NA	NA	NA	NA	6.33E-03
Arsenic*	7440-38-2	EPA6 a	8.00E-03	EPA6 a	NA	NA	NA	NA	6.33E-03
Barium*	7440-39-3	EPA6 a	1.50E-02	EPA6 a	1.50E-02	Baes b	4.88E-02	EPA calc d	3.22E-02
Barium*	7440-39-3	EPA6 a	1.50E-02	EPA6 a	1.50E-02	Baes b	4.88E-02	EPA calc d	3.22E-02
Barium*	7440-39-3	EPA6 a	1.50E-02	EPA6 a	1.50E-02	Baes b	4.88E-02	EPA calc d	3.22E-02
Beryllium*	7440-41-7	EPA6 a	1.50E-03	EPA6 a	1.50E-03	EPA6 a	3.63E-03	EPA calc d	2.58E-03
Beryllium*	7440-41-7	EPA6 a	1.50E-03	EPA6 a	1.50E-03	EPA6 a	3.63E-03	EPA calc d	2.58E-03
Beryllium*	7440-41-7	EPA6 a	1.50E-03	EPA6 a	1.50E-03	EPA6 a	3.63E-03	EPA calc d	2.58E-03
Bismuth	7440-69-9	Baes b	5.00E-03	Baes b	5.00E-03	Baes b	1.25E-02	EPA calc d	8.81E-03
Boron	7440-42-8	Baes b	2.00E+00	Baes b	2.00E+00	Baes b	2.50E+00	EPA calc d	2.25E+00
Cadmium*	7440-43-9	EPA6 a	6.40E-02	EPA6 a	NA	NA	NA	NA	1.25E-01
Cadmium*	7440-43-9	EPA6 a	6.40E-02	EPA6 a	NA	NA	NA	NA	1.25E-01
Cadmium*	7440-43-9	EPA6 a	6.40E-02	EPA6 a	NA	NA	NA	NA	1.25E-01
Calcium	7440-70-2	Baes b	3.50E-01	Baes b	3.50E-01	Baes b	1.14E+00	EPA calc d	7.50E-01
Chromium (and VI)*	18540-29-9	EPA6 a	4.50E-03	Baes b	4.50E-03	Baes b	5.25E-03	EPA calc d	4.88E-03
Chromium (and VI)*	18540-29-9	EPA6 a	4.50E-03	Baes b	4.50E-03	Baes b	5.25E-03	EPA calc d	4.88E-03
Chromium (and VI)*	18540-29-9	EPA6 a	4.50E-03	Baes b	4.50E-03	Baes b	5.25E-03	EPA calc d	4.88E-03
Chromium (total)*	7440-47-3	EPA6 a	4.50E-03	EPA6 a	NA	NA	NA	NA	NA
Chromium (total)*	7440-47-3	EPA6 a	4.50E-03	EPA6 a	NA	NA	NA	NA	NA
Chromium (total)*	7440-47-3	EPA6 a	4.50E-03	EPA6 a	NA	NA	NA	NA	NA
Cobalt	7440-48-4	Baes b	7.00E-02	Baes b	7.00E-02	Baes b	5.75E-02	EPA calc d	6.36E-02
Copper	7440-50-8	Baes b	2.50E-01	Baes b	2.50E-01	Baes b	2.88E-01	EPA calc d	2.69E-01
Iron	7439-89-6	Baes b	1.00E-03	Baes b	1.00E-03	Baes b	1.75E-03	EPA calc d	1.38E-03
Lead	7439-92-1	Baes b	9.00E-03	Baes b	9.00E-03	Baes b	1.80E-02	EPA calc d	1.36E-02

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Plant Uptake Factors							
Constituent of Potential Concern	CAS Registry Number	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(fruit)}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(veg)}$ ((ug/g DW plant) /(ug/g soil))[e]	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))
Lithium	7439-93-2	Baes b	4.00E-03	Baes b	4.00E-03	Baes b	9.25E-03	EPA calc d	6.67E-03
Magnesium	7439-95-4	Baes b	5.50E-01	Baes b	5.50E-01	Baes b	6.63E-01	EPA calc d	6.07E-01
Manganese	7439-96-5	Baes b	5.00E-02	Baes b	5.00E-02	Baes b	1.00E-01	EPA calc d	7.54E-02
Mercury	7439-97-6	EPA6 a	2.00E-01	Baes b	2.00E-01	Baes b	3.75E-01	EPA calc d	2.89E-01
Molybdenum	7439-98-7	Baes b	6.00E-02	Baes b	6.00E-02	Baes b	1.08E-01	EPA calc d	8.42E-02
Nickel*	7440-02-0	EPA6 a	8.00E-03	EPA6 a	NA	NA	NA	NA	9.31E-03
Nickel*	7440-02-0	EPA6 a	8.00E-03	EPA6 a	NA	NA	NA	NA	9.31E-03
Nickel*	7440-02-0	EPA6 a	8.00E-03	EPA6 a	NA	NA	NA	NA	9.31E-03
Potassium	7440-09-7	Baes b	5.50E-01	Baes b	5.50E-01	Baes b	6.63E-01	EPA calc d	6.07E-01
Rhodium	7440-16-6	Baes b	4.00E-02	Baes b	4.00E-02	Baes b	6.75E-02	EPA calc d	5.40E-02
Selenium*	7782-49-2	EPA6 a	2.20E-02	EPA6 a	NA	NA	NA	NA	1.95E-02
Selenium*	7782-49-2	EPA6 a	2.20E-02	EPA6 a	NA	NA	NA	NA	1.95E-02
Selenium*	7782-49-2	EPA6 a	2.20E-02	EPA6 a	NA	NA	NA	NA	1.95E-02
Silicon	7440-21-3	Baes b	7.00E-02	Baes b	7.00E-02	Baes b	1.40E-01	EPA calc d	1.06E-01
Silver*	7440-22-4	EPA6 a	1.00E-01	EPA6 a	1.00E-01	Baes b	1.75E-01	EPA calc d	1.38E-01
Silver*	7440-22-4	EPA6 a	1.00E-01	EPA6 a	1.00E-01	Baes b	1.75E-01	EPA calc d	1.38E-01
Silver*	7440-22-4	EPA6 a	1.00E-01	EPA6 a	1.00E-01	Baes b	1.75E-01	EPA calc d	1.38E-01
Sodium	7440-23-5	Baes b	5.50E-02	Baes b	5.50E-02	Baes b	6.00E-02	EPA calc d	5.75E-02
Tantalum	7440-25-7	Baes b	2.50E-03	Baes b	2.50E-03	Baes b	4.38E-03	EPA calc d	3.45E-03
Thallium*	7440-28-0	EPA6 a	4.00E-04	EPA6 a	4.00E-04	Baes b	1.30E-03	EPA calc d	8.58E-04
Thallium*	7440-28-0	EPA6 a	4.00E-04	EPA6 a	4.00E-04	Baes b	1.30E-03	EPA calc d	8.58E-04
Thallium*	7440-28-0	EPA6 a	4.00E-04	EPA6 a	4.00E-04	Baes b	1.30E-03	EPA calc d	8.58E-04
Tin	7440-31-5	Baes b	6.00E-03	Baes b	6.00E-03	Baes b	1.20E-02	EPA calc d	9.05E-03
Tungsten	7440-33-7	Baes b	1.00E-02	Baes b	1.00E-02	Baes b	1.88E-02	EPA calc d	1.25E-02
Uranium	7440-61-1	Baes b	4.00E-03	Baes b	4.00E-03	Baes b	5.13E-03	EPA calc d	4.57E-03
Vanadium	7440-62-2	Baes b	3.00E-03	Baes b	3.00E-03	Baes b	3.63E-03	EPA calc d	3.32E-03
Yttrium	7440-65-5	Baes b	6.00E-03	Baes b	6.00E-03	Baes b	8.25E-03	EPA calc d	7.14E-03
Zinc	7440-66-6	EPA6 a	4.40E-02	Baes b	4.60E-02	EPA6 a	9.70E-02	EPA6 a	7.19E-02

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Plant Uptake Factors							
Constituent of Potential Concern	CAS Registry Number	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(fruit)}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(veg)}$ ((ug/g DW plant) /(ug/g soil))[e]	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))
Zirconium	7440-67-7	Baes b	5.00E-04	Baes b	5.00E-04	Baes b	8.75E-04	EPA calc d	1.02E-01
Non-Metal and Anions									
Ammonia/Ammonium	7664-41-7	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	24959-67-9	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	16887-00-6	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide	57-12-5	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride	16984-48-8	NA	NA	NA	NA	NA	NA	NA	NA
Hydroxide	14280-30-9	NA	NA	NA	NA	NA	NA	NA	NA
Iodine	7553-56-2	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	14797-55-8	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite	14797-65-0	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	14265-44-2	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	14808-79-8	NA	NA	NA	NA	NA	NA	NA	NA
Criteria Pollutants									
Carbon dioxide	124-38-9	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen dioxide	10102-44-0	NA	NA	NA	NA	NA	NA	NA	NA
Ozone	10028-15-6	NA	NA	NA	NA	NA	NA	NA	NA
Particulate matter	no cas #	NA	NA	NA	NA	NA	NA	NA	NA
Sulfur dioxide	7446-09-5	NA	NA	NA	NA	NA	NA	NA	NA

* These metals have varying dissociation cc
a = EPA Region 6 Hazardous Waste Combı
b = Baes et al
c = Ng et al
d = Calculation from EPA Region 6 Hazard
e = Br_{ag} is a weighted average of $Br_{ag(fruit)}$ a

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Plant Uptake Factors					Bioaccumulation/Biotransfer Factors				
Constituent of Potential Concern	CAS Registry Number	Source	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)
Metals											
Aluminum	7429-90-5	EPA6 calc d	4.00E-03	Baes b	6.50E-04	Baes b	2.00E-04	Baes b	1.50E-03	Baes b	NA
Antimony	7440-36-0	EPA6 calc d	2.00E-01	Baes b	3.00E-02	Baes b	1.00E-04	Baes b	1.00E-03	Baes b	NA
Arsenic*	7440-38-2	EPA6 a	3.60E-02	EPA6 a	4.00E-03	EPA6 a	6.00E-03	Baes b	2.00E-03	Baes b	NA
Arsenic*	7440-38-2	EPA6 a	3.60E-02	EPA6 a	4.00E-03	EPA6 a	6.00E-03	Baes b	2.00E-03	Baes b	NA
Arsenic*	7440-38-2	EPA6 a	3.60E-02	EPA6 a	4.00E-03	EPA6 a	6.00E-03	Baes b	2.00E-03	Baes b	NA
Barium*	7440-39-3	EPA6 calc d	1.50E-01	EPA6 a	1.50E-02	EPA6 a	3.50E-04	EPA6 a	1.50E-04	EPA6 a	NA
Barium*	7440-39-3	EPA6 calc d	1.50E-01	EPA6 a	1.50E-02	EPA6 a	3.50E-04	EPA6 a	1.50E-04	EPA6 a	NA
Barium*	7440-39-3	EPA6 calc d	1.50E-01	EPA6 a	1.50E-02	EPA6 a	3.50E-04	EPA6 a	1.50E-04	EPA6 a	NA
Beryllium*	7440-41-7	EPA6 calc d	1.00E-02	EPA6 a	1.50E-03	EPA6 a	9.00E-07	EPA6 a	1.00E-03	EPA6 a	NA
Beryllium*	7440-41-7	EPA6 calc d	1.00E-02	EPA6 a	1.50E-03	EPA6 a	9.00E-07	EPA6 a	1.00E-03	EPA6 a	NA
Beryllium*	7440-41-7	EPA6 calc d	1.00E-02	EPA6 a	1.50E-03	EPA6 a	9.00E-07	EPA6 a	1.00E-03	EPA6 a	NA
Bismuth	7440-69-9	EPA6 calc d	3.50E-02	Baes b	5.00E-03	Baes b	5.00E-04	Baes b	4.00E-04	Baes b	NA
Boron	7440-42-8	EPA6 calc d	4.00E+00	Baes b	2.00E+00	Baes b	1.50E-03	Baes b	8.00E-04	Baes b	NA
Cadmium*	7440-43-9	EPA6 a	3.64E-01	EPA6 a	6.20E-02	EPA6 a	6.50E-06	EPA6 a	1.20E-04	EPA6 a	1.91E-04
Cadmium*	7440-43-9	EPA6 a	3.64E-01	EPA6 a	6.20E-02	EPA6 a	6.50E-06	EPA6 a	1.20E-04	EPA6 a	1.91E-04
Cadmium*	7440-43-9	EPA6 a	3.64E-01	EPA6 a	6.20E-02	EPA6 a	6.50E-06	EPA6 a	1.20E-04	EPA6 a	1.91E-04
Calcium	7440-70-2	EPA6 calc d	3.50E+00	Baes b	3.50E-01	Baes b	1.00E-02	Baes b	7.00E-04	Baes b	NA
Chromium (and VI)*	18540-29-9	EPA6 calc d	7.50E-03	Baes b	4.50E-03	Baes b	1.50E-03	Baes b	5.50E-03	Baes b	NA
Chromium (and VI)*	18540-29-9	EPA6 calc d	7.50E-03	Baes b	4.50E-03	Baes b	1.50E-03	Baes b	5.50E-03	Baes b	NA
Chromium (and VI)*	18540-29-9	EPA6 calc d	7.50E-03	Baes b	4.50E-03	Baes b	1.50E-03	Baes b	5.50E-03	Baes b	NA
Chromium (total)*	7440-47-3	NA	7.50E-03	EPA6 a	4.50E-03	EPA6 a	1.50E-03	EPA6 a	5.50E-03	EPA6 a	NA
Chromium (total)*	7440-47-3	NA	7.50E-03	EPA6 a	4.50E-03	EPA6 a	1.50E-03	EPA6 a	5.50E-03	EPA6 a	NA
Chromium (total)*	7440-47-3	NA	7.50E-03	EPA6 a	4.50E-03	EPA6 a	1.50E-03	EPA6 a	5.50E-03	EPA6 a	NA
Cobalt	7440-48-4	EPA6 calc d	2.00E-02	Baes b	7.00E-02	Baes b	2.00E-03	Baes b	2.00E-02	Baes b	1.70E-01
Copper	7440-50-8	EPA6 calc d	4.00E-01	Baes b	2.50E-01	Baes b	1.50E-03	Baes b	1.00E-02	Baes b	2.20E-02
Iron	7439-89-6	EPA6 calc d	4.00E-03	Baes b	1.00E-03	Baes b	2.50E-04	Baes b	2.00E-02	Baes b	2.60E-02
Lead	7439-92-1	EPA6 calc d	4.50E-02	Baes b	9.00E-03	Baes b	2.50E-04	Baes b	3.00E-04	Baes b	NA

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Plant Uptake Factors					Bioaccumulation/Biotransfer Factors				
Constituent of Potential Concern	CAS Registry Number	Source	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)
Lithium	7439-93-2	EPA6 calc d	2.50E-02	Baes b	4.00E-03	Baes b	2.00E-02	Baes b	1.00E-02	Baes b	NA
Magnesium	7439-95-4	EPA6 calc d	1.00E+00	Baes b	5.50E-01	Baes b	4.00E-03	Baes b	5.00E-03	Baes b	NA
Manganese	7439-96-5	EPA6 calc d	2.50E-01	Baes b	5.00E-02	Baes b	3.50E-04	Baes b	4.00E-04	Baes b	3.60E-03
Mercury	7439-97-6	EPA6 calc d	9.00E-01	Baes b	2.00E-01	Baes b	4.50E-04	Baes b	2.50E-01	Baes b	NA
Molybdenum	7439-98-7	EPA6 calc d	2.50E-01	Baes b	6.00E-02	Baes b	1.50E-03	Baes b	6.00E-03	Baes b	NA
Nickel*	7440-02-0	EPA6 a	3.20E-02	EPA6 a	6.00E-03	EPA6 a	1.00E-03	EPA6 a	6.00E-03	EPA6 a	NA
Nickel*	7440-02-0	EPA6 a	3.20E-02	EPA6 a	6.00E-03	EPA6 a	1.00E-03	EPA6 a	6.00E-03	EPA6 a	NA
Nickel*	7440-02-0	EPA6 a	3.20E-02	EPA6 a	6.00E-03	EPA6 a	1.00E-03	EPA6 a	6.00E-03	EPA6 a	NA
Potassium	7440-09-7	EPA6 calc d	1.00E+00	Baes b	5.50E-01	Baes b	7.00E-03	Baes b	2.00E-02	Baes b	NA
Rhodium	7440-16-6	EPA6 calc d	1.50E-01	Baes b	4.00E-02	Baes b	1.00E-02	Baes b	2.00E-03	Baes b	NA
Selenium*	7782-49-2	EPA6 a	1.60E-02	EPA6 a	2.00E-03	EPA6 a	5.86E-03	EPA6 a	2.27E-03	EPA6 a	3.70E-03
Selenium*	7782-49-2	EPA6 a	1.60E-02	EPA6 a	2.00E-03	EPA6 a	5.86E-03	EPA6 a	2.27E-03	EPA6 a	3.70E-03
Selenium*	7782-49-2	EPA6 a	1.60E-02	EPA6 a	2.00E-03	EPA6 a	5.86E-03	EPA6 a	2.27E-03	EPA6 a	3.70E-03
Silicon	7440-21-3	EPA6 calc d	3.50E-01	Baes b	7.00E-02	Baes b	2.00E-05	Baes b	4.00E-05	Baes b	NA
Silver*	7440-22-4	EPA6 calc d	4.00E-01	EPA6 a	1.00E-01	EPA6 a	2.00E-02	EPA6 a	3.00E-03	EPA6 a	NA
Silver*	7440-22-4	EPA6 calc d	4.00E-01	EPA6 a	1.00E-01	EPA6 a	2.00E-02	EPA6 a	3.00E-03	EPA6 a	NA
Silver*	7440-22-4	EPA6 calc d	4.00E-01	EPA6 a	1.00E-01	EPA6 a	2.00E-02	EPA6 a	3.00E-03	EPA6 a	NA
Sodium	7440-23-5	EPA6 calc d	7.50E-02	Baes b	5.50E-02	Baes b	3.50E-02	Baes b	5.50E-02	Baes b	NA
Tantalum	7440-25-7	EPA6 calc d	1.00E-02	Baes b	2.50E-03	Baes b	3.00E-04	Baes b	6.00E-04	Baes b	NA
Thallium*	7440-28-0	EPA6 calc d	4.00E-03	EPA6 a	4.00E-04	EPA6 a	2.00E-03	EPA6 a	4.00E-02	EPA6 a	NA
Thallium*	7440-28-0	EPA6 calc d	4.00E-03	EPA6 a	4.00E-04	EPA6 a	2.00E-03	EPA6 a	4.00E-02	EPA6 a	NA
Thallium*	7440-28-0	EPA6 calc d	4.00E-03	EPA6 a	4.00E-04	EPA6 a	2.00E-03	EPA6 a	4.00E-02	EPA6 a	NA
Tin	7440-31-5	EPA6 calc d	3.00E-02	Baes b	6.00E-03	Baes b	1.00E-03	Baes b	8.00E-02	Baes b	NA
Tungsten	7440-33-7	EPA6 calc d	4.50E-02	Baes b	1.00E-02	Baes b	3.00E-04	Baes b	4.50E-02	Baes b	NA
Uranium	7440-61-1	EPA6 calc d	8.50E-03	Baes b	4.00E-03	Baes b	6.00E-04	Baes b	2.00E-04	Baes b	4.00E-02
Vanadium	7440-62-2	EPA6 calc d	5.50E-03	Baes b	3.00E-03	Baes b	2.00E-05	Baes b	2.50E-03	Baes b	NA
Yttrium	7440-65-5	EPA6 calc d	1.50E-02	Baes b	6.00E-03	Baes b	2.00E-05	Baes b	3.00E-04	Baes b	NA
Zinc	7440-66-6	EPA6 calc d	2.50E-01	EPA6 a	5.40E-02	EPA6 a	3.25E-05	EPA6 a	9.00E-05	EPA6 a	1.28E-04

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Plant Uptake Factors					Bioaccumulation/Biotransfer Factors				
Constituent of Potential Concern	CAS Registry Number	Source	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)
Zirconium	7440-67-7	EPA6 calc d	2.00E-03	Baes b	5.00E-04	Baes b	3.00E-05	Baes b	5.50E-03	Baes b	NA
Non-Metal and Anions											
Ammonia/Ammonium	7664-41-7	NA	NA	NA	NA	NA	7.90E-09	NA	NA	NA	NA
Bromide	24959-67-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	16887-00-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide	57-12-5	NA	NA	NA	NA	NA	9.90E-08	NA	NA	NA	NA
Fluoride	16984-48-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydroxide	14280-30-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodine	7553-56-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	14797-55-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite	14797-65-0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	14265-44-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	14808-79-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Criteria Pollutants											
Carbon dioxide	124-38-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen dioxide	10102-44-0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ozone	10028-15-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Particulate matter	no cas #	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfur dioxide	7446-09-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

* These metals have varying dissociation cc
a = EPA Region 6 Hazardous Waste Combı
b = Baes et al
c = Ng et al
d = Calculation from EPA Region 6 Hazard
e = Br_{ag} is a weighted average of $Br_{ag(fruit)}$ a

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Bioaccumulation/Biotransfer Factors										
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)	Source	$BSAF_{fish}$ (unitless)	Source
Metals												
Aluminum	7429-90-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	7440-36-0	NA	NA	NA	NA	NA	4.00E+01	EPA6 a	NA	NA	NA	NA
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	2.00E+01	EPA6 a	NA	NA	NA	NA
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	2.00E+01	EPA6 a	NA	NA	NA	NA
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	2.00E+01	EPA6 a	NA	NA	NA	NA
Barium*	7440-39-3	NA	9.00E-01	Ng c	2.00E-02	Ng c	NA	NA	NA	NA	NA	NA
Barium*	7440-39-3	NA	9.00E-01	Ng c	2.00E-02	Ng c	NA	NA	NA	NA	NA	NA
Barium*	7440-39-3	NA	9.00E-01	Ng c	2.00E-02	Ng c	NA	NA	NA	NA	NA	NA
Beryllium*	7440-41-7	NA	NA	NA	NA	NA	4.20E+01	EPA6 a	NA	NA	NA	NA
Beryllium*	7440-41-7	NA	NA	NA	NA	NA	4.20E+01	EPA6 a	NA	NA	NA	NA
Beryllium*	7440-41-7	NA	NA	NA	NA	NA	4.20E+01	EPA6 a	NA	NA	NA	NA
Bismuth	7440-69-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Boron	7440-42-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium*	7440-43-9	EPA6 a	2.50E-03	EPA6 a	1.06E-01	EPA6 a	2.50E+02	EPA6 a	NA	NA	NA	NA
Cadmium*	7440-43-9	EPA6 a	2.50E-03	EPA6 a	1.06E-01	EPA6 a	2.50E+02	EPA6 a	NA	NA	NA	NA
Cadmium*	7440-43-9	EPA6 a	2.50E-03	EPA6 a	1.06E-01	EPA6 a	2.50E+02	EPA6 a	NA	NA	NA	NA
Calcium	7440-70-2	NA	4.40E-02	Ng c	4.40E-02	Ng c	NA	NA	NA	NA	NA	NA
Chromium (and VI)*	18540-29-9	NA	NA	NA	NA	NA	3.00E+00	EPA6 a	NA	NA	NA	NA
Chromium (and VI)*	18540-29-9	NA	NA	NA	NA	NA	3.00E+00	EPA6 a	NA	NA	NA	NA
Chromium (and VI)*	18540-29-9	NA	NA	NA	NA	NA	3.00E+00	EPA6 a	NA	NA	NA	NA
Chromium (total)*	7440-47-3	NA	NA	NA	NA	NA	2.83E+02	EPA6 a	NA	NA	NA	NA
Chromium (total)*	7440-47-3	NA	NA	NA	NA	NA	2.83E+02	EPA6 a	NA	NA	NA	NA
Chromium (total)*	7440-47-3	NA	NA	NA	NA	NA	2.83E+02	EPA6 a	NA	NA	NA	NA
Cobalt	7440-48-4	Ng c	2.00E-02	Ng c	5.30E-01	Ng c	NA	NA	3.00E+02	NA	NA	NA
Copper	7440-50-8	Ng c	4.90E-01	Ng c	5.10E-01	Ng c	NA	NA	2.00E+02	NA	NA	NA
Iron	7439-89-6	Ng c	1.30E+00	Ng c	1.50E+00	Ng c	NA	NA	2.00E+02	NA	NA	NA
Lead	7439-92-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Bioaccumulation/Biotransfer Factors										
Constituent of Potential Concern	CAS Registry Number	Source	Ba_{egg} (day/kg FW)	Source	$Ba_{chicken}$ (day/kg FW)	Source	BCF_{fish} (L/kg FW tissue)	Source	BAF_{fish} (L/kg FW)	Source	$BSAF_{fish}$ (unitless)	Source
Lithium	7439-93-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	7439-95-4	NA	1.60E+00	Ng c	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	7439-96-5	Ng c	6.50E-02	Ng c	5.10E-02	Ng c	NA	NA	NA	NA	NA	NA
Mercury	7439-97-6	NA	NA	NA	2.70E-02	Ng c	NA	NA	NA	NA	NA	NA
Molybdenum	7439-98-7	NA	5.00E-01	Ng c	5.00E-02	Ng c	NA	NA	NA	NA	NA	NA
Nickel*	7440-02-0	NA	NA	NA	NA	NA	3.07E+02	EPA6 a	NA	NA	NA	NA
Nickel*	7440-02-0	NA	NA	NA	NA	NA	3.07E+02	EPA6 a	NA	NA	NA	NA
Nickel*	7440-02-0	NA	NA	NA	NA	NA	3.07E+02	EPA6 a	NA	NA	NA	NA
Potassium	7440-09-7	NA	1.10E+00	Ng c	NA	NA	NA	NA	NA	NA	NA	NA
Rhodium	7440-16-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium*	7782-49-2	EPA6 a	1.13E+00	EPA6 a	1.13E+00	EPA6 a	1.29E+02	EPA6 a	NA	NA	NA	NA
Selenium*	7782-49-2	EPA6 a	1.13E+00	EPA6 a	1.13E+00	EPA6 a	1.29E+02	EPA6 a	NA	NA	NA	NA
Selenium*	7782-49-2	EPA6 a	1.13E+00	EPA6 a	1.13E+00	EPA6 a	1.29E+02	EPA6 a	NA	NA	NA	NA
Silicon	7440-21-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver*	7440-22-4	NA	NA	NA	NA	NA	2.04E+02	EPA6 a	NA	NA	NA	NA
Silver*	7440-22-4	NA	NA	NA	NA	NA	2.04E+02	EPA6 a	NA	NA	NA	NA
Silver*	7440-22-4	NA	NA	NA	NA	NA	2.04E+02	EPA6 a	NA	NA	NA	NA
Sodium	7440-23-5	NA	6.10E+00	Ng c	NA	Ng c	NA	NA	NA	NA	NA	NA
Tantalum	7440-25-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium*	7440-28-0	NA	NA	NA	NA	NA	1.40E+03	EPA6 a	NA	NA	NA	NA
Thallium*	7440-28-0	NA	NA	NA	NA	NA	1.40E+03	EPA6 a	NA	NA	NA	NA
Thallium*	7440-28-0	NA	NA	NA	NA	NA	1.40E+03	EPA6 a	NA	NA	NA	NA
Tin	7440-31-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tungsten	7440-33-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Uranium	7440-61-1	Ng c	9.90E-01	Ng c	1.20E+00	Ng c	NA	NA	NA	NA	NA	NA
Vanadium	7440-62-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Yttrium	7440-65-5	NA	2.00E-03	Ng c	1.00E-02	Ng c	NA	NA	NA	NA	NA	NA
Zinc	7440-66-6	EPA6 a	8.75E-03	EPA6 a	8.75E-03	EPA6 a	NA	NA	NA	NA	NA	NA

Table B1-2. Physical/Chemical Parameters for Exposure Point Concentration Modelling for Inorganic COPCs

		Bioaccumulation/Biotransfer Factors										
Constituent of Potential Concern	**CAS Registry Number**	**Source**	**Ba_{egg} (day/kg FW)**	**Source**	**$Ba_{chicken}$ (day/kg FW)**	**Source**	**BCF_{fish} (L/kg FW tissue)**	**Source**	**BAF_{fish} (L/kg FW)**	**Source**	**$BSAF_{fish}$ (unitless)**	**Source**
Zirconium	7440-67-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-Metal and Anions												
Ammonia/Ammonium	7664-41-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	24959-67-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	16887-00-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide	57-12-5	NA	NA	NA	NA	NA	NA	NA	6.33E+02	NA	NA	NA
Fluoride	16984-48-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydroxide	14280-30-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodine	7553-56-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate	14797-55-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite	14797-65-0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	14265-44-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	14808-79-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Criteria Pollutants												
Carbon dioxide	124-38-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen dioxide	10102-44-0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ozone	10028-15-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Particulate matter	no cas #	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfur dioxide	7446-09-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

* These metals have varying dissociation cc
a = EPA Region 6 Hazardous Waste Combı
b = Baes et al
c = Ng et al
d = Calculation from EPA Region 6 Hazard
e = Br_{ag} is a weighted average of $Br_{ag(fruit)}$ a

Table B1-3. Physical/Chemical Parameters for Exposure Point Concentration Modelling for ROPCs

			Diffusivity				Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	D_a (cm^2/s)	Source	D_w (cm^2/s)	Source	Kd_s (cm^3/g)	Source	Kd_{sw} (L/Kg)	Source	Kd_{bs} (cm^3/g)	Source
Actinum-227	14952-40-0	227	5.11E-02	EPA6 calc a	5.91E-06	EPA6 calc a	1.50E+03	Baes b	1.50E+03	Baes b	1.50E+03	Baes b
Americium-241	14596-10-2	241	4.91E-02	EPA6 calc a	5.68E-06	EPA6 calc a	7.00E+02	Baes b	7.00E+02	Baes b	7.00E+02	Baes b
Americium-243	14993-75-0	243	4.88E-02	EPA6 calc a	5.65E-06	EPA6 calc a	7.00E+02	Baes b	7.00E+02	Baes b	7.00E+02	Baes b
Antimony-125	14234-35-6	125	7.60E-02	EPA6 calc a	8.80E-06	EPA6 calc a	4.50E+01	Baes b	4.50E+01	Baes b	4.50E+01	Baes b
Barium-137	13981-97-0	137	7.15E-02	EPA6 calc a	8.28E-06	EPA6 calc a	6.00E+01	Baes b	6.00E+01	Baes b	6.00E+01	Baes b
Cadmium-113	no cas #	113	8.13E-02	EPA6 calc a	9.41E-06	EPA6 calc a	6.50E+00	Baes b	6.50E+00	Baes b	6.50E+00	Baes b
Carbon-14	14762-75-5	14	3.27E-01	EPA6 calc a	3.79E-05	EPA6 calc a	NA	NA	NA	NA	NA	NA
Cesium-134	13967-70-9	134	7.26E-02	EPA6 calc a	8.40E-06	EPA6 calc a	1.00E+03	Baes b	1.00E+03	Baes b	1.00E+03	Baes b
Cesium-137	10045-97-3	137	7.15E-02	EPA6 calc a	8.28E-06	EPA6 calc a	1.00E+03	Baes b	1.00E+03	Baes b	1.00E+03	Baes b
Cobalt-60	10198-40-0	60	1.24E-01	EPA6 calc a	1.44E-05	EPA6 calc a	4.50E+01	Baes b	4.50E+01	Baes b	4.50E+01	Baes b
Curium-242	15510-73-3	242	4.89E-02	EPA6 calc a	5.67E-06	EPA6 calc a	2.00E+03	Baes b	2.00E+03	Baes b	2.00E+03	Baes b
Curium-243	15757-87-6	243	4.88E-02	EPA6 calc a	5.65E-06	EPA6 calc a	2.00E+03	Baes b	2.00E+03	Baes b	2.00E+03	Baes b
Curium-244	13981-15-2	244	4.87E-02	EPA6 calc a	5.63E-06	EPA6 calc a	2.00E+03	Baes b	2.00E+03	Baes b	2.00E+03	Baes b
Europium-152	14683-23-9	152	6.67E-02	EPA6 calc a	7.72E-06	EPA6 calc a	6.50E+02	Baes b	6.50E+02	Baes b	6.50E+02	Baes b
Europium-154	15585-10-1	154	6.61E-02	EPA6 calc a	7.66E-06	EPA6 calc a	6.50E+02	Baes b	6.50E+02	Baes b	6.50E+02	Baes b
Europium-155	14391-16-3	155	6.58E-02	EPA6 calc a	7.62E-06	EPA6 calc a	6.50E+02	Baes b	6.50E+02	Baes b	6.50E+02	Baes b
Iodine-129	15046-84-1	129	7.44E-02	EPA6 calc a	8.62E-06	EPA6 calc a	6.00E+01	Baes b	6.00E+01	Baes b	6.00E+01	Baes b
Neptunium-237	13994-20-2	237	4.96E-02	EPA6 calc a	5.74E-06	EPA6 calc a	3.00E+01	Baes b	3.00E+01	Baes b	3.00E+01	Baes b
Nickel-59	14336-70-0	59	1.25E-01	EPA6 calc a	1.45E-05	EPA6 calc a	1.50E+02	Baes b	1.50E+02	Baes b	1.50E+02	Baes b
Nickel-63	13981-37-8	63	1.20E-01	EPA6 calc a	1.39E-05	EPA6 calc a	1.50E+02	Baes b	1.50E+02	Baes b	1.50E+02	Baes b
Niobium-93	7440-03-1	93	9.26E-02	EPA6 calc a	1.07E-05	EPA6 calc a	3.50E+02	Baes b	3.50E+02	Baes b	3.50E+02	Baes b
Plutonium-238	13981-16-3	238	4.95E-02	EPA6 calc a	5.73E-06	EPA6 calc a	4.50E+03	Baes b	4.50E+03	Baes b	4.50E+03	Baes b
Plutonium-239	15117-48-3	239	4.93E-02	EPA6 calc a	5.71E-06	EPA6 calc a	4.50E+03	Baes b	4.50E+03	Baes b	4.50E+03	Baes b
Plutonium-240	14119-33-6	240	4.92E-02	EPA6 calc a	5.70E-06	EPA6 calc a	4.50E+03	Baes b	4.50E+03	Baes b	4.50E+03	Baes b
Plutonium-241	14119-32-5	241	4.91E-02	EPA6 calc a	5.68E-06	EPA6 calc a	4.50E+03	Baes b	4.50E+03	Baes b	4.50E+03	Baes b
Plutonium-242	13982-10-0	242	4.89E-02	EPA6 calc a	5.67E-06	EPA6 calc a	4.50E+03	Baes b	4.50E+03	Baes b	4.50E+03	Baes b
Protactinium-231	14331-85-2	231	5.05E-02	EPA6 calc a	5.84E-06	EPA6 calc a	2.50E+03	Baes b	2.50E+03	Baes b	2.50E+03	Baes b
Radium-226	13982-63-3	226	5.12E-02	EPA6 calc a	5.93E-06	EPA6 calc a	4.50E+02	Baes b	4.50E+02	Baes b	4.50E+02	Baes b
Radium-228	15262-20-1	228	5.09E-02	EPA6 calc a	5.89E-06	EPA6 calc a	4.50E+02	Baes b	4.50E+02	Baes b	4.50E+02	Baes b
Ruthenium-106	13967-48-1	106	8.48E-02	EPA6 calc a	9.82E-06	EPA6 calc a	3.50E+02	Baes b	3.50E+02	Baes b	3.50E+02	Baes b

Table B1-3. Physical/Chemical Parameters for Exposure Point Concentration Modelling for ROPCs

			Diffusivity				Partitioning Coefficients					
Constituent of Potential Concern	CAS Registry Number	MW (g/mol)	D_a (cm^2/s)	Source	D_w (cm^2/s)	Source	Kd_s (cm^3/g)	Source	Kd_{sw} (L/Kg)	Source	Kd_{bs} (cm^3/g)	Source
Samarium-151	15715-94-3	151	6.70E-02	EPA6 calc a	7.76E-06	EPA6 calc a	6.50E+02	Baes b	6.50E+02	Baes b	6.50E+02	Baes b
Selenium-79	no cas #	79	1.03E-01	EPA6 calc a	1.19E-05	EPA6 calc a	3.00E+02	Baes b	3.00E+02	Baes b	3.00E+02	Baes b
Strontium-90	10098-97-2	90	9.46E-02	EPA6 calc a	1.10E-05	EPA6 calc a	3.50E+01	Baes b	3.50E+01	Baes b	3.50E+01	Baes b
Technetium-99	14133-76-7	99	8.88E-02	EPA6 calc a	1.03E-05	EPA6 calc a	1.50E+00	Baes b	1.50E+00	Baes b	1.50E+00	Baes b
Thorium-229	15594-54-4	229	5.08E-02	EPA6 calc a	5.88E-06	EPA6 calc a	1.50E+05	Baes b	1.50E+05	Baes b	1.50E+05	Baes b
Thorium-232	7440-29-1	232	5.03E-02	EPA6 calc a	5.83E-06	EPA6 calc a	1.50E+05	Baes b	1.50E+05	Baes b	1.50E+05	Baes b
Tin-126	15832-50-5	126	7.56E-02	EPA6 calc a	8.75E-06	EPA6 calc a	2.50E+02	Baes b	2.50E+02	Baes b	2.50E+02	Baes b
Tritium	10028-17-8	3	9.13E-01	EPA6 calc a	1.06E-04	EPA6 calc a	NA	NA	NA	NA	NA	NA
Uranium-232	14158-29-3	232	5.03E-02	EPA6 calc a	5.83E-06	EPA6 calc a	4.50E+02	Baes b	4.50E+02	Baes b	4.50E+02	Baes b
Uranium-233	13968-55-3	233	5.02E-02	EPA6 calc a	5.81E-06	EPA6 calc a	4.50E+02	Baes b	4.50E+02	Baes b	4.50E+02	Baes b
Uranium-234	13966-29-5	234	5.00E-02	EPA6 calc a	5.79E-06	EPA6 calc a	4.50E+02	Baes b	4.50E+02	Baes b	4.50E+02	Baes b
Uranium-235	15117-96-1	235	4.99E-02	EPA6 calc a	5.78E-06	EPA6 calc a	4.50E+02	Baes b	4.50E+02	Baes b	4.50E+02	Baes b
Uranium-236	13982-70-2	236	4.98E-02	EPA6 calc a	5.76E-06	EPA6 calc a	4.50E+02	Baes b	4.50E+02	Baes b	4.50E+02	Baes b
Uranium-238	7440-61-1	238	4.95E-02	EPA6 calc a	5.73E-06	EPA6 calc a	4.50E+02	Baes b	4.50E+02	Baes b	4.50E+02	Baes b
Yttrium-90	10098-91-6	90	9.46E-02	EPA6 calc a	1.10E-05	EPA6 calc a	5.00E+02	Baes b	5.00E+02	Baes b	5.00E+02	Baes b
Zirconium-93	15751-77-6	93	9.26E-02	EPA6 calc a	1.07E-05	EPA6 calc a	3.00E+03	Baes b	3.00E+03	Baes b	3.00E+03	Baes b

a = Calculation from EPA Region 6 Hazardous Waste Combustion Facility Guidance (b)
b = Baes et al
c = RAIS database
d = Br_{ag} is a weighted average of $Br_{ag(fruit)}$ and $Br_{ag(veg)}$

Table B1-3. Physical/Chemical Parameters for Exposure Point Concentration Modelling for ROPCs

		Half - life	Plant Uptake Factors							
Constituent of Potential Concern	CAS Registry Number	$t_{1/2}$ (days)	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(fruit)}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(veg)}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))[d]
Actinum-227	14952-40-0	7.96E+03	RAIS c	3.50E-04	Baes b	3.50E-04	Baes b	1.14E-03	EPA6 calc d	7.50E-04
Americium-241	14596-10-2	1.58E+05	RAIS c	2.50E-04	Baes b	2.50E-04	Baes b	1.56E-03	EPA6 calc d	9.17E-04
Americium-243	14993-75-0	2.69E+06	RAIS c	2.50E-04	Baes b	2.50E-04	Baes b	1.56E-03	EPA6 calc d	9.17E-04
Antimony-125	14234-35-6	1.01E+03	RAIS c	3.00E-02	Baes b	3.00E-02	Baes b	7.25E-02	EPA6 calc d	5.16E-02
Barium-137	13981-97-0	1.77E-03	RAIS c	1.50E-02	Baes b	1.50E-02	Baes b	4.88E-02	EPA6 calc d	3.22E-02
Cadmium-113	no cas #	NA	NA	1.50E-01	Baes b	1.50E-01	Baes b	2.50E-01	EPA6 calc d	2.01E-01
Carbon-14	14762-75-5	2.09E+06	RAIS c	NA	NA	NA	NA	NA	NA	NA
Cesium-134	13967-70-9	7.52E+02	RAIS c	3.00E-02	Baes b	3.00E-02	Baes b	4.25E-02	EPA6 calc d	3.64E-02
Cesium-137	10045-97-3	1.10E+04	RAIS c	3.00E-02	Baes b	3.00E-02	Baes b	4.25E-02	EPA6 calc d	3.64E-02
Cobalt-60	10198-40-0	1.92E+03	RAIS c	7.00E-03	Baes b	7.00E-03	Baes b	1.03E-02	EPA6 calc d	8.65E-03
Curium-242	15510-73-3	1.63E+02	RAIS c	1.50E-05	Baes b	1.50E-05	Baes b	2.24E-04	EPA6 calc d	1.21E-04
Curium-243	15757-87-6	1.04E+04	RAIS c	1.50E-05	Baes b	1.50E-05	Baes b	2.24E-04	EPA6 calc d	1.21E-04
Curium-244	13981-15-2	6.61E+03	RAIS c	1.50E-05	Baes b	1.50E-05	Baes b	2.24E-04	EPA6 calc d	1.21E-04
Europium-152	14683-23-9	4.96E+03	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.50E-03	EPA6 calc d	4.76E-03
Europium-154	15585-10-1	3.21E+03	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.50E-03	EPA6 calc d	4.76E-03
Europium-155	14391-16-3	1.81E+03	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.50E-03	EPA6 calc d	4.76E-03
Iodine-129	15046-84-1	5.73E+09	RAIS c	5.00E-02	Baes b	5.00E-02	Baes b	7.50E-02	EPA6 calc d	6.27E-02
Neptunium-237	13994-20-2	7.81E+08	RAIS c	1.00E-02	Baes b	1.00E-02	Baes b	3.25E-02	EPA6 calc d	2.14E-02
Nickel-59	14336-70-0	2.74E+07	RAIS c	3.20E-02	Baes b	3.20E-02	Baes b	2.55E-02	EPA6 calc d	2.87E-02
Nickel-63	13981-37-8	3.65E+04	RAIS c	6.00E-02	Baes b	6.00E-02	Baes b	6.00E-02	EPA6 calc d	6.00E-02
Niobium-93	7440-03-1	5.33E+03	RAIS c	5.00E-03	Baes b	5.00E-03	Baes b	8.75E-03	EPA6 calc d	6.91E-03
Plutonium-238	13981-16-3	3.20E+04	RAIS c	4.50E-05	Baes b	4.50E-05	Baes b	1.46E-04	EPA6 calc d	9.65E-05
Plutonium-239	15117-48-3	8.80E+06	RAIS c	4.50E-05	Baes b	4.50E-05	Baes b	1.46E-04	EPA6 calc d	9.65E-05
Plutonium-240	14119-33-6	2.40E+06	RAIS c	4.50E-05	Baes b	4.50E-05	Baes b	1.46E-04	EPA6 calc d	9.65E-05
Plutonium-241	14119-32-5	5.26E+03	RAIS c	4.50E-05	Baes b	4.50E-05	Baes b	1.46E-04	EPA6 calc d	9.65E-05
Plutonium-242	13982-10-0	1.37E+08	RAIS c	4.50E-05	Baes b	4.50E-05	Baes b	1.46E-04	EPA6 calc d	9.65E-05
Protactinium-231	14331-85-2	1.36E+07	RAIS c	2.50E-04	Baes b	2.50E-04	Baes b	8.13E-04	EPA6 calc d	5.36E-04
Radium-226	13982-63-3	5.84E+05	RAIS c	1.50E-03	Baes b	1.50E-03	Baes b	4.88E-03	EPA6 calc d	3.22E-03
Radium-228	15262-20-1	2.10E+03	RAIS c	1.50E-03	Baes b	1.50E-03	Baes b	4.88E-03	EPA6 calc d	3.22E-03
Ruthenium-106	13967-48-1	3.68E+02	RAIS c	2.00E-02	Baes b	2.00E-02	Baes b	3.38E-02	EPA6 calc d	2.70E-02

Table B1-3. Physical/Chemical Parameters for Exposure Point Concentration Modelling for ROPCs

		Half - life	Plant Uptake Factors							
Constituent of Potential Concern	CAS Registry Number	$t_{1/2}$ (days)	Source	$Br_{root\ veg}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(fruit)}$ ((ug/g DW plant) /(ug/g soil))	Source	$Br_{ag(veg)}$ ((ug/g DW plant) /(ug/g soil))	Source	Br_{ag} ((ug/g DW plant) /(ug/g soil))[d]
Samarium-151	15715-94-3	3.29E+04	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.50E-03	EPA6 calc d	4.76E-03
Selenium-79	no cas #	NA	NA	2.50E-02	Baes b	2.50E-02	Baes b	2.50E-02	EPA6 calc d	2.50E-02
Strontium-90	10098-97-2	1.04E+04	RAIS c	2.50E-01	Baes b	2.50E-01	Baes b	8.13E-01	EPA6 calc d	5.36E-01
Technetium-99	14133-76-7	7.77E+07	RAIS c	1.50E+00	Baes b	1.50E+00	Baes b	3.50E+00	EPA6 calc d	2.52E+00
Thorium-229	15594-54-4	2.68E+06	RAIS c	8.50E-05	Baes b	8.50E-05	Baes b	2.76E-04	EPA6 calc d	1.82E-04
Thorium-232	7440-29-1	5.15E+12	RAIS c	8.50E-05	Baes b	8.50E-05	Baes b	2.76E-04	EPA6 calc d	1.82E-04
Tin-126	15832-50-5	3.65E+07	RAIS c	6.00E-03	Baes b	6.00E-03	Baes b	1.20E-02	EPA6 calc d	9.05E-03
Tritium	10028-17-8	4.49E+03	RAIS c	NA	NA	NA	NA	NA	NA	NA
Uranium-232	14158-29-3	2.63E+04	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.13E-03	EPA6 calc d	4.57E-03
Uranium-233	13968-55-3	5.80E+07	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.13E-03	EPA6 calc d	4.57E-03
Uranium-234	13966-29-5	8.94E+07	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.13E-03	EPA6 calc d	4.57E-03
Uranium-235	15117-96-1	2.57E+11	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.13E-03	EPA6 calc d	4.57E-03
Uranium-236	13982-70-2	8.54E+09	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.13E-03	EPA6 calc d	4.57E-03
Uranium-238	7440-61-1	1.63E+12	RAIS c	4.00E-03	Baes b	4.00E-03	Baes b	5.13E-03	EPA6 calc d	4.57E-03
Yttrium-90	10098-91-6	2.67E+00	RAIS c	6.00E-03	Baes b	6.00E-03	Baes b	8.25E-03	EPA6 calc d	7.14E-03
Zirconium-93	15751-77-6	5.58E+08	RAIS c	5.00E-04	Baes b	5.00E-04	Baes b	8.75E-04	EPA6 calc d	6.91E-04

a = Calculation from EPA Region 6 H:
b = Baes et al
c = RAIS database
d = Br_{ag} is a weighted average of $Br_{ag(}$

Table B1-3. Physical/Chemical Parameters for Exposure Point Concentration Modelling for ROPCs

		Plant Uptake Factors					Bioconcentration/Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)
Actinum-227	14952-40-0	EPA6 calc d	3.50E-03	Baes b	3.50E-04	Baes b	2.00E-05	Baes b	2.50E-05	Baes b	NA
Americium-241	14596-10-2	EPA6 calc d	5.50E-03	Baes b	2.50E-04	Baes b	4.00E-07	Baes b	3.50E-06	Baes b	NA
Americium-243	14993-75-0	EPA6 calc d	5.50E-03	Baes b	2.50E-04	Baes b	4.00E-07	Baes b	3.50E-06	Baes b	NA
Antimony-125	14234-35-6	EPA6 calc d	2.00E-01	Baes b	3.00E-02	Baes b	1.00E-04	Baes b	1.00E-03	Baes b	NA
Barium-137	13981-97-0	EPA6 calc d	1.50E-01	Baes b	1.50E-02	Baes b	3.50E-04	Baes b	1.50E-04	Baes b	NA
Cadmium-113	no cas #	EPA6 calc d	5.50E-01	Baes b	1.50E-01	Baes b	1.00E-03	Baes b	5.50E-04	Baes b	NA
Carbon-14	14762-75-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cesium-134	13967-70-9	EPA6 calc d	8.00E-02	Baes b	3.00E-02	Baes b	7.00E-03	Baes b	2.00E-02	Baes b	NA
Cesium-137	10045-97-3	EPA6 calc d	8.00E-02	Baes b	3.00E-02	Baes b	7.00E-03	Baes b	2.00E-02	Baes b	NA
Cobalt-60	10198-40-0	EPA6 calc d	2.00E-02	Baes b	7.00E-03	Baes b	2.00E-03	Baes b	2.00E-02	Baes b	NA
Curium-242	15510-73-3	EPA6 calc d	8.50E-04	Baes b	1.50E-05	Baes b	2.00E-03	Baes b	3.50E-06	Baes b	NA
Curium-243	15757-87-6	EPA6 calc d	8.50E-04	Baes b	1.50E-05	Baes b	2.00E-03	Baes b	3.50E-06	Baes b	NA
Curium-244	13981-15-2	EPA6 calc d	8.50E-04	Baes b	1.50E-05	Baes b	2.00E-03	Baes b	3.50E-06	Baes b	NA
Europium-152	14683-23-9	EPA6 calc d	1.00E-02	Baes b	4.00E-03	Baes b	2.00E-05	Baes b	5.00E-03	Baes b	NA
Europium-154	15585-10-1	EPA6 calc d	1.00E-02	Baes b	4.00E-03	Baes b	2.00E-05	Baes b	5.00E-03	Baes b	NA
Europium-155	14391-16-3	EPA6 calc d	1.00E-02	Baes b	4.00E-03	Baes b	2.00E-05	Baes b	5.00E-03	Baes b	NA
Iodine-129	15046-84-1	EPA6 calc d	1.50E-01	Baes b	5.00E-02	Baes b	1.00E-02	Baes b	7.00E-03	Baes b	NA
Neptunium-237	13994-20-2	EPA6 calc d	1.00E-01	Baes b	1.00E-02	Baes b	5.00E-06	Baes b	5.50E-05	Baes b	NA
Nickel-59	14336-70-0	EPA6 calc d	6.00E-03	Baes b	3.20E-02	Baes b	1.00E-02	Baes b	6.00E-03	Baes b	NA
Nickel-63	13981-37-8	EPA6 calc d	6.00E-02	Baes b	6.00E-02	Baes b	1.00E-02	Baes b	6.00E-03	Baes b	NA
Niobium-93	7440-03-1	EPA6 calc d	2.00E-02	Baes b	5.00E-03	Baes b	2.00E-02	Baes b	2.50E-01	Baes b	NA
Plutonium-238	13981-16-3	EPA6 calc d	4.50E-04	Baes b	4.50E-05	Baes b	1.00E-07	Baes b	5.00E-07	Baes b	NA
Plutonium-239	15117-48-3	EPA6 calc d	4.50E-04	Baes b	4.50E-05	Baes b	1.00E-07	Baes b	5.00E-07	Baes b	NA
Plutonium-240	14119-33-6	EPA6 calc d	4.50E-04	Baes b	4.50E-05	Baes b	1.00E-07	Baes b	5.00E-07	Baes b	NA
Plutonium-241	14119-32-5	EPA6 calc d	4.50E-04	Baes b	4.50E-05	Baes b	1.00E-07	Baes b	5.00E-07	Baes b	NA
Plutonium-242	13982-10-0	EPA6 calc d	4.50E-04	Baes b	4.50E-05	Baes b	1.00E-07	Baes b	5.00E-07	Baes b	NA
Protactinium-231	14331-85-2	EPA6 calc d	2.50E-03	Baes b	2.50E-04	Baes b	5.00E-06	Baes b	1.00E-05	Baes b	NA
Radium-226	13982-63-3	EPA6 calc d	1.50E-02	Baes b	1.50E-03	Baes b	4.50E-04	Baes b	2.50E-04	Baes b	NA
Radium-228	15262-20-1	EPA6 calc d	1.50E-02	Baes b	1.50E-03	Baes b	4.50E-04	Baes b	2.50E-04	Baes b	NA
Ruthenium-106	13967-48-1	EPA6 calc d	7.50E-02	Baes b	2.00E-02	Baes b	6.00E-07	Baes b	2.00E-03	Baes b	NA

Table B1-3. Physical/Chemical Parameters for Exposure Point Concentration Modelling for ROPCs

		Plant Uptake Factors					Bioconcentration/Bioaccumulation Factors				
Constituent of Potential Concern	CAS Registry Number	Source	Br_{forage} ((ug/g DW plant) /(ug/g soil))	Source	Br_{grain} ((ug/g DW plant) /(ug/g soil))	Source	Ba_{milk} (day/kg FW)	Source	Ba_{beef} (day/kg FW)	Source	Ba_{pork} (day/kg FW)
Samarium-151	15715-94-3	EPA6 calc d	1.00E-02	Baes b	4.00E-03	Baes b	2.00E-05	Baes b	5.00E-03	Baes b	NA
Selenium-79	no cas #	EPA6 calc d	2.50E-02	Baes b	2.50E-02	Baes b	4.00E-03	Baes b	1.50E-02	Baes b	NA
Strontium-90	10098-97-2	EPA6 calc d	2.50E+00	Baes b	2.50E-01	Baes b	1.50E-03	Baes b	3.00E-04	Baes b	NA
Technetium-99	14133-76-7	EPA6 calc d	9.50E+00	Baes b	1.50E+00	Baes b	1.00E-02	Baes b	8.50E-03	Baes b	NA
Thorium-229	15594-54-4	EPA6 calc d	8.50E-04	Baes b	8.50E-05	Baes b	5.00E-06	Baes b	6.00E-06	Baes b	NA
Thorium-232	7440-29-1	EPA6 calc d	8.50E-04	Baes b	8.50E-05	Baes b	5.00E-06	Baes b	6.00E-06	Baes b	NA
Tin-126	15832-50-5	EPA6 calc d	3.00E-02	Baes b	6.00E-03	Baes b	1.00E-03	Baes b	8.00E-02	Baes b	NA
Tritium	10028-17-8	NA	NA	NA	NA	NA	1.00E-03	RAIS c	NA	NA	NA
Uranium-232	14158-29-3	EPA6 calc d	8.50E-03	Baes b	4.00E-03	Baes b	6.00E-04	Baes b	2.00E-04	Baes b	NA
Uranium-233	13968-55-3	EPA6 calc d	8.50E-03	Baes b	4.00E-03	Baes b	6.00E-04	Baes b	2.00E-04	Baes b	NA
Uranium-234	13966-29-5	EPA6 calc d	8.50E-03	Baes b	4.00E-03	Baes b	6.00E-04	Baes b	2.00E-04	Baes b	NA
Uranium-235	15117-96-1	EPA6 calc d	8.50E-03	Baes b	4.00E-03	Baes b	6.00E-04	Baes b	2.00E-04	Baes b	NA
Uranium-236	13982-70-2	EPA6 calc d	8.50E-03	Baes b	4.00E-03	Baes b	6.00E-04	Baes b	2.00E-04	Baes b	NA
Uranium-238	7440-61-1	EPA6 calc d	8.50E-03	Baes b	4.00E-03	Baes b	6.00E-04	Baes b	2.00E-04	Baes b	NA
Yttrium-90	10098-91-6	EPA6 calc d	1.50E-02	Baes b	6.00E-03	Baes b	2.00E-05	Baes b	3.00E-04	Baes b	NA
Zirconium-93	15751-77-6	EPA6 calc d	2.00E-03	Baes b	5.00E-04	Baes b	3.00E-05	Baes b	5.50E-03	Baes b	NA

a = Calculation from EPA Region 6 H:
b = Baes et al
c = RAIS database
d = Br_{ag} is a weighted average of $Br_{ag(}$

Table B1-3. Physical/Chemical Parameters for Exposure Point Concentration Modelling for ROPCs

		Bioconcentration/Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	$Ba_{chicken}$ (day/kg FW)	BCF_{fish} (L/kg FW tissue)	BAF_{fish} (L/kg FW)	Source	$BSAF_{fish}$ (unitless)
Actinum-227	14952-40-0	NA	NA	NA	2.50E+01	RAIS c	NA
Americium-241	14596-10-2	NA	NA	NA	3.00E+01	RAIS c	NA
Americium-243	14993-75-0	NA	NA	NA	3.00E+01	RAIS c	NA
Antimony-125	14234-35-6	NA	NA	NA	1.00E-02	RAIS c	NA
Barium-137	13981-97-0	NA	NA	NA	4.00E+00	RAIS c	NA
Cadmium-113	no cas #	NA	NA	NA	2.00E+02	RAIS c	NA
Carbon-14	14762-75-5	NA	NA	NA	NA	NA	NA
Cesium-134	13967-70-9	NA	NA	NA	2.00E+03	RAIS c	NA
Cesium-137	10045-97-3	NA	NA	NA	2.00E+03	RAIS c	NA
Cobalt-60	10198-40-0	NA	NA	NA	3.00E+02	RAIS c	NA
Curium-242	15510-73-3	NA	NA	NA	3.00E+01	RAIS c	NA
Curium-243	15757-87-6	NA	NA	NA	3.00E+01	RAIS c	NA
Curium-244	13981-15-2	NA	NA	NA	3.00E+01	RAIS c	NA
Europium-152	14683-23-9	NA	NA	NA	5.00E+01	RAIS c	NA
Europium-154	15585-10-1	NA	NA	NA	5.00E+01	RAIS c	NA
Europium-155	14391-16-3	NA	NA	NA	5.00E+01	RAIS c	NA
Iodine-129	15046-84-1	NA	NA	NA	4.00E+01	RAIS c	NA
Neptunium-237	13994-20-2	NA	NA	NA	3.00E+01	RAIS c	NA
Nickel-59	14336-70-0	NA	NA	NA	1.00E+02	RAIS c	NA
Nickel-63	13981-37-8	NA	NA	NA	1.00E+02	RAIS c	NA
Niobium-93	7440-03-1	NA	NA	NA	3.00E+02	RAIS c	NA
Plutonium-238	13981-16-3	NA	NA	NA	3.00E+01	RAIS c	NA
Plutonium-239	15117-48-3	NA	NA	NA	3.00E+01	RAIS c	NA
Plutonium-240	14119-33-6	NA	NA	NA	3.00E+01	RAIS c	NA
Plutonium-241	14119-32-5	NA	NA	NA	3.00E+01	RAIS c	NA
Plutonium-242	13982-10-0	NA	NA	NA	3.00E+01	RAIS c	NA
Protactinium-231	14331-85-2	NA	NA	NA	1.00E+01	RAIS c	NA
Radium-226	13982-63-3	NA	NA	NA	5.00E+01	RAIS c	NA
Radium-228	15262-20-1	NA	NA	NA	5.00E+01	RAIS c	NA
Ruthenium-106	13967-48-1	NA	NA	NA	1.00E+01	RAIS c	NA

Table B1-3. Physical/Chemical Parameters for Exposure Point Concentration Modelling for ROPCs

		Bioconcentration/Bioaccumulation Factors					
Constituent of Potential Concern	CAS Registry Number	Ba_{egg} (day/kg FW)	$Ba_{chicken}$ (day/kg FW)	BCF_{fish} (L/kg FW tissue)	BAF_{fish} (L/kg FW)	Source	$BSAF_{fish}$ (unitless)
Samarium-151	15715-94-3	NA	NA	NA	NA	NA	NA
Selenium-79	no cas #	NA	NA	NA	NA	NA	NA
Strontium-90	10098-97-2	NA	NA	NA	6.00E+01	RAIS c	NA
Technetium-99	14133-76-7	NA	NA	NA	2.00E+01	RAIS c	NA
Thorium-229	15594-54-4	NA	NA	NA	1.00E+02	RAIS c	NA
Thorium-232	7440-29-1	NA	NA	NA	1.00E+02	RAIS c	NA
Tin-126	15832-50-5	NA	NA	NA	3.00E+03	RAIS c	NA
Tritium	10028-17-8	NA	NA	NA	1.00E+00	RAIS c	NA
Uranium-232	14158-29-3	NA	NA	NA	1.00E+01	RAIS c	NA
Uranium-233	13968-55-3	NA	NA	NA	1.00E+01	RAIS c	NA
Uranium-234	13966-29-5	NA	NA	NA	1.00E+01	RAIS c	NA
Uranium-235	15117-96-1	NA	NA	NA	1.00E+01	RAIS c	NA
Uranium-236	13982-70-2	NA	NA	NA	1.00E+01	RAIS c	NA
Uranium-238	7440-61-1	NA	NA	NA	1.00E+01	RAIS c	NA
Yttrium-90	10098-91-6	NA	NA	NA	3.00E+01	RAIS c	NA
Zirconium-93	15751-77-6	NA	NA	NA	3.00E+02	RAIS c	NA

a = Calculation from EPA Region 6 H:
b = Baes et al
c = RAIS database
d = Br_{ag} is a weighted average of $Br_{ag(}$

NOTES

COPC	=	Constituent of Potential Concern to include Organic, Inorganic, and Radiological Constituents
MW	=	Molecular weight of COPC (g/mole)
H	=	Henry's Law Constant (atm*m^3/mol)
D_a	=	Diffusivity of COPC in air (cm^2/s)
D_w	=	Diffusivity of COPC in water (cm^2/s)
K_{ow}	=	Octanol/water partitioning coefficient (unitless)
K_{oc}	=	Soil organic carbon-water partitioning coefficient (ml water/g soil)
Kd_s	=	Soil-water partitioning coefficient (ml water/g soil)
Kd_{sw}	=	Suspended sediment/surface water partitioning coefficient (L water/kg suspended sediment)
Kd_{bs}	=	Bed sediment/sediment pore water partitioning coefficient (L COPC/kg water body)
ksg	=	COPC soil loss due to biotic and abiotic degradation ($year^{-1}$)
$t_{1/2}$	=	Half time of COPC in soil (days)
F_v	=	Fraction of COPC air concetration in vapor phase (unitless)
RCF	=	Root concentration factor (ug COPC/g DW plant)/(ug COPC/ml soil water) - (unitless)
$Br_{rootveg}$	=	Plant-soil bioconcentration factor for belowground produce (ug COPC/g DW plant)/(ug COPC/ml soil) - (unitless)
Br_{forage}	=	Plant-soil bioconcentration factor in forage and silage (ug COPC/g DW plant)/(ug COPC/ml soil) - (unitless)
$Br_{ag(fruit)}$	=	Plant-soil bioconcentration factor in abovegroud produce for fruit (ug COPC/g DW plant)/(ug COPC/ml soil) - (unitless)
$Br_{ag(veg)}$	=	Plant-soil bioconcentration factor in aboveground produce for vegetables (ug COPC/g DW plant)/(ug COPC/ml soil) - (unitless)
Br_{ag}	=	Plant-soil bioconcentration factor in abovegraound produce as a weighted average of $Br_{ag(fruit)}$ and $Br_{ag(veg)}$ (ug COPC/g DW plant)/(ug COPC/ml soil) - (unitless)
Br_{grain}	=	Plant-soil bioconcentration factor in grain (ug COPC/g DW plant)/(ug COPC/ml soil) - (unitless)
Bv_{ag}	=	COPC air-to-plant biotransfer factor for aboveground produce ((ug COPC/g DW plant)/(ug COPC/ml air) - (unitless)
Bv_{forage}	=	COPC air-to-plant biotransfer factor for forage and silage ((ug COPC/g DW plant)/(ug COPC/ml air) - (unitless)
Ba_{milk}	=	Biotransfer factor for milk (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
Ba_{beef}	=	Biotransfer factor for beef (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
Ba_{pork}	=	Biotransfer factor for pork (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
Ba_{egg}	=	Biotransfer factor for eggs (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
$Ba_{chicken}$	=	Biotransfer factor for chicken (mg COPC/kg FW tissue)/(mg COPC/day) OR (day/kg FW tissue)
BCF_{fish}	=	Bioconcentration factor in fish (L/kg FW) OR (unitless)
BAF_{fish}	=	Bioaccumulatin factor in fish (mg COPC/kg FW tissue)/(mg COPC/L total water column)
$BSAF_{fish}$	=	Biota-sediment accumulation factor in fish (mg COPC/kg lipid tissue)/(mg COPC/kg sediment) - (unitless)

References for Appendix B1

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Appendix B2

Supporting Equations for Media Constituents of Potential Concern Concentrations

Appendix B2

Supporting Equations for Media Constituents of Potential Concern Concentrations

Soil Concentration

The following equations can be used to calculate the constituent of potential concern (COPC) soil loss constants that are dependent on significant amounts of water, such as erosion, runoff, and leaching. These processes are not likely to require quantitative evaluation in the risk assessment due to the low precipitation and high evapotranspiration in the region.

The soil loss constant due to soil erosion (kse) can be calculated based on the following equation:

$$\text{kse} = \frac{0.1 \times X_e \times \text{SD} \times \text{ER}}{\text{BD} \times Z_s} \times \frac{\text{Kd}_s \times \text{BD}}{\theta_{sw} + (\text{Kd}_s \times \text{BD})}$$

where

kse = COPC soil loss constant due to soil erosion (1/yr)
0.1 = Units conversion factor (1,000 g per kg/10,000 cm^2 per m^2)
X_e = Unit soil loss as calculated from Universal Soil Loss Equation (kg/m^2-yr)
SD = Sediment delivery ratio (unitless)
ER = Soil enrichment ratio (unitless)
Kd_s = Soil-water partition coefficient (ml water/g soil)
BD = Soil bulk density (g soil/cm^3 soil)
Z_s = Soil mixing zone depth (cm)
θ_{sw} = Soil volumetric water content (ml water/cm^3 soil)

The unit soil loss (X_e) and sediment delivery ratio (SD) are used to account for losses of COPCs from soil, and are used to represent loads of COPCs that may migrate to surface water bodies. Therefore, further discussion of these parameters can be found in the surface water section (section 6). EPA 1998a recommends that the parameter for soil loss due to erosion be set to zero, based on the assumption that soil loss due to runoff from a site would be equal to soil gained due to run on to a site from adjacent areas. An additional assumption is that the soil run on contamination is equal to the soil runoff contamination.

The COPC loss constant due to surface runoff (ksr) can be calculated based on the following equation:

$$\text{ksr} = \frac{\text{RO} \times \text{CF}}{\theta_{sw} \times Z_s} \times \left(\frac{1}{1 + \left(\text{Kd}_s \times \text{BD} / \theta_{sw} \right)} \right)$$

where

ksr = COPC loss constant due to surface runoff (1/yr)
RO = Average annual surface runoff from pervious areas (cm/yr)
CF = Conversion factor of 1.0 (ml/cm^3)

θ_{sw} = Soil volumetric water content (ml water/cm^3 soil)
Z_s = Soil mixing zone depth (cm)
Kd_s = Soil-water partition coefficient (ml water/g soil)
BD = Soil bulk density (g soil/cm^3 soil)

The COPC loss constant due to leaching (ksl) can be calculated based on the following equation:

$$ksl = \left[\frac{P + I - RO - E_v}{\theta_{sw} \times Z_s \times (1 + (BD \times Kd_s / \theta_{sw}))}\right](CF)$$

where

ksl = COPC loss constant due to leaching (1/yr)
P = Average annual precipitation (cm/yr)
I = Average annual irrigation (cm/yr)
RO = Average annual surface runoff from pervious areas (cm/yr)
E_v = Average annual evapotranspiration (cm/yr)
θ_{sw} = Soil volumetric water content (ml water/cm^3 soil)
Z_s = Soil mixing zone depth (cm)
BD = Soil bulk density (g soil/cm^3 soil)
Kd_s = Soil-water partition coefficient (ml water/g soil)
CF = Conversion factor of 1.0 (ml/cm^3)

Surface Water and Fish Concentrations

The following equations are not likely to be necessary in the calculation of surface water and fish concentrations, due to a lack of available water in the Hanford site. They are included in this appendix for completeness.

The runoff load from impervious surfaces (L_{ri}) can be calculated as follows:

$$L_{ri} = Q \times [F_v \times Dywwv + (1.0 - F_v) \times Dytwp \times A_I]$$

where

L_{ri} = Runoff load from impervious surfaces (g/yr)
Q = COPC emission rate (g/s)
F_v = Fraction of COPC in air concentration in vapor phase (unitless)
Dywwv = Unitized yearly (waterbody and watershed) average wet deposition from vapor phase (s/m^2/yr)
Dytwp = Unitized yearly (waterbody and watershed) average total (wet and dry) deposition from vapor phase (s/m^2/yr)
A_I = Impervious watershed area receiving COPC deposition (m^2)

The runoff load from pervious surfaces (L_{rp}) can be calculated with the following equation:

$$L_{rp} = RO \times (A_L - A_I) \frac{Cs \times BD}{\theta_{sw} + Kd_s \times BD} \times (0.01)(CF)$$

where

L_{rp}	=	Runoff load from previous surfaces (g/yr)
RO	=	Average annual surface runoff from pervious areas (cm/yr)
A_L	=	Total watershed area receiving COPC deposition (m^2)
A_I	=	Impervious watershed area receiving COPC deposition (m^2)
Cs	=	Average soil concentration over exposure duration (in watershed soils) (mass COPC/kg soil)
BD	=	Soil bulk density (g soil/cm^3 soil)
θ_{sw}	=	Soil volumetric water content (ml water/cm^3 soil)
Kd_s	=	Soil-water partition coefficient (ml water/g soil)
0.01	=	Units conversion factor (kg-cm^2/mg-m^2)
CF	=	Conversion factor of 1.0 (ml/cm^3)

The COPC load to surface water due to soil erosion will be calculated with the following equation:

$$L_E = X_e \times (A_L - A_I) \times SD \times ER \frac{Cs \times Kd_s \times BD}{\theta_{sw} + Kd_s \times BD} \times (0.001)$$

where

L_E	=	Soil erosion load (g/yr)
X_e	=	Unit soil loss (kg/m^2-yr)
A_L	=	Total watershed area evaluated receiving COPC deposition (m^2)
A_I	=	Impervious watershed area receiving COPC deposition (m^2)
SD	=	Sediment delivery ratio for watershed (unitless)
ER	=	Soil enrichment ratio (unitless)
Cs	=	Average soil concentration in watershed soils over exposure duration (mass COPC/kg soil)
Kd_s	=	Soil-water partition coefficient (ml water/g soil)
BD	=	Soil bulk density (g soil/cm^3 soil)
θ_{sw}	=	Soil volumetric water content (ml water/cm^3 soil)
0.001	=	Units conversion factor (g/mg)

The soil loss due to erosion (X_e) will be calculated with the universal soil loss equation (USLE):

$$X_e = RF \times K \times LS \times C \times PF \times \frac{907.18}{4047}$$

where

X_e	=	Unit soil loss (kg/m^2-yr)
RF	=	USLE rainfall (or erosivity) factor (1/yr)
K	=	USLE erodibility factor (ton/acre)
LS	=	USLE length-slope factor (unitless)
C	=	USLE cover management factor (unitless)
PF	=	USLE supporting practice factor (unitless)
907.18	=	Conversion factor (kg/ton)
4047	=	Conversion factor (m^2/acre)

Water Concentration

The fraction of total water body COPC concentration in the water column (f_{wc}) will be calculated with the following equations:

$$f_{wc} = \frac{(1 + Kd_{sw} \times TSS \times CF) \times d_{wc}/d_z}{\left((1 + Kd_{sw} \times TSS \times CF) \times d_{wc}/d_z\right) + (\theta_{bs} + Kd_{bs} \times C_{BS}) \times d_{bs}/d_z}$$

where

f_{wc}	=	Fraction of total water body COPC concentration in the water column (unitless)
Kd_{sw}	=	Suspended sediments/surface water partition coefficient (L water/kg suspended sediment)
TSS	=	Total suspended solids concentration (mg/L)
CF	=	Conversion factor of 1×10^{-6} (kg/mg)
d_{wc}	=	Depth of water column (m)
d_z	=	Total water body depth (m)
2_{bs}	=	Bed sediment porosity (L water/L sediment)
Kd_{bs}	=	Bed sediment/sediment pore water partition coefficient (L water/kg bottom sediment)
C_{BS}	=	Bed sediment concentration (g/cm^3)
d_{bs}	=	Depth of upper benthic sediment layer (m)

If measured data are not available, the total suspended solids (TSS) concentration will be calculated with the following equation:

$$TSS = \frac{X_e \times (A_L - A_I) \times SD \times CF}{Vf_x + D_{ss} \times A_W}$$

where

TSS	=	Total suspended solids concentration (mg/L)
X_e	=	Unit soil loss (kg/m^2-yr)
A_L	=	Total watershed area receiving COPC deposition (m^2)
A_I	=	Total impervious watershed area receiving COPC deposition (m^2)
SD	=	Sediment delivery ratio for watershed (unitless)
CF	=	Conversion factor of 1000 (mg - m^3/kg - L)
Vf_x	=	Average volumetric flow rate through water body (m^3/year)
Dss	=	Suspended solids deposition rate (m/yr)
A_W	=	Water body surface area (m^2)

The sediment delivery ratio (SD) will be calculated as follows:

$$SD = a \times (A_L)^{-b}$$

where

SD	=	Sediment delivery ratio [watershed (unitless)]
a	=	Empirical intercept coefficient (unitless)
A_L	=	Total watershed area evaluated which receives COPC deposition (m^2)
b	=	Empirical slope coefficient (unitless)

The bed sediment porosity (2_{bs}) will be calculated with the following equation:

$$\theta_{bs} = 0.6^{L_{water}/L_{sediment}}$$

The above equation assumes the bed sediment density is 2.65 kg/L and the bed sediment concentration is 1 kg/L.

The overall total waterbody COPC dissipation rate constant (k_{wt}) will be calculated with the following equation:

$$k_{wt} = f_{wc} \times k_v + f_{bs} \times k_b$$

where

k_{wt}	=	Total water body COPC dissipation rate constant (1/yr)
f_{wc}	=	Fraction of total water body COPC concentration in the water column (unitless)
k_v	=	Water column volatilization rate constant (1/yr)
f_{bs}	=	Fraction of total water body COPC concentration in benthic sediment (unitless)
k_b	=	Benthic burial rate constant (1/yr)

The water column volatilization rate constant (k_v) will be calculated with the following equation:

$$k_v = \frac{K_v}{d_z \times (1 + Kd_{SW} \times TSS \times CF)}$$

where

k_v	=	Water column volatilization rate constant (1/yr)
K_v	=	Overall COPC transfer rate coefficient (m/yr)
d_z	=	Total water body depth (m)
Kd_{sw}	=	Suspended sediments/surface water partition coefficient (L water/kg suspended sediments)
TSS	=	Total suspended sediments concentration (mg/L)
CF	=	Conversion factor of 1×10^{-6} (kg/mg)

The overall COPC transfer rate coefficient (K_V) will be calculated as follows:

$$K_v = \left(K_L^{-1} + \left(K_G \frac{H}{R \cdot T_{wk}} \right)^{-1} \right)^{-1} \times \theta^{T_{wk} - 293}$$

where

K_v	=	Overall COPC transfer rate coefficient (m/yr)
K_L	=	Liquid phase transfer coefficient (m/yr)
K_G	=	Gas phase transfer coefficient (m/yr)
H	=	Henry's Law constant (atm-m^3/mol)
R	=	Universal gas constant of 8.205×10^{-5} (atm-m^3/mol-°K)
T_{wk}	=	Water body temperature (°K)
2	=	Temperature correction factor of 1.026 (unitless)

For flowing water bodies the liquid phase transfer coefficient (K_L) will be calculated using the following equation:

$$K_L = \left(\sqrt{\frac{CF_1 \times D_w \times u}{d_z}}\right)(CF_2)$$

where

K_L	=	Liquid phase transfer coefficient (m/yr)
CF_1	=	Conversion factor of 1×10^{-4} (m^2/cm^2)
D_w	=	Diffusivity of COPC in water (cm^2/s)
u	=	Current velocity (m/s)
d_z	=	Total water body depth (m)
CF_2	=	Conversion factor of 3.1536×10^7 (s/yr)

The gas phase transfer coefficient (K_G) will be assumed to be equal to 36500 m/yr for flowing water bodies.

For quiescent lakes or ponds the liquid phase transfer coefficient (K_L) will be calculated using the following equation:

$$K_L = \left(C_d^{0.5} \times W\right) \times \left(\frac{\rho_a}{\rho_w}\right)^{0.5} \times \left(\frac{k^{0.33}}{\lambda_z}\right) \times \left(\frac{\mu_w}{\rho_w \times D_w}\right)^{-0.67} \times CF$$

where

K_L	=	Liquid phase transfer coefficient (m/yr)
C_d	=	Drag coefficient (unitless)
W	=	Average annual wind speed (m/s)
Δ_a	=	Density of air (g/cm^3)
Δ_w	=	Density of water (g/cm^3)
k	=	von Karman's constant (unitless)
8_z	=	Dimensionless viscous sublayer thickness (unitless)
μ_w	=	Viscosity of water corresponding to water temperature (g/cm - s)
D_w	=	Diffusivity of COPC in water (cm^2/s)
CF	=	Conversion factor of 3.1536×10^7 (s/yr)

The gas phase transfer coefficient (K_G) for a quiescent stream will be calculated with the following equation:

$$K_G = \left(C_d^{\,0.5} \times W\right) \times \left(\frac{k^{0.33}}{\lambda_z}\right) \times \left(\frac{\mu_a}{\rho_a \times D_a}\right)^{-0.67} \times CF$$

where

K_G	=	Gas phase transfer coefficient (m/yr)
C_d	=	Drag coefficient (unitless)
W	=	Average annual wind speed (m/s)
k	=	von Karman's constant (unitless)
8_z	=	Dimensionless viscous sublayer thickness (unitless)
$:_a$	=	Viscosity of air corresponding to air temperature (g/cm-s)
Δ_a	=	Density of air (g/cm^3)
D_a	=	Diffusivity of COPC in air (cm^2/s)
CF	=	Conversion factor of 3.1536×10^7 (s/yr)

The fraction of total water body COPC concentration in benthic sediment (f_{bs}) will be calculated as follows:

$$f_{bs} = 1 - f_{wc}$$

where

f_{bs}	=	Fraction of total water body COPC concentration in benthic sediment (unitless)
f_{wc}	=	Fraction of total water body COPC concentration in the water column (unitless).

References for Appendix B2

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Appendix C

Appendix C

Chemical-Specific Parameters for Ecological Risk Assessment

Appendix C-1

Lists of Common Vascular Plants, Mammals, Common Birds, Amphibians and Reptiles, Plant Species of Concern, and State Candidate Species

Table C1-1. Common Vascular Plants Found on the Hanford Site

(Taxonomy follows Hitchcock and Cronquist 1973)

A. Shrub-Steppe Species	Scientific Name
Shrub	
Big sagebrush	*Artemisia tridentata*
Bitterbrush	*Purshia tridentata*
Gray rabbitbrush	*Chrysothamnus nauseosus*
Green rabbitbrush	*Chrysothamnus viscidiflorus*
Snow buckwheat	*Eriogonum niveum*
Spiny hopsage	*Grayia (Atriplex) spinosa*
Threetip sagebrush	*Artemisia tripartita*
Perennial Grasses	
Bluebunch wheatgrass	*Agropyron spicatum*
Bottlebrush squirreltail	*Sitanion hystrix*
Crested wheatgrass	*Agropyron desertorum (cristatum)*[a]
Indian ricegrass	*Oryzopsis hymenoides*
Needle-and-thread grass	*Stipa comata*
Prairie Junegrass	*Koeleria cristata*
Sand dropseed	*Sporobolus cryptandrus*
Sandberg's bluegrass	*Poa sandbergii (secunda)*
Thickspike wheatgrass	*Agropyron dasytachyum*
Perennial Forbs	
Bastard toad flax	*Comandra umbellata*
Buckwheat milkvetch	*Astragalus caricinus*
Carey's balsamroot	*Balsamorhiza careyana*
Cusick's sunflower	*Helianthus cusickii*
Cutleaf ladysfoot mustard	*Thelypodium laciniatum*
Douglas' clusterlily	*Brodiaea douglasii*
Dune scurfpea	*Psoralea lanceolata*
Franklin's sandwort	*Arenaria franklinii*
Gray's desertparsley	*Lomatium grayi*
Hoary aster	*Machaeranthera canescens*
Hoary false yarrow	*Chaenactis douglasii*
Longleaf phlox	*Phlox longifolia*
Munro's globemallow	*Sphaeralcea munroana*
Pale evening primrose	*Oenothera pallida*
Sand beardtongue	*Penstemon acuminatus*
Stalked-pod milkvetch	*Astragalus sclerocarpus*
Threadleaf fleabane	*Erigeron filifolius*

Table C1-1. Common Vascular Plants Found on the Hanford Site

(Taxonomy follows Hitchcock and Cronquist 1973)

A. Shrub-Steppe Species	Scientific Name
Turpentine spring parsley	*Cymopteris terebinthinus*
Winged dock	*Rumex venosus*
Yarrow	*Achillea millefolium*
Yellow bell	*Fritillaria pudica*
Annual Forbs	
Annual Jacob's ladder	*Polemonium micranthum*
Blue mustard	*Chorispora tenella*[(a)]
Bur ragweed	*Ambrosia acanthicarpa*
Clasping pepperweed	*Lepidium perfoliatum*
Indian wheat	*Plantago patagonica*
Jagged chickweed	*Holosteum umbellatum*[(a)]
Jim Hill's tumblemustard	*Sisymbrium altissimum*[(a)]
Matted cryptantha	*Cryptantha circumscissa*
Pink microsteris	*Microsteris gracilis*
Prickly lettuce	*Lactuca serriola*[(a)]
Rough wallflower	*Erysimum asperum*
Russian thistle (tumbleweed)	*Salsola kali*[(a)]
Slender hawksbeard	*Crepis atrabarba*
Spring whitlowgrass	*Draba verna*[(a)]
Storksbill	*Erodium cicutarium*[(a)]
Tall willowherb	*Epilobium paniculatum*
Tarweed fiddleneck	*Amsinckia lycopsoides*
Threadleaf scorpion weed	*Phacelia linearis*
Western tansymustard	*Descurainia pinnata*
White cupseed	*Plectritis macrocera*
Whitestem stickleaf	*Mentzelia albicaulis*
Winged cryptantha	*Cryptantha pterocarya*
Yellow salsify	*Tragopogon dubius*[(a)]
Annual Grasses	
Cheatgrass	*Bromus tectorum*[(a)]
Slender sixweeks	*Festuca octoflora*
Small sixweeks	*Festuca microstachys*

Table C1-1. Common Vascular Plants Found on the Hanford Site

(Taxonomy follows Hitchcock and Cronquist 1973)

B. Riparian Species	Scientific Name
Trees and Shrubs	
Black cottonwood	*Populus trichocarpa*
Black locust	*Robinia pseudo-acacia*
Coyote willow	*Salix exigua*
Dogbane	*Apocynum cannabinum*
Peach, apricot, cherry	*Prunus* spp.
Peachleaf willow	*Salix amygdaloides*
Willow	*Salix* spp.
White Mulberry	*Morus alba*[a]
Perennial Grasses and Forbs	
Bentgrass	*Agrostis* spp. [b]
Blanket flower	*Gaillardia aristata*
Bulrushes	*Scirpus* spp.[b]
Cattail	*Typha latifolia*[b]
Columbia River gumweed	*Grindelia columbiana*
Hairy golden aster	*Heterotheca villosa*
Heartweed	*Polygonum persicaria*
Horsetails	*Equisetum* spp.
Horseweed tickseed	*Coreopsis atkinsoniana*
Lovegrass	*Eragrostis* spp. [b]
Lupine	*Lupinus* spp.
Meadow foxtail	*Alopecurus aequalis* [b]
Pacific sage	*Artemisia campestris*
Prairie sagebrush	*Artemisia ludoviciana*
Reed canary grass	*Phalaris arundinacea*[b]
Rushes	*Juncus* spp.
Russian knapweed	*Centaurea repens*[a]
Sedge	*Carex* spp.[b]
Water speedwell	*Veronica anagallis-aquatica*
Western goldenrod	*Solidago occidentalis*
Wild onion	*Allium* spp.
Wiregrass spikerush	*Eleocharis* spp.[b]
Aquatic Vascular	
Canadian waterweed	*Elodea canadensis*
Columbia yellowcress	*Rorippa columbiae*
Duckweed	*Lemna minor*

Table C1-1. Common Vascular Plants Found on the Hanford Site

(Taxonomy follows Hitchcock and Cronquist 1973)

B. Riparian Species	**Scientific Name**
Aquatic Vascular	
Pondweed	*Potamogeton* spp.
Spiked water milfoil	*Myriophyllum spicatum*
Watercress	*Rorippa nasturtium-aquaticum*

(a) Introduced
(b) Perennial grasses and graminoids

from Neitzel et al. 1998

Table C1-2. List of Mammals Occurring on the Hanford Site

Scientific Name	Common Name
Antrozous pallidus	pallid bat
Brachylagus idahoensis	pygmy rabbit
Canis latrans	coyote
Castor canadensis	beaver
Cervus elaphus	elk
Erethizon dorsatum	porcupine
Eutamias minimus	least chipmunk
Lagurus curtatus	sagebrush vole
Lasionycteris noctivagans	silver-haired bat
Lasiurus cinereus	hoary bat
Lepus californicus	black-tailed jackrabbit
Lepus townsendi	white-tailed jackrabbit
Lutra canadensis	river otter
Lynx rufus	bobcat
Marmota flaviventris	yellow-bellied marmot
Mephitis mephitis	striped skunk
Microtus montanus	montane meadow mouse
Mus musculus	house mouse
Mustela erminea	short-tailed weasel
Mustela frenata	long-tailed weasel
Mustela vison	mink
Myotis californicus	California brown bat
Myotis lucifugus	little brown bat
Myotis yumanensis	Yuma brown bat
Neotoma cinerea	bushy-tailed woodrat
Odocoileus hemionus	mule deer
Odocoileus virginianus	white-tailed deer
Ondatra zibethicus	muskrat
Onychomys leucogaster	northern grasshopper mouse
Perognathus parvus	Great Basin pocket mouse
Peromyscus maniculatus	deer mouse
Plecotus townsendii townsendii	Pacific western big-eared bat
Procyon lotor	raccoon
Rattus norvegicus	Norway rat
Reithrodontomys megalotis	western harvest mouse
Sorex merriami	Merriam shrew
Sorex vagrans	vagrant shrew
Spermophilus townsendii	Townsend ground squirrel
Sylvilagus nuttallii	Nuttall cottontail rabbit
Taxidea taxus	badger
Thomomys talpoides	northern pocket gopher

Source: Cushing 1992 in DOE 1996a

Table C1-3. Common Birds Occurring on the Hanford Site

Scientific Name	Common Name
Ageless phonics	red-winged blackbird
Alas aceta	northern pintail
Alas americana	American wigeon
Anas clypeata	northern shoveler
Anas platyrhynchos	mallard
Ardea herodias	great blue heron
Aythya americana	edhead
Branta canadensis	Canada goose
Bucephala albeola	bufflehead
Calidris mauri	western sandpiper
Calidris minutilla	least sandpiper
Carpodacus mexicanus	house finch
Charadrius vociferus	killdeer
Chordeiles minor	common nighthawk
*Columba livia*rock	dove
Corvus corax	common raven
Dendroica coronata	yellow-rumped warbler
Eremophila alpestris	horned lark
Fulica americana	American coot
Hirundo pyrrhonota	cliff swallow
Hirundo rustica	barn swallow
Junco hyemalis	dark-eyed junco
Larus californicus	California gull
Larus delawarensis	ring-billed gull
Limnodromus scolopaceus	long-billed dowitcher
Mergus merganser	common merganser
Numenius americanus	long-billed curlew
Passer domesticus	house sparrow
Pica pica	black-billed magpie
Podilymbus podiceps	pied-billed grebe
Sturnella neglecta	western meadowlark
Sturnus vulgaris	european starling
Turdus migratorius	American robin
Tyrannus verticalis	western kingbird
Zenaida macroura	mourning dove
Zonotrichia leucophrys	white-crowned sparrow

Source: Cushing 1992 in DOE 1996a

Table C1-4. Amphibians and Reptiles Occurring on the Hanford Site

Scientific Name	Common Name
Amphibians	
Bufo woodhouseii	Woodhouse toad
Hyla regilla	Pacific treefrog
Spea intermontana	Great Basin spadefoot
Rana catesbeiana	Bullfrog
Reptiles	
Chrysemys picta	painted turtle
Coluber constrictor	western yellow-bellied racer
Crotalus viridis	western rattlesnake
Hyspiglena torquata	desert night snake
Masticophis taeniatus	striped whipsnake
Phrynosoma douglassii	short-horned lizard
Pituophis melanoleucus	gopher snake
Sceloporus graciosus	sagebrush lizard
Uta stansburiana	side-blotched lizard

Source: Cushing 1992 in DOE 1996a

Table C1-5. Plant Species of Concern on the Hanford Site

COMMON NAME	SCIENTIFIC NAME	STATE LISTING[a]
Annual paintbrush	*Castilleja exilis*	R1
Awned half chaff sedge	*Lipocarpha (= Hemicarpha) aristulata*	R1
Basalt milk-vetch	*Astragalus conjunctus var. rikardii*	R1
Bristly combseed	*Pectocarya setosa*	W
Brittle prickly-pear	*Opuntia fragilis*	R1
Canadian St. John's wort	*Hypericum majus*	S
Chaffweed	*Centunculus minimus*	R1
Columbia River mugwort	*Artemesia lindleyana*	W
Crouching milkvetch	*Astragalus succumbens*	W
Desert dodder	*Cuscuta denticulata*	S
Desert evening-primrose	*Oenothera cespitosa*	S
False pimpernel	*Lindernia dubia anagallidea*	R2
Fuzzytongue penstemon	*Penstemon eriantherus whitedii*	R1
Geyer's milkvetch	*Astragalus geyeri*	S
Grand redstem	*Ammannia robusta*	R1
Gray cryptantha	*Cryptantha leucophaea*	S
Great Basin gilia	*Gilia leptomeria*	R1
Hedge hog cactus	*Pediocactus simpsonii var. robustio nigrispinus*	R1
Kittitas larkspur	*Delphinium multiplex*	W
Miner's candle	*Cryptantha scoparia*	R1
Palouse thistle	*Cirsium brevifolium*	W
Piper's daisy	*Erigeron piperianus*	S
Robinson's onion	*Allium robinsonii*	W
Rosy balsamroot	*Balsamorhiza rosea*	W
Rosy pussypaws	*Calyptridium roseum*	S
Scilla onion	*Allium scilloides*	W
Shining flatsedge	*Cyperus bipartitus (rivularis)*	S
Small-flowered evening-primrose	*Camissonia (= Oenothera) minor*	R1
Small-flowered nama	*Nama densum var. parviflorum*	R1
Smooth cliffbrake	*Pellaea glabella simplex*	W
Snake River cryptantha	*Cryptantha spiculifera (= C. interrupta)*	S
Southern mudwort	*Limosella acaulis*	W
Stalked-pod milkvetch	*Astragalus sclerocarpus*	W
Suksdorf's monkey flower	*Mimulus suksdorfii*	S
Toothcup	*Rotala ramosior*	R1
Winged combseed	*Pectocarya linearis*	R1

The following species have been reported as occurring on the Hanford site, but the known collections are questionable in terms of location or identification, and have not been recently collected on the Hanford site.

Coyote tobacco	*Nicotiana attenuata*	S
Dense sedge	*Carex densa*	S
Few-flowered collinsia	*Collinsia sparsiflora var. bruciae*	S
Medic milkvetch	*Astragalus speirocarpus*	W
Palouse milkvetch	*Astragalus arrectus*	S
Thompson's sandwort	*Arenaria franklinii thompsonii*	R2

(a) S = Sensitive (i.e., taxa vulnerable or declining) and could become endangered or threatened without active management or removal of threats.
R1 = Taxa for which there are insufficient data to support listing as threatened, endangered, or sensitive (formerly monitor group 1).
R2 = Taxa with unresolved taxanomic questions (formerly monitor group 2).
W = Taxa that are more abundant and/or less threatened than previously assumed (formerly monitor group 3).

from Neitzel et al. 1998

Table C1-6. Wildlife Species of Concern on the Hanford Site

Common Name	Scientific Name
Molluscs	
Columbia pebble snail	*Fluminicola (= Lithoglyphus) columbiana*
Shortfaced lanx	*Fisherola (= Lanx) nuttalli*
Insects	
Columbia River tiger beetle[b]	*Cicindela columbica*
Juniper hairstreak	*Mitoura siva*
Silver-bordered bog fritillary	*Boloria selene atrocastalis*
Birds	
Burrowing owl	*Athene cunicularia*
Common loon	*Gavia immer*
Flammulated owl[a]	*Otus flammeolus*
Golden eagle	*Aquila chrysaetos*
Lewis' woodpecker[a]	*Melanerpes lewis*
Loggerhead shrike	*Lanius ludovicianus*
Northern goshawk[a]	*Accipter gentilis*
Sage sparrow	*Amphispiza belli*
Sage thrasher	*Oreoscoptes montanus*
Western sage grouse[a]	*Centrocercus urophasianus phaios*
Merlin	*Falco columbarius*
Reptiles	
Striped whipsnake	*Masticophis taeniatus*
Mammals	
Merriam's shrew	*Sorex merriami*
Pacific (Townsend's) western big-eared bat[b]	*Corynorhinus townsendii* [c]
Washington ground squirrel	*Spermophilus washingtoni*

(a) Reported, but seldom observed on the Hanford site
(b) Probable, but not observed, on the Hanford site
(c) Also known as *Plecotus townsendii*

from Neitzel et al. 1998

Table C1-7. Federally or Washington State Listed Threatened and Endangered Species Occurring or Potentially Occurring on the Hanford Site

Common Name	Scientific Name	Federal	State
Plants			
Columbia milk-vetch	*Astragalus columbianus*		T
Columbia yellowcress	*Rorippa columbiae*		E
Dwarf evening primrose	*Oenothera pygmaea*		T
Hoover's desert parsley	*Lomatium tuberosum*		T
Loeflingia	*Loeflingia squarrosa* var. *squarrosa*		T
Northern wormwood[a]	*Artemisia campestris borealis* var. *wormskioldii*		E
Umtanum desert buckwheat	*Eriogonum codium*		E
White Bluffs bladderpod	*Lesquerella tuplashensis*		E
White eatonella	*Eatonella nivea*		T
Birds			
Aleutian Canada goose[b]	*Branta canadensis leucopareia*	T	E
American white pelican	*Pelecanus erythrorhychos*		E
Bald eagle	*Haliaeetus leucocephalus*	T	T
Ferruginous hawk	*Buteo regalis*		T
Peregrine falcon[b]	*Falco peregrinus*	E	E
Sandhill crane[b]	*Grus canadensis*		E
Mammals			
Pygmy rabbit[a]	*Brachylagus idahoensis*		E
Fish			
Steelhead			
(Upper Columbia River ESU)	*Oncorhynchus mykiss*	E	
(Middle Columbia River ESU)[c]		T	
Chinook Salmon			
(Upper Columbia River spring-run ESU)[d]	*Oncorhynchus tshawytscha*	E	

T = threatened
E = endangered
[a]Likely not currently occurring on the Hanford site
[b]Incidental occurrence
[c]64 FR 14517, March 25, 1999
[d]64 FR 14308, March 24, 1999

from Neitzel et al. 1998

References for Appendix C-1

64 FR 14308. *Endangered and Threatened Species: Threatened Status for Three Chinook Salmon Evolutionarily Significant Units in Washington and Oregon, and Endangered Status of One Chinook Salmon ESU in Washington; Final Rule* and *Partial 6-Month Extension on Final Listing Determinations for Four Evolutionarily Significant Units of West Coast Chinook Salmon; Proposed Rule*, Volume 64, Number 56, p 14308-14328, 24 March 1999. Federal Register

64 FR 14517. *Endangered and Threatened Species: Threatened Status for Two ESUs of Chum Salmon in Washington and Oregon, for Two ESUs of Steelhead in Washington and Oregon, and for Ozette Lake Sockeye Salmon in Washington; Rules*, Volume 64, Number 57, p 14507-14517, 25 March 1999. Federal Register.

DOE. 1996. *Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan*, DOE/EIS-0222D, August 1996. US Department of Energy, Washington, D.C., USA.

Neitzel DA and others. 1998. *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415, Revision 10, 1998. Pacific Northwest National Laboratory, Richland, Washington, USA.

Appendix C-2

Soil-to-Plant Transfer Factors, Terrestrial Bioaccumulation Factors, and Aquatic Bioaccumulation Factors for Ecological Constituents of Potential Concern

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Organic Compounds										
Aromatic Halogenated Hydrocarbons										
4-Chloro-3-methylphenol	59-50-7	3.10		1.25E-01	e		1.25E-01	e		1.25E-01
2,3,4,6-Tetrachlorophenol	58-90-2	4.42		2.16E-02	e		2.16E-02	e		2.16E-02
Aromatic Nonhalogenated Hydrocarbons										
2-Nitrotoluene	88-72-2	2.30		3.63E-01	e		3.63E-01	e		3.63E-01
4-Nitrobiphenyl	92-93-3	3.77		5.13E-02	e		5.13E-02	e		5.13E-02
Benzaldehyde	100-52-7	1.48		1.08E+00	e		1.08E+00	e		1.08E+00
Benzene	71-43-2	-4.99		5.94E+03	e		5.94E+03	e		5.94E+03
Benzyl alcohol	100-51-6	1.10		1.79E+00	e		1.79E+00	e		1.79E+00
Ethyl benzene	100-41-4	3.12		1.21E-01	e		1.21E-01	e		1.21E-01
m-Xylene	108-38-3	3.20		1.09E-01	e		1.09E-01	e		1.09E-01
o-Xylene	95-47-6	3.13		1.20E-01	e		1.20E-01	e		1.20E-01
p-Xylene	106-42-3	3.17		1.14E-01	e		1.14E-01	e		1.14E-01
Styrene	100-42-5	2.93		1.57E-01	e		1.57E-01	e		1.57E-01
Toluene	108-88-3	2.67		2.22E-01	e		2.22E-01	e		2.22E-01
Non-aromatic Nonhalogenated Hydrocarbons										
1,2-Epoxybutane	106-88-7	1.44		1.14E+00	e		1.14E+00	e		1.14E+00
1,3-Butadiene	106-99-0	1.90		6.18E-01	e		6.18E-01	e		6.18E-01
1,4-Dioxane	123-91-1	-0.27	5.53E+01	1.11E+01	f		1.11E+01	e		1.11E+01
1-Methylpropyl alcohol	78-92-2	0.61		3.44E+00	e		3.44E+00	e		3.44E+00
1-Nitropropane	108-03-2	0.87		2.43E+00	e		2.43E+00	e		2.43E+00
2,2,4-Trimethylpentane	540-84-1	5.02		9.72E-03	e		9.72E-03	e		9.72E-03
2-Butanone	78-93-3	0.28		5.33E+00	e		5.33E+00	e		5.33E+00
2-Butenaldehyde (2-Butenal)	4170-30-3	No data		No data			1.00E+00		Default	1.00E+00
2-Ethoxyethanol	110-80-5	-0.10		8.85E+00	e		8.85E+00	e		8.85E+00
2-Heptanone	110-43-0	1.98		5.55E-01	e		5.55E-01	e		5.55E-01
2-Hexanone	591-78-6	1.38		1.23E+00	e		1.23E+00	e		1.23E+00
2-Methoxyethanol	109-86-4	0.25		5.54E+00	e		5.54E+00	e		5.54E+00

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
2-Methyl-2-propanol	75-65-0	0.35		4.86E+00	e		4.86E+00	e		4.86E+00
2-Methyl-2-propenenitrile	126-98-7	0.54		3.77E+00	e		3.77E+00	e		3.77E+00
2-Methylaziridine	75-55-8	-0.60		1.73E+01	e		1.73E+01	e		1.73E+01
2-Methylpropyl alcohol	78-83-1	0.76		2.82E+00	e		2.82E+00	e		2.82E+00
2-Pentanone	107-87-9	0.91		2.31E+00	e		2.31E+00	e		2.31E+00
2-Propanone (Acetone)	67-64-1	-0.22	5.20E+01	1.04E+01	f		1.04E+01	e		1.04E+01
2-Propene-1-ol	107-18-6	0.17		6.18E+00	e		6.18E+00	e		6.18E+00
2-Propyl alcohol	67-63-0	0.05		7.25E+00	e		7.25E+00	e		7.25E+00
3-Heptanone	106-35-4	No data		No data			1.00E+00		Default	1.00E+00
3-Methyl-1-butanol	123-51-3	No data		No data			1.00E+00		Default	1.00E+00
3-Methyl-2-butanone	563-80-4	No data		No data			1.00E+00		Default	1.00E+00
3-Pentanone	96-22-0	0.99		2.07E+00	e		2.07E+00	e		2.07E+00
4-Heptanone	123-19-3	No data		No data			1.00E+00		Default	1.00E+00
4-Methyl-2-pentanone	108-10-1	1.19		1.59E+00	e		1.59E+00	e		1.59E+00
4-Methyl-3-penten-2-one	141-79-7	No data		No data			1.00E+00		Default	1.00E+00
5-Methyl-2-hexanone	110-12-3	No data		No data			1.00E+00		Default	1.00E+00
Acetaldehyde	75-07-0	-0.22		1.04E+01	e		1.04E+01	e		1.04E+01
Acetamide	60-35-5	-1.26		4.14E+01	e		4.14E+01	e		4.14E+01
Acetic acid	64-19-7	-0.17		9.71E+00	e		9.71E+00	e		9.71E+00
Acetic acid ethyl ester	141-78-6	0.73		2.93E+00	e		2.93E+00	e		2.93E+00
Acetic acid n-butyl ester	123-86-4	1.73		7.75E-01	e		7.75E-01	e		7.75E-01
Acetonitrile	75-05-8	-0.34		1.22E+01	e		1.22E+01	e		1.22E+01
Acrolein	107-02-8	-0.01		7.84E+00	e		7.84E+00	e		7.84E+00
Acrylonitrile	107-13-1	0.25	2.78E+01	5.55E+00	f		5.55E+00	e		5.55E+00
Bis(isopropyl)ether	108-20-3	No data		No data			1.00E+00		Default	1.00E+00
Butane	106-97-8	2.89		1.65E-01	e		1.65E-01	e		1.65E-01
Carbon disulfide	75-15-0	2.00		5.41E-01	e		5.41E-01	e		5.41E-01
Cyanogen	460-19-5	0.81		2.64E+00	e		2.64E+00	e		2.64E+00
Cyclohexane	110-82-7	3.44		7.96E-02	e		7.96E-02	e		7.96E-02

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Cyclohexanone	108-94-1	0.81		2.64E+00	e		2.64E+00	e		2.64E+00
Cyclohexene	110-83-8	2.86		1.72E-01	e		1.72E-01	e		1.72E-01
Cyclopentane	287-92-3	3.00		1.43E-01	e		1.43E-01	e		1.43E-01
Ethyl alcohol	64-17-5	0.31		5.13E+00	e		5.13E+00	e		5.13E+00
Ethyl ether	60-29-7	0.89		2.37E+00	e		2.37E+00	e		2.37E+00
Ethyl methacrylate	97-63-2	1.59		9.33E-01	e		9.33E-01	e		9.33E-01
Formaldehyde	50-00-0	0.34	2.46E+01	4.91E+00	f		4.91E+00	e		4.91E+00
Formamide	75-12-7	-1.51		5.78E+01	e		5.78E+01	e		5.78E+01
Formic acid	64-18-6	-0.54		1.58E+01	e		1.58E+01	e		1.58E+01
Formic acid, methyl ester	107-31-3	-0.26		1.10E+01	e		1.10E+01	e		1.10E+01
Glycidylaldehyde	765-34-4	-0.73		2.05E+01	e		2.05E+01	e		2.05E+01
Methyl acetate	79-20-9	0.18		6.10E+00	e		6.10E+00	e		6.10E+00
Methyl alcohol	67-56-1	-0.71		1.99E+01	e		1.99E+01	e		1.99E+01
Methyl isocyanate	624-83-9	No data		No data			NA		Reacts with water	NA
Methyl methacrylate	80-62-6	0.79		2.71E+00	e		2.71E+00	e		2.71E+00
Methyl tert-butyl ether	1634-04-4	0.94		2.22E+00	e		2.22E+00	e		2.22E+00
Methylacetylene	74-99-7	0.94		2.22E+00	e		2.22E+00	e		2.22E+00
Methylcyclohexane	108-87-2	4.10		3.31E-02	e		3.31E-02	e		3.31E-02
N,N-Dimethylacetamide	127-19-5	No data		No data			1.00E+00		Default	1.00E+00
n-Butyl alcohol	71-36-3	0.88		2.40E+00	e		2.40E+00	e		2.40E+00
n-Heptane	142-82-5	4.66		1.57E-02	e		1.57E-02	e		1.57E-02
n-Hexane	110-54-3	4.11		3.26E-02	e		3.26E-02	e		3.26E-02
Nitromethane	75-52-5	-0.35		1.23E+01	e		1.23E+01	e		1.23E+01
n-Nonane	111-84-2	5.65		4.20E-03	e		4.20E-03	e		4.20E-03
n-Octane	111-65-9	4.00		3.78E-02	e		3.78E-02	e		3.78E-02
n-Pentane	109-66-0	3.21		1.08E-01	e		1.08E-01	e		1.08E-01
n-Propionaldehyde	123-38-6	0.59		3.53E+00	e		3.53E+00	e		3.53E+00
n-Propyl alcohol	71-23-8	0.25		5.55E+00	e		5.55E+00	e		5.55E+00
n-Valeraldehyde	110-62-3	No data		No data	e		1.00E+00		Default	1.00E+00

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Oxirane	75-21-8	-0.30		1.15E+01	e		1.15E+01	e		1.15E+01
p-Cymene	99-87-6	4.10		3.31E-02	e		3.31E-02	e		3.31E-02
Phosgene	75-44-5	No data		No data	e		1.00E+00		Default	1.00E+00
Propargyl alcohol	107-19-7	0.26		5.48E+00	e		5.48E+00	e		5.48E+00
Propionic acid	79-09-4	0.33		4.99E+00	e		4.99E+00	e		4.99E+00
Propionitrile	107-12-0	0.16		6.26E+00	e		6.26E+00	e		6.26E+00
Propylene gylcol monomethyl ether	107-98-2	-0.18		9.84E+00	e		9.84E+00	e		9.84E+00
p-tert-Butyltoluene	98-51-1	No data		No data			1.00E+00		Default	1.00E+00
Triethylamine	121-44-8	0.16		6.26E+00	e		6.26E+00	e		6.26E+00
Trimethylamine	75-50-3	0.16		6.26E+00	e		6.26E+00	e		6.26E+00
Vinyl acetate	108-05-4	0.70		3.06E+00	e		3.06E+00	e		3.06E+00
Non-aromatic Halogenated Hydrocarbons										
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	No data		No data			1.00E+00		Default	1.00E+00
1,1,1,2-Tetrachloroethane	630-20-6	2.63		2.34E-01	e		2.34E-01	e		2.34E-01
1,1,1-Trichloroethane	71-55-6	2.42		3.09E-01	e		3.09E-01	e		3.09E-01
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	3.73		5.41E-02	e		5.41E-02	e		5.41E-02
1,1,2,2-Tetrachloroethane	79-34-5	4.64		1.60E-02	e		1.60E-02	e		1.60E-02
1,1,2,2-Tetrachloroethene	127-18-4	2.55		2.62E-01	e		2.62E-01	e		2.62E-01
1,1,2-Trichloroethane	79-00-5	2.10		4.75E-01	e		4.75E-01	e		4.75E-01
1,1,2-Trichloroethylene	79-01-6	2.43		3.04E-01	e		3.04E-01	e		3.04E-01
1,1-Dichloroethane	75-34-3	1.79		7.13E-01	e		7.13E-01	e		7.13E-01
1,1-Dichloroethene	75-35-4	2.12		4.61E-01	e		4.61E-01	e		4.61E-01
1,2,2-Trichloro-1,1,2-trifluoroethane	76-13-1	3.16		1.15E-01	e		1.15E-01	e		1.15E-01
1,2,3-Trichloropropane	96-18-4	2.25		3.88E-01	e		3.88E-01	e		3.88E-01
1,2-Dibromo-3-chloropropane	96-12-8	2.34		3.44E-01	e		3.44E-01	e		3.44E-01
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	2.82		1.82E-01	e		1.82E-01	e		1.82E-01
1,2-Dichloroethane	107-06-2	1.46		1.11E+00	e		1.11E+00	e		1.11E+00
1,2-Dichloroethylene	540-59-0	0.48		4.09E+00	e		4.09E+00	e		4.09E+00
1,2-Dichloropropane	78-87-5	2.25		3.88E-01	e		3.88E-01	e		3.88E-01

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
1,3-Dichloropropene	542-75-6	1.75		7.56E-01	e		7.56E-01	e		7.56E-01
1,4-Dichloro-2-butene	764-41-0	0.87		2.42E+00	e		2.42E+00	e		2.42E+00
1-Chloroethene	75-01-4	1.15		1.68E+00	e		1.68E+00	e		1.68E+00
2,2-Dichloropropionic acid	75-99-0	0.78		2.75E+00	e		2.75E+00	e		2.75E+00
2-Chloropropane	75-29-6	1.90		6.18E-01	e		6.18E-01	e		6.18E-01
3-Chloropropene (allyl chloride)	107-05-1	0.95		2.17E+00	e		2.17E+00	e		2.17E+00
Bromochloromethane	74-97-5	1.41		1.19E+00	e		1.19E+00	e		1.19E+00
Bromodichloromethane	75-27-4	2.03		5.23E-01	e		5.23E-01	e		5.23E-01
Bromoethene	593-60-2	1.07		1.87E+00	e		1.87E+00	e		1.87E+00
Bromoform	75-25-2	2.35		3.39E-01	e		3.39E-01	e		3.39E-01
Bromomethane	74-83-9	1.11		1.76E+00	e		1.76E+00	e		1.76E+00
Carbon tetrachloride	56-23-5	2.72	1.04E+00	2.08E-01	f		2.08E-01	e		2.08E-01
Chlorodibromomethane	124-48-1	2.18		4.28E-01	e		4.28E-01	e		4.28E-01
Chlorodifluoromethane	75-45-6	1.08		1.84E+00	e		1.84E+00	e		1.84E+00
Chloroethane	75-00-3	3.10		1.25E-01	e		1.25E-01	e		1.25E-01
Chloroform	67-66-3	1.95	2.90E+00	5.80E-01	f		5.78E-01	e		5.80E-01
Chloromethane	74-87-3	0.90		2.33E+00	e		2.33E+00	e		2.33E+00
Chloropentafluoroethane	76-15-3	No data		No data			1.00E+00		Default	1.00E+00
cis-1,2-Dichloroethene	156-59-2	1.98		5.54E-01	e		5.54E-01	e		5.54E-01
cis-1,3-Dichloropropene	10061-01-5	No data		No data			1.00E+00		Default	1.00E+00
Cyanogen bromide	506-68-3	No data		No data			1.00E+00		Default	1.00E+00
Cyanogen chloride	506-77-4	0.20		5.94E+00	e		5.94E+00	e		5.94E+00
Dichlorodifluoromethane	75-71-8	2.16		4.38E-01	e		4.38E-01	e		4.38E-01
Dichlorofluoromethane	75-43-4	No data		No data			1.00E+00		Default	1.00E+00
Dichloromethane	75-09-2	1.26		1.46E+00	e		1.46E+00	e		1.46E+00
Difluorodibromomethane	75-61-6	No data		No data			1.00E+00		Default	1.00E+00
Hexafluoroacetone	684-16-2	No data		No data			1.00E+00		Default	1.00E+00
Iodomethane	74-88-4	1.69		8.17E-01	e		8.17E-01	e		8.17E-01
Methylene bromide	74-95-3	1.62		8.97E-01	e		8.97E-01	e		8.97E-01

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Pentachloroethane	76-01-7	3.05		1.34E-01	e		1.34E-01	e		1.34E-01
trans-1,2-Dichloroethene	156-60-5	1.98		5.54E-01	e		5.54E-01	e		5.54E-01
trans-1,3-Dichloropropene	10061-02-6	2.06		4.99E-01	e		4.99E-01	e		4.99E-01
Trichloroacetic acid	76-03-9	1.33		1.32E+00	e		1.32E+00	e		1.32E+00
Trichlorofluoroethane	27154-33-2	No data		No data			1.00E+00		Default	1.00E+00
Trichlorofluoromethane	75-69-4	2.53		2.67E-01	e		2.67E-01	e		2.67E-01
Trifluorobromomethane	75-63-8	1.86		6.52E-01	e		6.52E-01	e		6.52E-01
Dioxin and Furan Compounds										
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	8.20	2.90E-04	5.80E-05	g		5.80E-05	g		5.80E-05
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	7.92	6.20E-05	1.24E-05	g		1.24E-05	g		1.24E-05
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	7.92	2.20E-03	4.40E-04	g		4.40E-04	g		4.40E-04
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	7.79	1.70E-03	3.40E-04	g		3.40E-04	g		3.40E-04
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	7.25	4.30E-04	8.60E-05	g		8.60E-05	g		8.60E-05
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	7.25	6.70E-04	1.34E-04	g		1.34E-04	g		1.34E-04
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	7.25	1.10E-03	2.20E-04	g		2.20E-04	g		2.20E-04
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	7.25	7.80E-04	1.56E-04	g		1.56E-04	g		1.56E-04
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	7.25	3.50E-03	7.00E-04	g		7.00E-04	g		7.00E-04
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	6.64	5.20E-03	1.04E-03	g		1.04E-03	g		1.04E-03
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	6.79	1.10E-03	2.20E-04	g		2.20E-04	g		2.20E-04
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	7.25	3.80E-03	7.60E-04	g		7.60E-04	g		7.60E-04
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	6.92	9.00E-03	1.80E-03	g		1.80E-03	g		1.80E-03
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	6.64	5.62E-03	1.12E-03	e		1.12E-03	e		1.12E-03
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	6.53	4.50E-03	9.00E-04	g		9.00E-04	g		9.00E-04
Dibenzofuran	132-64-9	4.33		2.43E-02	e		2.43E-02	e		2.43E-02
Octachlorodibenzo(p)dioxin	3268-87-9	8.20	6.70E-05	1.34E-05	g		1.34E-05	g		1.34E-05
Octachlorodibenzofuran	39001-02-0	8.78	9.00E-05	1.80E-05	g		1.80E-05	g		1.80E-05
PCBs										
Polychlorinated biphenyls (PCBs)[h]	1336-36-3	7.31	1.00E-02	2.00E-03	f		4.63E-04	e		2.00E-03
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	7.08		6.26E-04	e		6.26E-04	e		6.26E-04

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	7.12		5.94E-04	e		5.94E-04	e		5.94E-04
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	No data		No data	e		1.00E+00		Default	1.00E+00
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	No data		No data	e		1.00E+00		Default	1.00E+00
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	No data		No data	e		1.00E+00		Default	1.00E+00
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	No data		No data	e		1.00E+00		Default	1.00E+00
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	No data		No data	e		1.00E+00		Default	1.00E+00
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	No data		No data	e		1.00E+00		Default	1.00E+00
2',3,4,4',5-Pentachlorobiphenyl	no cas #	No data		No data	e		1.00E+00		Default	1.00E+00
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	7.12		5.94E-04	e		5.94E-04	e		5.94E-04
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	7.41		4.05E-04	e		4.05E-04	e		4.05E-04
3,3',4,4',5-Pentachlorobiphenyl	no cas #	No data		No data	e		1.00E+00		Default	1.00E+00
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	No data		No data	e		1.00E+00		Default	1.00E+00
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	No data		No data	e		1.00E+00		Default	1.00E+00
Phthalates										
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	5.20	3.80E-02	7.60E-03	f		7.60E-03	e		7.60E-03
Butylbenzyl phthalate	85-68-7	4.41		2.18E-02	e		2.18E-02	e		2.18E-02
Dibutyl phthalate	84-74-2	4.72		1.45E-02	e		1.45E-02	e		1.45E-02
Diethyl phthalate	84-66-2	4.44		2.11E-02	e		2.11E-02	e		2.11E-02
Dimethylphthalate	131-11-3	1.63		8.81E-01	e		8.81E-01	e		8.81E-01
n-Dioctyl phthalate	117-84-0	9.33	1.57E-04	3.14E-05	f		3.13E-05	e		3.14E-05
Light Polycyclic Aromatic Hydrocarbons (molecular weight <200 g/mole)										
2-Chloronapthalene	91-58-7	4.07		3.45E-02	e		3.45E-02	e		3.45E-02
2-Methyl naphthalene	91-57-6	3.86		4.55E-02	e		4.55E-02	e		4.55E-02
5-Nitroacenaphthene	602-87-9	No data		No data			1.00E+00		Default	1.00E+00
Acenaphthene	83-32-9	3.96		3.96E-02	e		3.96E-02	e		3.96E-02
Acenaphthylene	208-96-8	4.07		3.44E-02	e		3.44E-02	e		3.44E-02
Anthracene	120-12-7	4.47		2.02E-02	e		2.02E-02	e		2.02E-02
Fluorene	86-73-7	4.18		2.97E-02	e		2.97E-02	e		2.97E-02
Indene	95-13-6	No data		No data			1.00E+00		Default	1.00E+00

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Naphthalene	91-20-3	3.37		8.70E-02	e		8.70E-02	e		8.70E-02
Phenanthrene	85-01-8	4.55		1.82E-02	e		1.82E-02	e		1.82E-02
Pyrene	129-00-0	5.00		9.98E-03	e		9.98E-03	e		9.98E-03
Heavy Polycyclic Aromatic Hydrocarbons (molecular weight >200 g/mole)										
3-Methylcholanthrene	56-49-5	7.11		6.02E-04	e		6.02E-04	e		6.02E-04
5-Methylchrysene	3697-24-3	No data		No data			1.00E+00		Default	1.00E+00
Benzo(a)anthracene	56-55-3	5.68	2.02E-02	4.04E-03	f		4.04E-03	e		4.04E-03
Benzo(a)pyrene	50-32-8	6.13	1.11E-02	2.22E-03	f		2.22E-03	e		2.22E-03
Benzo(b)fluoranthene	205-99-2	6.20	1.01E-02	2.02E-03	f		2.02E-03	e		2.02E-03
Benzo(e)pyrene	192-97-2	7.40		4.09E-04	e		4.09E-04	e		4.09E-04
Benzo(g,h,i)perylene	191-24-2	7.10		6.10E-04	e		6.10E-04	e		6.10E-04
Benzo(j)fluoranthene	205-82-3	6.44		1.47E-03	e		1.47E-03	e		1.47E-03
Benzo(k)fluoranthene	207-08-9	6.20	1.01E-02	2.02E-03	f		2.01E-03	e		2.02E-03
Benzo[a,i]pyrene	191-30-0	No data		No data			1.00E+00		Default	1.00E+00
Chrysene	218-01-9	5.74	1.87E-02	3.74E-03	f		3.73E-03	e		3.74E-03
Dibenz(a,h)anthracene	53-70-3	6.55	6.40E-03	1.28E-03	f		1.27E-03	e		1.28E-03
Dibenz[a,h]acridine	226-36-8	No data		No data			1.00E+00		Default	1.00E+00
Dibenz[a,j]acridine	224-42-0	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo(a,e)fluoranthene	5385-75-1	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo(a,h)fluoranthene	no cas #	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo[a,e]pyrene	192-65-4	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo[a,h]pyrene	189-64-0	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo[a,i]pyrene	189-55-9	7.29		4.74E-04	e		4.74E-04	e		4.74E-04
Fluoranthene	206-44-0	5.08		8.94E-03	e		8.94E-03	e		8.94E-03
Hexachloronaphthalene	1335-87-1	7.59		3.18E-04	e		3.18E-04	e		3.18E-04
Indeno(1,2,3-cd)pyrene	193-39-5	6.91	3.90E-03	7.80E-04	f		7.80E-04	e		7.80E-04
Octachloronaphthalene	2234-13-1	6.42		1.51E-03	e		1.51E-03	e		1.51E-03
Pentachloronaphthalene	1321-64-8	No data		No data			1.00E+00		Default	1.00E+00
Tetrachloronaphthalene	1335-88-2	No data		No data			1.00E+00		Default	1.00E+00

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Trichloronaphthalene	1321-65-9	No data		No data			1.00E+00		Default	1.00E+00
Light Substituted Benzene Compounds (MW <200 g/mole)										
1,2,3-Trichlorobenzene	87-61-6	4.05		3.55E-02	e		3.55E-02	e		3.55E-02
1,2,4-Trichlorobenzene	120-82-1	3.99		3.84E-02	e		3.84E-02	e		3.84E-02
1,2,4-Trimethyl benzene	95-63-6	3.65		6.02E-02	e		6.02E-02	e		6.02E-02
1,2-Dichlorobenzene	95-50-1	3.45		7.90E-02	e		7.90E-02	e		7.90E-02
1,3,5-Trimethyl benzene	108-67-8	3.42		8.17E-02	e		8.17E-02	e		8.17E-02
1,3-Dichlorobenzene	541-73-1	3.53		7.06E-02	e		7.06E-02	e		7.06E-02
1,3-Dinitrobenzene	99-65-0	1.49	5.32E+00	1.06E+00	f		1.06E+00	e		1.06E+00
1,4-Dichlorobenzene	106-46-7	3.41		8.26E-02	e		8.26E-02	e		8.26E-02
1,4-Dinitrobenzene	100-25-4	1.50		1.05E+00	e		1.05E+00	e		1.05E+00
2,4,5-Trichlorophenol	95-95-4	3.87		4.49E-02	e		4.49E-02	e		4.49E-02
2,4,6-Trichlorophenol	88-06-2	3.71		5.54E-02	e		5.54E-02	e		5.54E-02
2,4-Dichlorophenol	120-83-2	3.04		1.36E-01	e		1.36E-01	e		1.36E-01
2,4-Dimethylphenol	105-67-9	2.36		3.35E-01	e		3.35E-01	e		3.35E-01
2,4-Dinitrophenol	51-28-5	1.52		1.03E+00	e		1.03E+00	e		1.03E+00
2,4-Dinitrotoluene	121-14-2	2.00	2.72E+00	5.44E-01	f		5.44E-01	e		5.44E-01
2,6-Dinitrotoluene	606-20-2	1.89	3.15E+00	6.30E-01	f		6.29E-01	e		6.30E-01
2-Chlorophenol	95-57-8	2.16		4.36E-01	e		4.36E-01	e		4.36E-01
2-Chlorotoluene	95-49-8	3.54		7.00E-02	e		7.00E-02	e		7.00E-02
2-Nitrophenol	88-75-5	1.79		7.15E-01	e		7.15E-01	e		7.15E-01
4,6-Dinitro-o-cresol	534-52-1	2.85		1.74E-01	e		1.74E-01	e		1.74E-01
4-Chlorotoluene	106-43-4	3.33		9.21E-02	e		9.21E-02	e		9.21E-02
4-Nitrophenol	100-02-7	1.91		6.10E-01	e		6.10E-01	e		6.10E-01
alpha-Methylstyrene	98-83-9	3.46		7.71E-02	e		7.71E-02	e		7.71E-02
Aniline	62-53-3	0.98		2.10E+00	e		2.10E+00	e		2.10E+00
Benzotrichloride	98-07-7	2.92		1.59E-01	e		1.59E-01	e		1.59E-01
Benzyl chloride	100-44-7	0.36		4.79E+00	e		4.79E+00	e		4.79E+00
Bromobenzene	108-86-1	2.99		1.45E-01	e		1.45E-01	e		1.45E-01

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Chlorobenzene	108-90-7	2.79		1.89E-01	e		1.89E-01	e		1.89E-01
Cumene	98-82-8	3.61		6.32E-02	e		6.32E-02	e		6.32E-02
m-Cresol	108-39-4	1.96		5.71E-01	e		5.71E-01	e		5.71E-01
n-Butyl benzene	104-51-8	4.28		2.60E-02	e		2.60E-02	e		2.60E-02
Nitrobenzene	98-95-3	1.83	3.38E+00	6.76E-01	f		6.76E-01	e		6.76E-01
n-Propyl benzene	103-65-1	3.69		5.70E-02	e		5.70E-02	e		5.70E-02
o-Cresol	95-48-7	2.02		5.26E-01	e		5.26E-01	e		5.26E-01
o-Dinitrobenzene	528-29-0	1.60		9.21E-01	e		9.21E-01	e		9.21E-01
o-Nitroaniline	88-74-4	1.85		6.60E-01	e		6.60E-01	e		6.60E-01
o-Toluidine	95-53-4	1.34		1.30E+00	e		1.30E+00	e		1.30E+00
p-Chloroaniline	106-47-8	1.87		6.44E-01	e		6.44E-01	e		6.44E-01
p-Cresol	106-44-5	1.94		5.86E-01	e		5.86E-01	e		5.86E-01
Phenol	108-95-2	1.48		1.08E+00	e		1.08E+00	e		1.08E+00
p-Nitrochlorobenzene	100-00-5	2.39		3.22E-01	e		3.22E-01	e		3.22E-01
p-Toluidine	106-49-0	1.40		1.20E+00	e		1.20E+00	e		1.20E+00
sec-Butyl benzene	135-98-8	4.57		1.77E-02	e		1.77E-02	e		1.77E-02
tert-Butyl benzene	98-06-6	4.11		3.26E-02	e		3.26E-02	e		3.26E-02
Toluene-2,6-diamine	823-40-5	1.45		1.12E+00	e		1.12E+00	e		1.12E+00
Trimethyl benzene	25551-13-7	3.40		8.39E-02	e		8.39E-02	e		8.39E-02
Other Light Semivolatile Compounds (molecular weight <200 g/mole)										
1,1'-Biphenyl	92-52-4	3.90		4.31E-02	e		4.31E-02	e		4.31E-02
1,1-Dimethylhydrazine	57-14-7	0.60		3.51E+00	e		3.51E+00	e		3.51E+00
1,2-Dimethylhydrazine	540-73-8	-1.37		4.78E+01	e		4.78E+01	e		4.78E+01
1,2-Diphenylhydrazine	122-66-7	2.94		1.55E-01	e		1.55E-01	e		1.55E-01
1,3-Propane sultone	1120-71-4	-0.52		1.55E+01	e		1.55E+01	e		1.55E+01
2,4-Toluene diisocyante	584-84-9	No data		No data			NA		Decomposes rapidly in water	NA
2-Chloroacetophenone	532-27-4	2.59		2.45E-01	e		2.45E-01	e		2.45E-01
2-Propenoic acid	79-10-7	0.33		4.99E+00	e		4.99E+00	e		4.99E+00

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
4,4-Methylenedianiline	101-77-9	3.38		8.62E-02	e		8.62E-02	e		8.62E-02
Acetophenone	98-86-2	1.64		8.73E-01	e		8.73E-01	e		8.73E-01
Benzoic acid	65-85-0	1.86		6.52E-01	e		6.52E-01	e		6.52E-01
bis(2-Chloroethoxy)methane	111-91-1	7.59		3.18E-04	e		3.18E-04	e		3.18E-04
bis(2-Chloroethyl) ether	111-44-4	1.30		1.37E+00	e		1.37E+00	e		1.37E+00
Chlorocyclopentadiene	41851-50-7	2.43		3.05E-01	e		3.05E-01	e		3.05E-01
Cyclohexanol	108-93-0	1.23		1.51E+00	e		1.51E+00	e		1.51E+00
Dichloroisopropyl ether	108-60-1	2.58		2.50E-01	e		2.50E-01	e		2.50E-01
Dichloromethyl ether	542-88-1	-0.38		1.28E+01	e		1.28E+01	e		1.28E+01
Dichloropentadiene	no cas #	No data		No data			1.00E+00		Default	1.00E+00
Dimethyl sulfate	77-78-1	0.32		5.07E+00	e		5.07E+00	e		5.07E+00
Dimethylaniline	121-69-7	-0.88		2.50E+01	e		2.50E+01	e		2.50E+01
Di-n-propylnitrosamine	621-64-7	1.38		1.23E+00	e		1.23E+00	e		1.23E+00
Diphenyl ether	101-84-8	4.21		2.86E-02	e		2.86E-02	e		2.86E-02
Epichlorohydrin	106-89-8	0.25		5.55E+00	e		5.55E+00	e		5.55E+00
Ethyl carbamate (urethane)	51-79-6	-0.15		9.46E+00	e		9.46E+00	e		9.46E+00
Ethyl methanesulfonate	62-50-0	0.05		7.25E+00	e		7.25E+00	e		7.25E+00
Ethylene dibromide	106-93-4	1.75		7.55E-01	e		7.55E-01	e		7.55E-01
Ethylene glycol	107-21-1	-0.91		2.62E+01	e		2.62E+01	e		2.62E+01
Ethylene glycol monobutyl ether	111-76-2	1.55		9.78E-01	e		9.78E-01	e		9.78E-01
Ethylene glycol monoethyl ether acetate	111-15-9	0.62		3.40E+00	e		3.40E+00	e		3.40E+00
Ethylene thiourea	96-45-7	-0.64		1.82E+01	e		1.82E+01	e		1.82E+01
Furfural	98-01-1	0.96		2.16E+00	e		2.16E+00	e		2.16E+00
Maleic hydrazide	123-33-1	-0.74		2.07E+01	e		2.07E+01	e		2.07E+01
Malononitrile	109-77-3	0.04		7.34E+00	e		7.34E+00	e		7.34E+00
Methyl styrene (mixed isomers)	25013-15-4	3.35		8.97E-02	e		8.97E-02	e		8.97E-02
Methylhydrazine	60-34-4	-1.06		3.17E+01	e		3.17E+01	e		3.17E+01
N,N-Diphenylamine	122-39-4	3.50		7.35E-02	e		7.35E-02	e		7.35E-02
Nitric acid, propyl ester	627-13-4	No data		No data			1.00E+00		Default	1.00E+00

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
N-Nitrosodi-n-butylamine	924-16-3	2.41		3.13E-01	e		3.13E-01	e		3.13E-01
N-Nitrosomorpholine	59-89-2	0.98		2.10E+00	e		2.10E+00	e		2.10E+00
N-Nitroso-N,N-dimethylamine	62-75-9	-0.47		1.45E+01	e		1.45E+01	e		1.45E+01
o-Anisidine	90-04-0	1.18		1.61E+00	e		1.61E+00	e		1.61E+00
Oxalic acid	144-62-7	No data		No data			1.00E+00		Default	1.00E+00
Phthalic anhydride	85-44-9	-0.60		1.73E+01	e		1.73E+01	e		1.73E+01
p-Phthalic acid	100-21-0	0.82		2.59E+00	e		2.59E+00	e		2.59E+00
Pyridine	110-86-1	0.67		3.17E+00	e		3.17E+00	e		3.17E+00
Quinoline	91-22-5	2.03		5.20E-01	e		5.20E-01	e		5.20E-01
Quinone	106-51-4	0.20		5.94E+00	e		5.94E+00	e		5.94E+00
Safrole	94-59-7	2.66		2.25E-01	e		2.25E-01	e		2.25E-01
Tetrahydrofuran	109-99-9	0.45		4.27E+00	e		4.27E+00	e		4.27E+00
Other Heavy Semivolatile Compounds (molecular weight >200 g/mole)										
1,2,4,5-Tetrachlorobenzene	95-94-3	4.64		1.61E-02	e		1.61E-02	e		1.61E-02
1,3,5-Trinitrobenzene	99-35-4	1.18		1.61E+00	e		1.61E+00	e		1.61E+00
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	4.17		3.01E-02	e		3.01E-02	e		3.01E-02
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	-2.70		2.82E+02	e		2.82E+02	e		2.82E+02
2-sec-Butyl-4,6-dinitrophenol	88-85-7	3.14		1.19E-01	e		1.19E-01	e		1.19E-01
3,3'-Dimethoxybenzidine	119-90-4	1.81		6.96E-01	e		6.96E-01	e		6.96E-01
3,3-Dichlorobenzidine	91-94-1	3.58		6.65E-02	e		6.65E-02	e		6.65E-02
4-Bromophenylphenyl ether	101-55-3	5.00		9.98E-03	e		9.98E-03	e		9.98E-03
Ammonium perfluorooctanoate	3825-26-1	No data		No data			1.00E+00		Default	1.00E+00
Azobenzene	103-33-3	3.82		4.80E-02	e		4.80E-02	e		4.80E-02
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	No data		No data			1.00E+00		Default	1.00E+00
Captan	133-06-2	2.35		3.39E-01	e		3.39E-01	e		3.39E-01
Chlorobenzilate	510-15-6	4.38		2.28E-02	e		2.28E-02	e		2.28E-02
Dibutylphosphate	107-66-4	No data		No data			1.00E+00		Default	1.00E+00
Dimethyl aminoazobenzene	60-11-7	4.58		1.74E-02	e		1.74E-02	e		1.74E-02
Hexachlorobenzene	118-74-1	5.50	2.55E-02	5.10E-03	f		5.11E-03	e		5.10E-03

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Hexachlorobutadiene	87-68-3	4.73	7.14E-02	1.43E-02	f		1.43E-02	e		1.43E-02
Hexachlorocyclopentadiene	77-47-4	5.04	5.65E-02	1.13E-02	f		9.46E-03	e		1.13E-02
Hexachloroethane	67-72-1	3.98		3.85E-02	e		3.85E-02	e		3.85E-02
Hexachlorophene	70-30-4	7.54		3.39E-04	e		3.39E-04	e		3.39E-04
Hexamethylene-1,5-diisocyanate	822-06-0	1.27		1.42E+00	e		1.42E+00	e		1.42E+00
Mirex	2385-85-5	6.89		8.07E-04	e		8.07E-04	e		8.07E-04
Nitrofen	1836-75-5	5.53		4.93E-03	e		4.93E-03	e		4.93E-03
Pentachlorobenzene	608-93-5	5.09	4.40E-02	8.80E-03	f		8.89E-03	e		8.80E-03
Pentachloronitrobenzene	82-68-8	4.64	8.00E-02	1.61E-02	f		1.61E-02	e		1.61E-02
Pentachlorophenol	87-86-5	5.08	4.49E-02	8.98E-03	f		8.98E-03	e		8.98E-03
Picric acid	88-89-1	2.03		5.20E-01	e		5.20E-01	e		5.20E-01
Pronamide	23950-58-5	3.51		7.24E-02	e		7.24E-02	e		7.24E-02
Strychnine	57-24-9	1.93		5.94E-01	e		5.94E-01	e		5.94E-01
Terphenyls	26140-60-3	No data		No data			1.00E+00		Default	1.00E+00
Tributyl phosphate	126-73-8	4.00		3.78E-02	e		3.78E-02	e		3.78E-02
Trifluralin	1582-09-8	5.34		6.35E-03	e		6.35E-03	e		6.35E-03
Triphenylamine	603-34-9	No data		No data			1.00E+00		Default	1.00E+00
Herbicides and Organochlorinated Pesticides										
2,4,5-T	93-76-5	3.36		8.85E-02	e		8.85E-02	e		8.85E-02
2,4-D and esters	94-75-7	2.81		1.84E-01	e		1.84E-01	e		1.84E-01
4,4-DDD	72-54-8	6.20		2.02E-03	e		2.02E-03	e		2.02E-03
4,4-DDE	72-55-9	6.26	9.37E-03	1.87E-03	f		1.88E-03	e		1.87E-03
4,4-DDT	50-29-3	6.00		2.64E-03	e		2.64E-03	e		2.64E-03
Aldrin	309-00-2	6.18		2.08E-03	e		2.08E-03	e		2.08E-03
alpha-BHC	319-84-6	3.80		4.93E-02	e		4.93E-02	e		4.93E-02
beta-BHC	319-85-7	3.83		4.71E-02	e		4.71E-02	e		4.71E-02
Chlordane	57-74-9	5.94		2.87E-03	e		2.87E-03	e		2.87E-03
Delta-BHC	319-86-8	4.14		3.13E-02	e		3.13E-02	e		3.13E-02
Dieldrin	60-57-1	5.27		6.97E-03	e		6.97E-03	e		6.97E-03

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Endothall	145-73-3	-0.87		2.47E+01	e		2.47E+01	e		2.47E+01
Endrin	72-20-8	4.89		1.15E-02	e		1.15E-02	e		1.15E-02
gamma-BHC (Lindane)	58-89-9	3.72		5.48E-02	e		5.48E-02	e		5.48E-02
Heptachlor	76-44-8	5.02	4.89E-02	9.78E-03	f		9.75E-03	e		9.78E-03
Isodrin	465-73-6	3.55		6.87E-02	e		6.87E-02	e		6.87E-02
Methoxychlor	72-43-5	4.53		1.87E-02	e		1.87E-02	e		1.87E-02
Silvex (2,4,5-TP)	93-72-1	4.07		3.43E-02	e		3.43E-02	e		3.43E-02
Toxaphene	8001-35-2	5.50		5.13E-03	e		5.13E-03	e		5.13E-03
Inorganic Chemicals and Compounds										
Metals										
Aluminum	7429-90-5	NA	4.00E-03	8.00E-04	f		8.00E-04	i		8.00E-04
Antimony	7440-36-0	NA	2.00E-01	4.00E-02	f		4.00E-02	i		4.00E-02
Arsenic	7440-38-2	NA	3.60E-02	7.20E-03	f		8.00E-03	i		7.20E-03
Barium	7440-39-3	NA	1.50E-01	3.00E-02	f		3.00E-02	i		3.00E-02
Beryllium	7440-41-7	NA	1.00E-02	2.00E-03	f		2.00E-03	i		2.00E-03
Bismuth	7440-69-9	NA		7.00E-03	i		7.00E-03	i		7.00E-03
Boron	7440-42-8	NA		8.00E-01	i		8.00E-01	i		8.00E-01
Cadmium	7440-43-9	NA	3.64E-01	7.28E-02	f		1.10E-01	i		7.28E-02
Calcium	7440-70-2	NA		7.00E-01	i		7.00E-01	i		7.00E-01
Chromium (and VI)	18540-29-9	NA	7.50E-03	1.50E-03	f		1.50E-03	i		1.50E-03
Cobalt	7440-48-4	NA		4.00E-03	i		4.00E-03	i		4.00E-03
Copper	7440-50-8	NA	4.00E-01	8.00E-02	f		8.00E-02	i		8.00E-02
Iron	7439-89-6	NA		8.00E-04	i		8.00E-04	i		8.00E-04
Lead	7439-92-1	NA	4.50E-02	9.00E-03	f		9.00E-03	i		9.00E-03
Lithium	7439-93-2	NA		5.00E-03	i		5.00E-03	i		5.00E-03
Magnesium	7439-95-4	NA		2.00E-01	i		2.00E-01	i		2.00E-01
Manganese	7439-96-5	NA		5.00E-02	i		5.00E-02	i		5.00E-02
Mercury	7439-97-6	NA	3.75E-02	7.50E-03	f		1.80E-01	i		7.50E-03
Molybdenum	7439-98-7	NA		5.00E-02	i		5.00E-02	i		5.00E-02

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Nickel	7440-02-0	NA	3.20E-02	6.40E-03	f		1.20E-02	i		6.40E-03
Potassium	7440-09-7	NA		2.00E-01	i		2.00E-01	i		2.00E-01
Rhodium	7440-16-6	NA		3.00E-02	i		3.00E-02	i		3.00E-02
Selenium	7782-49-2	NA	1.60E-02	3.20E-03	f		5.00E-03	i		3.20E-03
Silicon	7440-21-3	NA		7.00E-02	i		7.00E-02	i		7.00E-02
Silver	7440-22-4	NA	4.00E-01	8.00E-02	f		8.00E-02	i		8.00E-02
Sodium	7440-23-5	NA		1.50E-02	i		1.50E-02	i		1.50E-02
Strontium	7440-24-6	NA		5.00E-01	i		5.00E-01	i		5.00E-01
Tantalum	7440-25-7	NA		2.00E-03	i		2.00E-03	i		2.00E-03
Thallium	7440-28-0	NA	4.00E-03	8.00E-04	f		8.00E-04	i		8.00E-04
Tin	7440-31-5	NA		6.00E-03	i		6.00E-03	i		6.00E-03
Tungsten	7440-33-7	NA		9.00E-03	i		9.00E-03	i		9.00E-03
Uranium	7440-61-1	NA		1.70E-03	i		1.70E-03	i		1.70E-03
Vanadium	7440-62-2	NA		1.10E-03	i		1.10E-03	i		1.10E-03
Yttrium	7440-65-5	NA		3.00E-03	i		3.00E-03	i		3.00E-03
Zinc	7440-66-6	NA	1.20E-12	2.40E-13	f		3.00E-01	i		2.40E-13
Zirconium	7440-67-7	NA		4.00E-04	i		4.00E-04	i		4.00E-04
Non-metals and Anions										
Ammonia/Ammonium	7664-41-7	NA		2.27E-02	j					2.27E-02
Bromide	24959-67-9	NA		3.00E-01	i		3.00E-01	i		3.00E-01
Chloride	16887-00-6	NA		1.40E+01	i		1.40E+01	i		1.40E+01
Cyanide	57-12-5	NA		2.27E-02	j		1.00E+00	k		2.27E-02
Fluoride	16984-48-8	NA		1.20E-02	i		1.20E-02	i		1.20E-02
Hydroxide	14280-30-9	NA		NA					Depends on pH	NA
Iodine	7553-56-2	NA		3.00E-02	i		3.00E-02	i		3.00E-02
Nitrate	14797-55-8	NA		2.27E-02	j					2.27E-02
Nitrite	14797-65-0	NA		2.27E-02	j					2.27E-02
Phosphate	14265-44-2	NA		7.00E-01	i		7.00E-01	i		7.00E-01
Phosphorus	7723-14-0	NA		7.00E-01	i		7.00E-01	i		7.00E-01

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Sulfate	14808-79-8	NA		3.00E-01	i		3.00E-01	i		3.00E-01
Total Sulfur	63705-05-5	NA		3.00E-01	i		3.00E-01	i		3.00E-01
Priority Pollutants										
Carbon Dioxide	124-38-9	NA		2.27E-02	j					2.27E-02
Nitrogen Dioxide	10102-44-0	NA		2.27E-02	j					2.27E-02
Ozone	10028-15-6	NA		2.27E-02	j					2.27E-02
Particulate Matter	No CAS #	NA		NA						NA
Sulfur Dioxode	7446-09-5	NA		2.27E-02	j					2.27E-02
Radionuclides										
Americium-241	1596-10-2	NA		1.10E-03	i		1.10E-03	i		1.10E-03
Antimony-125	14234-35-6	NA		4.00E-02	i		4.00E-02	i		4.00E-02
Barium-137	13981-97-0	NA		3.00E-02	i		3.00E-02	i		3.00E-02
Cadmium-113	None	NA		1.10E-01	i		1.10E-01	i		1.10E-01
Cesium-134	13967-70-9	NA		1.60E-02	i		1.60E-02	i		1.60E-02
Cesium-137	10045-97-3	NA		1.60E-02	i		1.60E-02	i		1.60E-02
Europium-154	15585-10-1	NA		2.00E-03	i		2.00E-03	i		2.00E-03
Europium-155	14391-16-3	NA		2.00E-03	i		2.00E-03	i		2.00E-03
Nickel-63	13981-37-8	NA		1.20E-02	i		1.20E-02	i		1.20E-02
Plutonium-239	15117-48-3	NA		9.00E-05	i		9.00E-05	i		9.00E-05
Plutonium-241	14119-32-5	NA		9.00E-05	i		9.00E-05	i		9.00E-05
Samarium-151	15715-94-3	NA		2.00E-03	i		2.00E-03	i		2.00E-03
Strontium-90	10098-97-2	NA		5.00E-01	i		5.00E-01	i		5.00E-01
Technetium-99	14133-79-7	NA		1.90E+00	i		1.90E+00	i		1.90E+00
Tritium	10028-17-8	NA		2.27E-02	j					2.27E-02
Yttrium-90	10098-91-6	NA		3.00E-03	i		3.00E-03	i		3.00E-03
Uranium-232	14158-29-3	NA		1.70E-03	i		1.70E-03	i		1.70E-03
Uranium-233	13968-55-3	NA		1.70E-03	i		1.70E-03	i		1.70E-03
Uranium-234	13966-29-5	NA		1.70E-03	i		1.70E-03	i		1.70E-03
Uranium-235	15117-96-1	NA		1.70E-03	i		1.70E-03	i		1.70E-03

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]
Uranium-236	13982-70-2	NA		1.70E-03	i		1.70E-03	i		1.70E-03
Uranium-238	7440-61-1	NA		1.70E-03	i		1.70E-03	i		1.70E-03
Actinium-227	14952-40-0	NA		7.00E-04	i		7.00E-04	i		7.00E-04
Americium-243	14993-75-0	NA		1.10E-03	i		1.10E-03	i		1.10E-03
Carbon-14	14762-75-5	NA		2.27E-02	j					2.27E-02
Cobalt-60	10198-40-0	NA		4.00E-03	i		4.00E-03	i		4.00E-03
Curium-242	15510-73-3	NA		1.70E-04	i		1.70E-04	i		1.70E-04
Curium-243	15757-87-6	NA		1.70E-04	i		1.70E-04	i		1.70E-04
Curium-244	13981-15-2	NA		1.70E-04	i		1.70E-04	i		1.70E-04
Europium-152	14683-23-9	NA		2.00E-03	i		2.00E-03	i		2.00E-03
Iodine-129	15046-84-1	NA		3.00E-02	i		3.00E-02	i		3.00E-02
Neptunium-237	13994-20-2	NA		2.00E-02	i		2.00E-02	i		2.00E-02
Nickel-59	14336-70-0	NA	3.20E-02	6.40E-03	f		1.20E-02	i		6.40E-03
Niobium-93	None	NA		4.00E-03	i		4.00E-03	i		4.00E-03
Plutonium-238	13981-16-3	NA		9.00E-05	i		9.00E-05	i		9.00E-05
Plutonium-240	14119-33-6	NA		9.00E-05	i		9.00E-05	i		9.00E-05
Plutonium-242	13982-10-0	NA		9.00E-05	i		9.00E-05	i		9.00E-05
Protactinium-231	14331-85-2	NA		5.00E-04	i		5.00E-04	i		5.00E-04
Radium-226	13982-63-3	NA		3.00E-03	i		3.00E-03	i		3.00E-03
Radium-228	15262-20-1	NA		3.00E-03	i		3.00E-03	i		3.00E-03
Ruthenium-106	13967-48-1	NA		1.50E-02	i		1.50E-02	i		1.50E-02
Selenium-79	None	NA		5.00E-03	i		5.00E-03	i		5.00E-03
Thorium-229	15594-54-4	NA		1.70E-04	i		1.70E-04	i		1.70E-04
Thorium-232	7440-29-1	NA		1.70E-04	i		1.70E-04	i		1.70E-04
Tin-126	15832-50-5	NA		6.00E-03	i		6.00E-03	i		6.00E-03
Zirconium-93	15751-77-6	NA		4.00E-04	i		4.00E-04	i		4.00E-04

NA = Not applicable

[a] $\log_{10}$ of K_{ow} values in Table 4.1

[b] Published in Appendix C of EPA (1999), Table C-2

Table C2-1. Terrestrial Soil-to-Plant Transfer Factors (SPv) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPv	SAIC Compiled SPv	Notes	Comments	Recommended SPv[d]

[c] Calculated or chosen as described in Appendix C, Sect. C-1.2 of EPA (1999), then multiplied by 0.2 to adjust to wet weight of plants

[d] Selection criteria described in Sect. 8.2.4.3

[e] Wet weight values calculated by using log K_{ow}: log SPv = 1.588 - 0.578 x log K_{ow} (Travis and Arms 1988) for dry weight and multiplying by 0.2 to adjust to wet weight

[f] EPA (1999) values published in Table C-2 multiplied by 0.2 to adjust to wet weight of plants

[g] Calculated from value for TCDD in Appendix C of EPA (1999), Table C-2 by multiplying by BEF, then by 0.2 to adjust to wet weight of plants

[h] Value for Aroclor 1254 from Appendix C of EPA (1999), Table C-2, was used for PCB mixtures

[i] Baes and others. (1984) (Figure 2.1) values multiplied by 0.2 to adjust to wet weight of plants

[j] Average of values for other inorganics published in Appendix C of EPA (1999), Table C-2, then multiplied by 0.2 to adjust to wet weight of plants

[k] HAZWRAP (1994), Table 4.4

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
Organic Compounds										
Aromatic Halogenated Hydrocarbons										
4-Chloro-3-methylphenol	59-50-7	3.10		1.25E-01	e		1.25E-01	e		1.25E-01
2,3,4,6-Tetrachlorophenol	58-90-2	4.42		2.16E-02	e		2.16E-02	e		2.16E-02
Aromatic Nonhalogenated Hydrocarbons										
2-Nitrotoluene	88-72-2	2.30		3.63E-01	e		3.63E-01	e		3.63E-01
4-Nitrobiphenyl	92-93-3	3.77		5.13E-02	e		5.13E-02	e		5.13E-02
Benzaldehyde	100-52-7	1.48		1.08E+00	e		1.08E+00	e		1.08E+00
Benzene	71-43-2	-4.99		5.94E+03	e		5.94E+03	e		5.94E+03
Benzyl alcohol	100-51-6	1.10		1.79E+00	e		1.79E+00	e		1.79E+00
Ethyl benzene	100-41-4	3.12		1.21E-01	e		1.21E-01	e		1.21E-01
m-Xylene	108-38-3	3.20		1.09E-01	e		1.09E-01	e		1.09E-01
o-Xylene	95-47-6	3.13		1.20E-01	e		1.20E-01	e		1.20E-01
p-Xylene	106-42-3	3.17		1.14E-01	e		1.14E-01	e		1.14E-01
Styrene	100-42-5	2.93		1.57E-01	e		1.57E-01	e		1.57E-01
Toluene	108-88-3	2.67		2.22E-01	e		2.22E-01	e		2.22E-01
Non-aromatic Nonhalogenated Hydrocarbons										
1,2-Epoxybutane	106-88-7	1.44		1.14E+00	e		1.14E+00	e		1.14E+00
1,3-Butadiene	106-99-0	1.90		6.18E-01	e		6.18E-01	e		6.18E-01
1,4-Dioxane	123-91-1	-0.27	5.53E+01	1.11E+01	f		1.11E+01	e		1.11E+01
1-Methylpropyl alcohol	78-92-2	0.61		3.44E+00	e		3.44E+00	e		3.44E+00
1-Nitropropane	108-03-2	0.87		2.43E+00	e		2.43E+00	e		2.43E+00
2,2,4-Trimethylpentane	540-84-1	5.02		9.72E-03	e		9.72E-03	e		9.72E-03
2-Butanone	78-93-3	0.28		5.33E+00	e		5.33E+00	e		5.33E+00
2-Butenaldehyde (2-Butenal)	4170-30-3	No data		No data			1.00E+00		Default	1.00E+00
2-Ethoxyethanol	110-80-5	-0.10		8.85E+00	e		8.85E+00	e		8.85E+00
2-Heptanone	110-43-0	1.98		5.55E-01	e		5.55E-01	e		5.55E-01

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
2-Hexanone	591-78-6	1.38		1.23E+00	e		1.23E+00	e		1.23E+00
2-Methoxyethanol	109-86-4	0.25		5.54E+00	e		5.54E+00	e		5.54E+00
2-Methyl-2-propanol	75-65-0	0.35		4.86E+00	e		4.86E+00	e		4.86E+00
2-Methyl-2-propenenitrile	126-98-7	0.54		3.77E+00	e		3.77E+00	e		3.77E+00
2-Methylaziridine	75-55-8	-0.60		1.73E+01	e		1.73E+01	e		1.73E+01
2-Methylpropyl alcohol	78-83-1	0.76		2.82E+00	e		2.82E+00	e		2.82E+00
2-Pentanone	107-87-9	0.91		2.31E+00	e		2.31E+00	e		2.31E+00
2-Propanone (Acetone)	67-64-1	-0.22	5.20E+01	1.04E+01	f		1.04E+01	e		1.04E+01
2-Propene-1-ol	107-18-6	0.17		6.18E+00	e		6.18E+00	e		6.18E+00
2-Propyl alcohol	67-63-0	0.05		7.25E+00	e		7.25E+00	e		7.25E+00
3-Heptanone	106-35-4	No data		No data			1.00E+00		Default	1.00E+00
3-Methyl-1-butanol	123-51-3	No data		No data			1.00E+00		Default	1.00E+00
3-Methyl-2-butanone	563-80-4	No data		No data			1.00E+00		Default	1.00E+00
3-Pentanone	96-22-0	0.99		2.07E+00	e		2.07E+00	e		2.07E+00
4-Heptanone	123-19-3	No data		No data			1.00E+00		Default	1.00E+00
4-Methyl-2-pentanone	108-10-1	1.19		1.59E+00	e		1.59E+00	e		1.59E+00
4-Methyl-3-penten-2-one	141-79-7	No data		No data			1.00E+00		Default	1.00E+00
5-Methyl-2-hexanone	110-12-3	No data		No data			1.00E+00		Default	1.00E+00
Acetaldehyde	75-07-0	-0.22		1.04E+01	e		1.04E+01	e		1.04E+01
Acetamide	60-35-5	-1.26		4.14E+01	e		4.14E+01	e		4.14E+01
Acetic acid	64-19-7	-0.17		9.71E+00	e		9.71E+00	e		9.71E+00
Acetic acid ethyl ester	141-78-6	0.73		2.93E+00	e		2.93E+00	e		2.93E+00
Acetic acid n-butyl ester	123-86-4	1.73		7.75E-01	e		7.75E-01	e		7.75E-01
Acetonitrile	75-05-8	-0.34		1.22E+01	e		1.22E+01	e		1.22E+01
Acrolein	107-02-8	-0.01		7.84E+00	e		7.84E+00	e		7.84E+00
Acrylonitrile	107-13-1	0.25	2.78E+01	5.55E+00	f		5.55E+00	e		5.55E+00
Bis(isopropyl)ether	108-20-3	No data		No data			1.00E+00		Default	1.00E+00

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
Butane	106-97-8	2.89		1.65E-01	e		1.65E-01	e		1.65E-01
Carbon disulfide	75-15-0	2.00		5.41E-01	e		5.41E-01	e		5.41E-01
Cyanogen	460-19-5	0.81		2.64E+00	e		2.64E+00	e		2.64E+00
Cyclohexane	110-82-7	3.44		7.96E-02	e		7.96E-02	e		7.96E-02
Cyclohexanone	108-94-1	0.81		2.64E+00	e		2.64E+00	e		2.64E+00
Cyclohexene	110-83-8	2.86		1.72E-01	e		1.72E-01	e		1.72E-01
Cyclopentane	287-92-3	3.00		1.43E-01	e		1.43E-01	e		1.43E-01
Ethyl alcohol	64-17-5	0.31		5.13E+00	e		5.13E+00	e		5.13E+00
Ethyl ether	60-29-7	0.89		2.37E+00	e		2.37E+00	e		2.37E+00
Ethyl methacrylate	97-63-2	1.59		9.33E-01	e		9.33E-01	e		9.33E-01
Formaldehyde	50-00-0	0.34	2.46E+01	4.91E+00	f		4.91E+00	e		4.91E+00
Formamide	75-12-7	-1.51		5.78E+01	e		5.78E+01	e		5.78E+01
Formic acid	64-18-6	-0.54		1.58E+01	e		1.58E+01	e		1.58E+01
Formic acid, methyl ester	107-31-3	-0.26		1.10E+01	e		1.10E+01	e		1.10E+01
Glycidylaldehyde	765-34-4	-0.73		2.05E+01	e		2.05E+01	e		2.05E+01
Methyl acetate	79-20-9	0.18		6.10E+00	e		6.10E+00	e		6.10E+00
Methyl alcohol	67-56-1	-0.71		1.99E+01	e		1.99E+01	e		1.99E+01
Methyl isocyanate	624-83-9	No data		No data			NA		Reacts with water	NA
Methyl methacrylate	80-62-6	0.79		2.71E+00	e		2.71E+00	e		2.71E+00
Methyl tert-butyl ether	1634-04-4	0.94		2.22E+00	e		2.22E+00	e		2.22E+00
Methylacetylene	74-99-7	0.94		2.22E+00	e		2.22E+00	e		2.22E+00
Methylcyclohexane	108-87-2	4.10		3.31E-02	e		3.31E-02	e		3.31E-02
N,N-Dimethylacetamide	127-19-5	No data		No data			1.00E+00		Default	1.00E+00
n-Butyl alcohol	71-36-3	0.88		2.40E+00	e		2.40E+00	e		2.40E+00
n-Heptane	142-82-5	4.66		1.57E-02	e		1.57E-02	e		1.57E-02
n-Hexane	110-54-3	4.11		3.26E-02	e		3.26E-02	e		3.26E-02
Nitromethane	75-52-5	-0.35		1.23E+01	e		1.23E+01	e		1.23E+01

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
n-Nonane	111-84-2	5.65		4.20E-03	e		4.20E-03	e		4.20E-03
n-Octane	111-65-9	4.00		3.78E-02	e		3.78E-02	e		3.78E-02
n-Pentane	109-66-0	3.21		1.08E-01	e		1.08E-01	e		1.08E-01
n-Propionaldehyde	123-38-6	0.59		3.53E+00	e		3.53E+00	e		3.53E+00
n-Propyl alcohol	71-23-8	0.25		5.55E+00	e		5.55E+00	e		5.55E+00
n-Valeraldehyde	110-62-3	No data		No data	e		1.00E+00		Default	1.00E+00
Oxirane	75-21-8	-0.30		1.15E+01	e		1.15E+01	e		1.15E+01
p-Cymene	99-87-6	4.10		3.31E-02	e		3.31E-02	e		3.31E-02
Phosgene	75-44-5	No data		No data	e		1.00E+00		Default	1.00E+00
Propargyl alcohol	107-19-7	0.26		5.48E+00	e		5.48E+00	e		5.48E+00
Propionic acid	79-09-4	0.33		4.99E+00	e		4.99E+00	e		4.99E+00
Propionitrile	107-12-0	0.16		6.26E+00	e		6.26E+00	e		6.26E+00
Propylene gylcol monomethyl ether	107-98-2	-0.18		9.84E+00	e		9.84E+00	e		9.84E+00
p-tert-Butyltoluene	98-51-1	No data		No data			1.00E+00		Default	1.00E+00
Triethylamine	121-44-8	0.16		6.26E+00	e		6.26E+00	e		6.26E+00
Trimethylamine	75-50-3	0.16		6.26E+00	e		6.26E+00	e		6.26E+00
Vinyl acetate	108-05-4	0.70		3.06E+00	e		3.06E+00	e		3.06E+00
Non-aromatic Halogenated Hydrocarbons										
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	No data		No data			1.00E+00		Default	1.00E+00
1,1,1,2-Tetrachloroethane	630-20-6	2.63		2.34E-01	e		2.34E-01	e		2.34E-01
1,1,1-Trichloroethane	71-55-6	2.42		3.09E-01	e		3.09E-01	e		3.09E-01
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	3.73		5.41E-02	e		5.41E-02	e		5.41E-02
1,1,2,2-Tetrachloroethane	79-34-5	4.64		1.60E-02	e		1.60E-02	e		1.60E-02
1,1,2,2-Tetrachloroethene	127-18-4	2.55		2.62E-01	e		2.62E-01	e		2.62E-01
1,1,2-Trichloroethane	79-00-5	2.10		4.75E-01	e		4.75E-01	e		4.75E-01
1,1,2-Trichloroethylene	79-01-6	2.43		3.04E-01	e		3.04E-01	e		3.04E-01
1,1-Dichloroethane	75-34-3	1.79		7.13E-01	e		7.13E-01	e		7.13E-01

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
1,1-Dichloroethene	75-35-4	2.12		4.61E-01	e		4.61E-01	e		4.61E-01
1,2,2-Trichloro-1,1,2-trifluoroethane	76-13-1	3.16		1.15E-01	e		1.15E-01	e		1.15E-01
1,2,3-Trichloropropane	96-18-4	2.25		3.88E-01	e		3.88E-01	e		3.88E-01
1,2-Dibromo-3-chloropropane	96-12-8	2.34		3.44E-01	e		3.44E-01	e		3.44E-01
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	2.82		1.82E-01	e		1.82E-01	e		1.82E-01
1,2-Dichloroethane	107-06-2	1.46		1.11E+00	e		1.11E+00	e		1.11E+00
1,2-Dichloroethylene	540-59-0	0.48		4.09E+00	e		4.09E+00	e		4.09E+00
1,2-Dichloropropane	78-87-5	2.25		3.88E-01	e		3.88E-01	e		3.88E-01
1,3-Dichloropropene	542-75-6	1.75		7.56E-01	e		7.56E-01	e		7.56E-01
1,4-Dichloro-2-butene	764-41-0	0.87		2.42E+00	e		2.42E+00	e		2.42E+00
1-Chloroethene	75-01-4	1.15		1.68E+00	e		1.68E+00	e		1.68E+00
2,2-Dichloropropionic acid	75-99-0	0.78		2.75E+00	e		2.75E+00	e		2.75E+00
2-Chloropropane	75-29-6	1.90		6.18E-01	e		6.18E-01	e		6.18E-01
3-Chloropropene (allyl chloride)	107-05-1	0.95		2.17E+00	e		2.17E+00	e		2.17E+00
Bromochloromethane	74-97-5	1.41		1.19E+00	e		1.19E+00	e		1.19E+00
Bromodichloromethane	75-27-4	2.03		5.23E-01	e		5.23E-01	e		5.23E-01
Bromoethene	593-60-2	1.07		1.87E+00	e		1.87E+00	e		1.87E+00
Bromoform	75-25-2	2.35		3.39E-01	e		3.39E-01	e		3.39E-01
Bromomethane	74-83-9	1.11		1.76E+00	e		1.76E+00	e		1.76E+00
Carbon tetrachloride	56-23-5	2.72	1.04E+00	2.08E-01	f		2.08E-01	e		2.08E-01
Chlorodibromomethane	124-48-1	2.18		4.28E-01	e		4.28E-01	e		4.28E-01
Chlorodifluoromethane	75-45-6	1.08		1.84E+00	e		1.84E+00	e		1.84E+00
Chloroethane	75-00-3	3.10		1.25E-01	e		1.25E-01	e		1.25E-01
Chloroform	67-66-3	1.95	2.90E+00	5.80E-01	f		5.78E-01	e		5.80E-01
Chloromethane	74-87-3	0.90		2.33E+00	e		2.33E+00	e		2.33E+00
Chloropentafluoroethane	76-15-3	No data		No data			1.00E+00		Default	1.00E+00
cis-1,2-Dichloroethene	156-59-2	1.98		5.54E-01	e		5.54E-01	e		5.54E-01

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
cis-1,3-Dichloropropene	10061-01-5	No data		No data			1.00E+00		Default	1.00E+00
Cyanogen bromide	506-68-3	No data		No data			1.00E+00		Default	1.00E+00
Cyanogen chloride	506-77-4	0.20		5.94E+00	e		5.94E+00	e		5.94E+00
Dichlorodifluoromethane	75-71-8	2.16		4.38E-01	e		4.38E-01	e		4.38E-01
Dichlorofluoromethane	75-43-4	No data		No data			1.00E+00		Default	1.00E+00
Dichloromethane	75-09-2	1.26		1.46E+00	e		1.46E+00	e		1.46E+00
Difluorodibromomethane	75-61-6	No data		No data			1.00E+00		Default	1.00E+00
Hexafluoroacetone	684-16-2	No data		No data			1.00E+00		Default	1.00E+00
Iodomethane	74-88-4	1.69		8.17E-01	e		8.17E-01	e		8.17E-01
Methylene bromide	74-95-3	1.62		8.97E-01	e		8.97E-01	e		8.97E-01
Pentachloroethane	76-01-7	3.05		1.34E-01	e		1.34E-01	e		1.34E-01
trans-1,2-Dichloroethene	156-60-5	1.98		5.54E-01	e		5.54E-01	e		5.54E-01
trans-1,3-Dichloropropene	10061-02-6	2.06		4.99E-01	e		4.99E-01	e		4.99E-01
Trichloroacetic acid	76-03-9	1.33		1.32E+00	e		1.32E+00	e		1.32E+00
Trichlorofluoroethane	27154-33-2	No data		No data			1.00E+00		Default	1.00E+00
Trichlorofluoromethane	75-69-4	2.53		2.67E-01	e		2.67E-01	e		2.67E-01
Trifluorobromomethane	75-63-8	1.86		6.52E-01	e		6.52E-01	e		6.52E-01
Dioxin and Furan Compounds										
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	8.20	2.90E-04	5.80E-05	g		5.80E-05	g		5.80E-05
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	7.92	6.20E-05	1.24E-05	g		1.24E-05	g		1.24E-05
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	7.92	2.20E-03	4.40E-04	g		4.40E-04	g		4.40E-04
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	7.79	1.70E-03	3.40E-04	g		3.40E-04	g		3.40E-04
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	7.25	4.30E-04	8.60E-05	g		8.60E-05	g		8.60E-05
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	7.25	6.70E-04	1.34E-04	g		1.34E-04	g		1.34E-04
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	7.25	1.10E-03	2.20E-04	g		2.20E-04	g		2.20E-04
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	7.25	7.80E-04	1.56E-04	g		1.56E-04	g		1.56E-04
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	7.25	3.50E-03	7.00E-04	g		7.00E-04	g		7.00E-04

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	6.64	5.20E-03	1.04E-03	g		1.04E-03	g		1.04E-03
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	6.79	1.10E-03	2.20E-04	g		2.20E-04	g		2.20E-04
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	7.25	3.80E-03	7.60E-04	g		7.60E-04	g		7.60E-04
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	6.92	9.00E-03	1.80E-03	g		1.80E-03	g		1.80E-03
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	6.64	5.62E-03	1.12E-03	e		1.12E-03	e		1.12E-03
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	6.53	4.50E-03	9.00E-04	g		9.00E-04	g		9.00E-04
Dibenzofuran	132-64-9	4.33		2.43E-02	e		2.43E-02	e		2.43E-02
Octachlorodibenzo(p)dioxin	3268-87-9	8.20	6.70E-05	1.34E-05	g		1.34E-05	g		1.34E-05
Octachlorodibenzofuran	39001-02-0	8.78	9.00E-05	1.80E-05	g		1.80E-05	g		1.80E-05
PCBs										
Polychlorinated biphenyls (PCBs)[h]	1336-36-3	7.31	1.00E-02	2.00E-03	f		4.63E-04	e		2.00E-03
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	7.08		6.26E-04	e		6.26E-04	e		6.26E-04
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	7.12		5.94E-04	e		5.94E-04	e		5.94E-04
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	No data		No data	e		1.00E+00		Default	1.00E+00
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	No data		No data	e		1.00E+00		Default	1.00E+00
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	No data		No data	e		1.00E+00		Default	1.00E+00
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	No data		No data	e		1.00E+00		Default	1.00E+00
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	No data		No data	e		1.00E+00		Default	1.00E+00
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	No data		No data	e		1.00E+00		Default	1.00E+00
2',3,4,4',5-Pentachlorobiphenyl	no cas #	No data		No data	e		1.00E+00		Default	1.00E+00
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	7.12		5.94E-04	e		5.94E-04	e		5.94E-04
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	7.41		4.05E-04	e		4.05E-04	e		4.05E-04
3,3',4,4',5-Pentachlorobiphenyl	no cas #	No data		No data	e		1.00E+00		Default	1.00E+00
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	No data		No data	e		1.00E+00		Default	1.00E+00
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	No data		No data	e		1.00E+00		Default	1.00E+00
Phthalates										
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	5.20	3.80E-02	7.60E-03	f		7.60E-03	e		7.60E-03

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
Butylbenzyl phthalate	85-68-7	4.41		2.18E-02	e		2.18E-02	e		2.18E-02
Dibutyl phthalate	84-74-2	4.72		1.45E-02	e		1.45E-02	e		1.45E-02
Diethyl phthalate	84-66-2	4.44		2.11E-02	e		2.11E-02	e		2.11E-02
Dimethylphthalate	131-11-3	1.63		8.81E-01	e		8.81E-01	e		8.81E-01
n-Dioctyl phthalate	117-84-0	9.33	1.57E-04	3.14E-05	f		3.13E-05	e		3.14E-05
Light Polycyclic Aromatic Hydrocarbons (molecular weight <200 g/mole)										
2-Chloronapthalene	91-58-7	4.07		3.45E-02	e		3.45E-02	e		3.45E-02
2-Methyl naphthalene	91-57-6	3.86		4.55E-02	e		4.55E-02	e		4.55E-02
5-Nitroacenaphthene	602-87-9	No data		No data			1.00E+00		Default	1.00E+00
Acenaphthene	83-32-9	3.96		3.96E-02	e		3.96E-02	e		3.96E-02
Acenaphthylene	208-96-8	4.07		3.44E-02	e		3.44E-02	e		3.44E-02
Anthracene	120-12-7	4.47		2.02E-02	e		2.02E-02	e		2.02E-02
Fluorene	86-73-7	4.18		2.97E-02	e		2.97E-02	e		2.97E-02
Indene	95-13-6	No data		No data			1.00E+00		Default	1.00E+00
Naphthalene	91-20-3	3.37		8.70E-02	e		8.70E-02	e		8.70E-02
Phenanthrene	85-01-8	4.55		1.82E-02	e		1.82E-02	e		1.82E-02
Pyrene	129-00-0	5.00		9.98E-03	e		9.98E-03	e		9.98E-03
Heavy Polycyclic Aromatic Hydrocarbons (molecular weight >200 g/mole)										
3-Methylcholanthrene	56-49-5	7.11		6.02E-04	e		6.02E-04	e		6.02E-04
5-Methylchrysene	3697-24-3	No data		No data			1.00E+00		Default	1.00E+00
Benzo(a)anthracene	56-55-3	5.68	2.02E-02	4.04E-03	f		4.04E-03	e		4.04E-03
Benzo(a)pyrene	50-32-8	6.13	1.11E-02	2.22E-03	f		2.22E-03	e		2.22E-03
Benzo(b)fluoranthene	205-99-2	6.20	1.01E-02	2.02E-03	f		2.02E-03	e		2.02E-03
Benzo(e)pyrene	192-97-2	7.40		4.09E-04	e		4.09E-04	e		4.09E-04
Benzo(g,h,i)perylene	191-24-2	7.10		6.10E-04	e		6.10E-04	e		6.10E-04
Benzo(j)fluoranthene	205-82-3	6.44		1.47E-03	e		1.47E-03	e		1.47E-03
Benzo(k)fluoranthene	207-08-9	6.20	1.01E-02	2.02E-03	f		2.30E-03	e		2.02E-03

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
Benzo[a,i]pyrene	191-30-0	No data		No data			1.00E+00		Default	1.00E+00
Chrysene	218-01-9	5.74	1.87E-02	3.74E-03	f		3.73E-03	e		3.74E-03
Dibenz(a,h)anthracene	53-70-3	6.55	6.40E-03	1.28E-03	f		1.27E-03	e		1.28E-03
Dibenz[a,h]acridine	226-36-8	No data		No data			1.00E+00		Default	1.00E+00
Dibenz[a,j]acridine	224-42-0	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo(a,e)fluoranthene	5385-75-1	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo(a,h)fluoranthene	no cas #	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo[a,e]pyrene	192-65-4	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo[a,h]pyrene	189-64-0	No data		No data			1.00E+00		Default	1.00E+00
Dibenzo[a,i]pyrene	189-55-9	7.29		4.74E-04	e		4.74E-04	e		4.74E-04
Fluoranthene	206-44-0	5.08		8.94E-03	e		8.94E-03	e		8.94E-03
Hexachloronaphthalene	1335-87-1	7.59		3.18E-04	e		3.18E-04	e		3.18E-04
Indeno(1,2,3-cd)pyrene	193-39-5	6.91	3.90E-03	7.80E-04	f		7.80E-04	e		7.80E-04
Octachloronaphthalene	2234-13-1	6.42		1.51E-03	e		1.51E-03	e		1.51E-03
Pentachloronaphthalene	1321-64-8	No data		No data			1.00E+00		Default	1.00E+00
Tetrachloronaphthalene	1335-88-2	No data		No data			1.00E+00		Default	1.00E+00
Trichloronaphthalene	1321-65-9	No data		No data			1.00E+00		Default	1.00E+00
Light Substituted Benzene Compounds (MW <200 g/mole)										
1,2,3-Trichlorobenzene	87-61-6	4.05		3.55E-02	e		3.55E-02	e		3.55E-02
1,2,4-Trichlorobenzene	120-82-1	3.99		3.84E-02	e		3.84E-02	e		3.84E-02
1,2,4-Trimethyl benzene	95-63-6	3.65		6.02E-02	e		6.02E-02	e		6.02E-02
1,2-Dichlorobenzene	95-50-1	3.45		7.90E-02	e		7.90E-02	e		7.90E-02
1,3,5-Trimethyl benzene	108-67-8	3.42		8.17E-02	e		8.17E-02	e		8.17E-02
1,3-Dichlorobenzene	541-73-1	3.53		7.06E-02	e		7.06E-02	e		7.06E-02
1,3-Dinitrobenzene	99-65-0	1.49	5.32E+00	1.06E+00	f		1.06E+00	e		1.06E+00
1,4-Dichlorobenzene	106-46-7	3.41		8.26E-02	e		8.26E-02	e		8.26E-02
1,4-Dinitrobenzene	100-25-4	1.50		1.05E+00	e		1.05E+00	e		1.05E+00

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
2,4,5-Trichlorophenol	95-95-4	3.87		4.49E-02	e		4.49E-02	e		4.49E-02
2,4,6-Trichlorophenol	88-06-2	3.71		5.54E-02	e		5.54E-02	e		5.54E-02
2,4-Dichlorophenol	120-83-2	3.04		1.36E-01	e		1.36E-01	e		1.36E-01
2,4-Dimethylphenol	105-67-9	2.36		3.35E-01	e		3.35E-01	e		3.35E-01
2,4-Dinitrophenol	51-28-5	1.52		1.03E+00	e		1.03E+00	e		1.03E+00
2,4-Dinitrotoluene	121-14-2	2.00	2.72E+00	5.44E-01	f		5.44E-01	e		5.44E-01
2,6-Dinitrotoluene	606-20-2	1.89	3.15E+00	6.30E-01	f		6.29E-01	e		6.30E-01
2-Chlorophenol	95-57-8	2.16		4.36E-01	e		4.36E-01	e		4.36E-01
2-Chlorotoluene	95-49-8	3.54		7.00E-02	e		7.00E-02	e		7.00E-02
2-Nitrophenol	88-75-5	1.79		7.15E-01	e		7.15E-01	e		7.15E-01
4,6-Dinitro-o-cresol	534-52-1	2.85		1.74E-01	e		1.74E-01	e		1.74E-01
4-Chlorotoluene	106-43-4	3.33		9.21E-02	e		9.21E-02	e		9.21E-02
4-Nitrophenol	100-02-7	1.91		6.10E-01	e		6.10E-01	e		6.10E-01
alpha-Methylstyrene	98-83-9	3.46		7.71E-02	e		7.71E-02	e		7.71E-02
Aniline	62-53-3	0.98		2.10E+00	e		2.10E+00	e		2.10E+00
Benzotrichloride	98-07-7	2.92		1.59E-01	e		1.59E-01	e		1.59E-01
Benzyl chloride	100-44-7	0.36		4.79E+00	e		4.79E+00	e		4.79E+00
Bromobenzene	108-86-1	2.99		1.45E-01	e		1.45E-01	e		1.45E-01
Chlorobenzene	108-90-7	2.79		1.89E-01	e		1.89E-01	e		1.89E-01
Cumene	98-82-8	3.61		6.32E-02	e		6.32E-02	e		6.32E-02
m-Cresol	108-39-4	1.96		5.71E-01	e		5.71E-01	e		5.71E-01
n-Butyl benzene	104-51-8	4.28		2.60E-02	e		2.60E-02	e		2.60E-02
Nitrobenzene	98-95-3	1.83	3.38E+00	6.76E-01	f		6.76E-01	e		6.76E-01
n-Propyl benzene	103-65-1	3.69		5.70E-02	e		5.70E-02	e		5.70E-02
o-Cresol	95-48-7	2.02		5.26E-01	e		5.26E-01	e		5.26E-01
o-Dinitrobenzene	528-29-0	1.60		9.21E-01	e		9.21E-01	e		9.21E-01
o-Nitroaniline	88-74-4	1.85		6.60E-01	e		6.60E-01	e		6.60E-01

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
o-Toluidine	95-53-4	1.34		1.30E+00	e		1.30E+00	e		1.30E+00
p-Chloroaniline	106-47-8	1.87		6.44E-01	e		6.44E-01	e		6.44E-01
p-Cresol	106-44-5	1.94		5.86E-01	e		5.86E-01	e		5.86E-01
Phenol	108-95-2	1.48		1.08E+00	e		1.08E+00	e		1.08E+00
p-Nitrochlorobenzene	100-00-5	2.39		3.22E-01	e		3.22E-01	e		3.22E-01
p-Toluidine	106-49-0	1.40		1.20E+00	e		1.20E+00	e		1.20E+00
sec-Butyl benzene	135-98-8	4.57		1.77E-02	e		1.77E-02	e		1.77E-02
tert-Butyl benzene	98-06-6	4.11		3.26E-02	e		3.26E-02	e		3.26E-02
Toluene-2,6-diamine	823-40-5	1.45		1.12E+00	e		1.12E+00	e		1.12E+00
Trimethyl benzene	25551-13-7	3.40		8.39E-02	e		8.39E-02	e		8.39E-02
Other Light Semivolatile Compounds (molecular weight <200 g/mole)										
1,1'-Biphenyl	92-52-4	3.90		4.31E-02	e		4.31E-02	e		4.31E-02
1,1-Dimethylhydrazine	57-14-7	0.60		3.51E+00	e		3.51E+00	e		3.51E+00
1,2-Dimethylhydrazine	540-73-8	-1.37		4.78E+01	e		4.78E+01	e		4.78E+01
1,2-Diphenylhydrazine	122-66-7	2.94		1.55E-01	e		1.55E-01	e		1.55E-01
1,3-Propane sultone	1120-71-4	-0.52		1.55E+01	e		1.55E+01	e		1.55E+01
2,4-Toluene diisocyante	584-84-9	No data		No data			NA		Decomposes rapidly in water	NA
2-Chloroacetophenone	532-27-4	2.59		2.45E-01	e		2.45E-01	e		2.45E-01
2-Propenoic acid	79-10-7	0.33		4.99E+00	e		4.99E+00	e		4.99E+00
4,4-Methylenedianiline	101-77-9	3.38		8.62E-02	e		8.62E-02	e		8.62E-02
Acetophenone	98-86-2	1.64		8.73E-01	e		8.73E-01	e		8.73E-01
Benzoic acid	65-85-0	1.86		6.52E-01	e		6.52E-01	e		6.52E-01
bis(2-Chloroethoxy)methane	111-91-1	7.59		3.18E-04	e		3.18E-04	e		3.18E-04
bis(2-Chloroethyl) ether	111-44-4	1.30		1.37E+00	e		1.37E+00	e		1.37E+00
Chlorocyclopentadiene	41851-50-7	2.43		3.05E-01	e		3.05E-01	e		3.05E-01
Cyclohexanol	108-93-0	1.23		1.51E+00	e		1.51E+00	e		1.51E+00
Dichloroisopropyl ether	108-60-1	2.58		2.50E-01	e		2.50E-01	e		2.50E-01

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
Dichloromethyl ether	542-88-1	-0.38		1.28E+01	e		1.28E+01	e		1.28E+01
Dichloropentadiene	no cas #	No data		No data			1.00E+00		Default	1.00E+00
Dimethyl sulfate	77-78-1	0.32		5.07E+00	e		5.07E+00	e		5.07E+00
Dimethylaniline	121-69-7	-0.88		2.50E+01	e		2.50E+01	e		2.50E+01
Di-n-propylnitrosamine	621-64-7	1.38		1.23E+00	e		1.23E+00	e		1.23E+00
Diphenyl ether	101-84-8	4.21		2.86E-02	e		2.86E-02	e		2.86E-02
Epichlorohydrin	106-89-8	0.25		5.55E+00	e		5.55E+00	e		5.55E+00
Ethyl carbamate (urethane)	51-79-6	-0.15		9.46E+00	e		9.46E+00	e		9.46E+00
Ethyl methanesulfonate	62-50-0	0.05		7.25E+00	e		7.25E+00	e		7.25E+00
Ethylene dibromide	106-93-4	1.75		7.55E-01	e		7.55E-01	e		7.55E-01
Ethylene glycol	107-21-1	-0.91		2.62E+01	e		2.62E+01	e		2.62E+01
Ethylene glycol monobutyl ether	111-76-2	1.55		9.78E-01	e		9.78E-01	e		9.78E-01
Ethylene glycol monoethyl ether acetate	111-15-9	0.62		3.40E+00	e		3.40E+00	e		3.40E+00
Ethylene thiourea	96-45-7	-0.64		1.82E+01	e		1.82E+01	e		1.82E+01
Furfural	98-01-1	0.96		2.16E+00	e		2.16E+00	e		2.16E+00
Maleic hydrazide	123-33-1	-0.74		2.07E+01	e		2.07E+01	e		2.07E+01
Malononitrile	109-77-3	0.04		7.34E+00	e		7.34E+00	e		7.34E+00
Methyl styrene (mixed isomers)	25013-15-4	3.35		8.97E-02	e		8.97E-02	e		8.97E-02
Methylhydrazine	60-34-4	-1.06		3.17E+01	e		3.17E+01	e		3.17E+01
N,N-Diphenylamine	122-39-4	3.50		7.35E-02	e		7.35E-02	e		7.35E-02
Nitric acid, propyl ester	627-13-4	No data		No data			1.00E+00		Default	1.00E+00
N-Nitrosodi-n-butylamine	924-16-3	2.41		3.13E-01	e		3.13E-01	e		3.13E-01
N-Nitrosomorpholine	59-89-2	0.98		2.10E+00	e		2.10E+00	e		2.10E+00
N-Nitroso-N,N-dimethylamine	62-75-9	-0.47		1.45E+01	e		1.45E+01	e		1.45E+01
o-Anisidine	90-04-0	1.18		1.61E+00	e		1.61E+00	e		1.61E+00
Oxalic acid	144-62-7	No data		No data			1.00E+00		Default	1.00E+00
Phthalic anhydride	85-44-9	-0.60		1.73E+01	e		1.73E+01	e		1.73E+01

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
p-Phthalic acid	100-21-0	0.82		2.59E+00	e		2.59E+00	e		2.59E+00
Pyridine	110-86-1	0.67		3.17E+00	e		3.17E+00	e		3.17E+00
Quinoline	91-22-5	2.03		5.20E-01	e		5.20E-01	e		5.20E-01
Quinone	106-51-4	0.20		5.94E+00	e		5.94E+00	e		5.94E+00
Safrole	94-59-7	2.66		2.25E-01	e		2.25E-01	e		2.25E-01
Tetrahydrofuran	109-99-9	0.45		4.27E+00	e		4.27E+00	e		4.27E+00
Other Heavy Semivolatile Compounds (molecular weight >200 g/mole)										
1,2,4,5-Tetrachlorobenzene	95-94-3	4.64		1.61E-02	e		1.61E-02	e		1.61E-02
1,3,5-Trinitrobenzene	99-35-4	1.18		1.61E+00	e		1.61E+00	e		1.61E+00
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	4.17		3.01E-02	e		3.01E-02	e		3.01E-02
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	-2.70		2.82E+02	e		2.82E+02	e		2.82E+02
2-sec-Butyl-4,6-dinitrophenol	88-85-7	3.14		1.19E-01	e		1.19E-01	e		1.19E-01
3,3'-Dimethoxybenzidine	119-90-4	1.81		6.96E-01	e		6.96E-01	e		6.96E-01
3,3-Dichlorobenzidine	91-94-1	3.58		6.65E-02	e		6.65E-02	e		6.65E-02
4-Bromophenylphenyl ether	101-55-3	5.00		9.98E-03	e		9.98E-03	e		9.98E-03
Ammonium perfluorooctanoate	3825-26-1	No data		No data			1.00E+00		Default	1.00E+00
Azobenzene	103-33-3	3.82		4.80E-02	e		4.80E-02	e		4.80E-02
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	No data		No data			1.00E+00		Default	1.00E+00
Captan	133-06-2	2.35		3.39E-01	e		3.39E-01	e		3.39E-01
Chlorobenzilate	510-15-6	4.38		2.28E-02	e		2.28E-02	e		2.28E-02
Dibutylphosphate	107-66-4	No data		No data			1.00E+00		Default	1.00E+00
Dimethyl aminoazobenzene	60-11-7	4.58		1.74E-02	e		1.74E-02	e		1.74E-02
Hexachlorobenzene	118-74-1	5.50	2.55E-02	5.10E-03	f		5.11E-03	e		5.10E-03
Hexachlorobutadiene	87-68-3	4.73	7.14E-02	1.43E-02	f		1.43E-02	e		1.43E-02
Hexachlorocyclopentadiene	77-47-4	5.04	5.65E-02	1.13E-02	f		9.46E-03	e		1.13E-02
Hexachloroethane	67-72-1	3.98		3.85E-02	e		3.85E-02	e		3.85E-02
Hexachlorophene	70-30-4	7.54		3.39E-04	e		3.39E-04	e		3.39E-04

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
Hexamethylene-1,5-diisocyanate	822-06-0	1.27		1.42E+00	e		1.42E+00	e		1.42E+00
Mirex	2385-85-5	6.89		8.07E-04	e		8.07E-04	e		8.07E-04
Nitrofen	1836-75-5	5.53		4.93E-03	e		4.93E-03	e		4.93E-03
Pentachlorobenzene	608-93-5	5.09	4.40E-02	8.80E-03	f		8.89E-03	e		8.80E-03
Pentachloronitrobenzene	82-68-8	4.64	8.00E-02	1.61E-02	f		1.61E-02	e		1.61E-02
Pentachlorophenol	87-86-5	5.08	4.49E-02	8.98E-03	f		8.98E-03	e		8.98E-03
Picric acid	88-89-1	2.03		5.20E-01	e		5.20E-01	e		5.20E-01
Pronamide	23950-58-5	3.51		7.24E-02	e		7.24E-02	e		7.24E-02
Strychnine	57-24-9	1.93		5.94E-01	e		5.94E-01	e		5.94E-01
Terphenyls	26140-60-3	No data		No data			1.00E+00		Default	1.00E+00
Tributyl phosphate	126-73-8	4.00		3.78E-02	e		3.78E-02	e		3.78E-02
Trifluralin	1582-09-8	5.34		6.35E-03	e		6.35E-03	e		6.35E-03
Triphenylamine	603-34-9	No data		No data			1.00E+00		Default	1.00E+00
Herbicides and Organochlorinated Pesticides										
2,4,5-T	93-76-5	3.36		8.85E-02	e		8.85E-02	e		8.85E-02
2,4-D and esters	94-75-7	2.81		1.84E-01	e		1.84E-01	e		1.84E-01
4,4-DDD	72-54-8	6.20		2.02E-03	e		2.02E-03	e		2.02E-03
4,4-DDE	72-55-9	6.26	9.37E-03	1.87E-03	f		1.88E-03	e		1.87E-03
4,4-DDT	50-29-3	6.00		2.64E-03	e		2.64E-03	e		2.64E-03
Aldrin	309-00-2	6.18		2.08E-03	e		2.08E-03	e		2.08E-03
alpha-BHC	319-84-6	3.80		4.93E-02	e		4.93E-02	e		4.93E-02
beta-BHC	319-85-7	3.83		4.71E-02	e		4.71E-02	e		4.71E-02
Chlordane	57-74-9	5.94		2.87E-03	e		2.87E-03	e		2.87E-03
Delta-BHC	319-86-8	4.14		3.13E-02	e		3.13E-02	e		3.13E-02
Dieldrin	60-57-1	5.27		6.97E-03	e		6.97E-03	e		6.97E-03
Endothall	145-73-3	-0.87		2.47E+01	e		2.47E+01	e		2.47E+01
Endrin	72-20-8	4.89		1.15E-02	e		1.15E-02	e		1.15E-02

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
gamma-BHC (Lindane)	58-89-9	3.72		5.48E-02	e		5.48E-02	e		5.48E-02
Heptachlor	76-44-8	5.02	4.89E-02	9.78E-03	f		9.75E-03	e		9.78E-03
Isodrin	465-73-6	3.55		6.87E-02	e		6.87E-02	e		6.87E-02
Methoxychlor	72-43-5	4.53		1.87E-02	e		1.87E-02	e		1.87E-02
Silvex (2,4,5-TP)	93-72-1	4.07		3.43E-02	e		3.43E-02	e		3.43E-02
Toxaphene	8001-35-2	5.50		5.13E-03	e		5.13E-03	e		5.13E-03
Inorganic Chemicals and Compounds										
Metals										
Aluminum	7429-90-5	NA	4.00E-03	8.00E-04	f		1.30E-04	i		1.30E-04
Antimony	7440-36-0	NA	2.00E-01	4.00E-02	f		6.00E-03	i		6.00E-03
Arsenic	7440-38-2	NA	3.60E-02	7.20E-03	f		1.20E-03	i		1.20E-03
Barium	7440-39-3	NA	1.50E-01	3.00E-02	f		3.00E-03	i		3.00E-03
Beryllium	7440-41-7	NA	1.00E-02	2.00E-03	f		3.00E-04	i		3.00E-04
Bismuth	7440-69-9	NA		7.00E-03	i		1.00E-03	i		1.00E-03
Boron	7440-42-8	NA		8.00E-01	i		4.00E-01	i		4.00E-01
Cadmium	7440-43-9	NA	3.64E-01	7.28E-02	f		3.00E-02	i		3.00E-02
Calcium	7440-70-2	NA		7.00E-01	i		7.00E-02	i		7.00E-02
Chromium (and VI)	18540-29-9	NA	7.50E-03	1.50E-03	f		9.00E-04	i		9.00E-04
Cobalt	7440-48-4	NA		4.00E-03	i		1.40E-03	i		1.40E-03
Copper	7440-50-8	NA	4.00E-01	8.00E-02	f		5.00E-02	i		5.00E-02
Iron	7439-89-6	NA		8.00E-04	i		2.00E-04	i		2.00E-04
Lead	7439-92-1	NA	4.50E-02	9.00E-03	f		1.80E-03	i		1.80E-03
Lithium	7439-93-2	NA		5.00E-03	i		8.00E-04	i		8.00E-04
Magnesium	7439-95-4	NA		2.00E-01	i		1.10E-01	i		1.10E-01
Manganese	7439-96-5	NA		5.00E-02	i		1.00E-02	i		1.00E-02
Mercury	7439-97-6	NA	3.75E-02	7.50E-03	f		4.00E-02	i		4.00E-02
Molybdenum	7439-98-7	NA		5.00E-02	i		1.20E-02	i		1.20E-02

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
Nickel	7440-02-0	NA	3.20E-02	6.40E-03	f		1.20E-02	i		1.20E-02
Potassium	7440-09-7	NA		2.00E-01	i		1.10E-01	i		1.10E-01
Rhodium	7440-16-6	NA		3.00E-02	i		8.00E-03	i		8.00E-03
Selenium	7782-49-2	NA	1.60E-02	3.20E-03	f		5.00E-03	i		5.00E-03
Silicon	7440-21-3	NA		7.00E-02	i		1.40E-02	i		1.40E-02
Silver	7440-22-4	NA	4.00E-01	8.00E-02	f		2.00E-02	i		2.00E-02
Sodium	7440-23-5	NA		1.50E-02	i		1.10E-02	i		1.10E-02
Strontium	7440-24-6	NA		5.00E-01	i		5.00E-02	i		5.00E-02
Tantalum	7440-25-7	NA		2.00E-03	i		5.00E-04	i		5.00E-04
Thallium	7440-28-0	NA	4.00E-03	8.00E-04	f		8.00E-05	i		8.00E-05
Tin	7440-31-5	NA		6.00E-03	i		1.20E-03	i		1.20E-03
Tungsten	7440-33-7	NA		9.00E-03	i		2.00E-03	i		2.00E-03
Uranium	7440-61-1	NA		1.70E-03	i		8.00E-04	i		8.00E-04
Vanadium	7440-62-2	NA		1.10E-03	i		6.00E-04	i		6.00E-04
Yttrium	7440-65-5	NA		3.00E-03	i		1.20E-03	i		1.20E-03
Zinc	7440-66-6	NA	1.20E-12	2.40E-13	f		1.80E-01	i		1.80E-01
Zirconium	7440-67-7	NA		4.00E-04	i		1.00E-04	i		1.00E-04
Non-metals and Anions										
Ammonia/Ammonium	7664-41-7	NA		2.27E-02	j					2.27E-02
Bromide	24959-67-9	NA		3.00E-01	i		3.00E-01	i		3.00E-01
Chloride	16887-00-6	NA		1.40E+01	i		1.40E+01	i		1.40E+01
Cyanide	57-12-5	NA		2.27E-02	j		0.00E+00	k		2.27E-02
Fluoride	16984-48-8	NA		1.20E-02	i		1.20E-03	i		1.20E-02
Hydroxide	14280-30-9	NA		NA					Depends on pH	NA
Iodine	7553-56-2	NA		3.00E-02	i		1.00E-02	i		3.00E-02
Nitrate	14797-55-8	NA		2.27E-02	j					2.27E-02
Nitrite	14797-65-0	NA		2.27E-02	j					2.27E-02

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
Phosphate	14265-44-2	NA		7.00E-01	i		7.00E-01	i		7.00E-01
Phosphorus	7723-14-0	NA		7.00E-01	i		7.00E-01	i		7.00E-01
Sulfate	14808-79-8	NA		3.00E-01	i		3.00E-01	i		3.00E-01
Total Sulfur	63705-05-5	NA		3.00E-01	i		3.00E-01	i		3.00E-01
Priority Pollutants										
Carbon Dioxide	124-38-9	NA		2.27E-02	j					2.27E-02
Nitrogen Dioxide	10102-44-0	NA		2.27E-02	j					2.27E-02
Ozone	10028-15-6	NA		2.27E-02	j					2.27E-02
Particulate Matter	No CAS #	NA		NA						NA
Sulfur Dioxode	7446-09-5	NA		2.27E-02	j					2.27E-02
Radionuclides										
Americium-241	1596-10-2	NA		1.10E-03	i		5.00E-05	i		5.00E-05
Antimony-125	14234-35-6	NA		4.00E-02	i		6.00E-03	i		6.00E-03
Barium-137	13981-97-0	NA		3.00E-02	i		3.00E-03	i		3.00E-03
Cadmium-113	None	NA		1.10E-01	i		3.00E-02	i		3.00E-02
Cesium-134	13967-70-9	NA		1.60E-02	i		6.00E-03	i		6.00E-03
Cesium-137	10045-97-3	NA		1.60E-02	i		6.00E-03	i		6.00E-03
Europium-154	15585-10-1	NA		2.00E-03	i		8.00E-04	i		8.00E-04
Europium-155	14391-16-3	NA		2.00E-03	i		8.00E-04	i		8.00E-04
Nickel-63	13981-37-8	NA		1.20E-02	i		1.20E-02	i		1.20E-02
Plutonium-239	15117-48-3	NA		9.00E-05	i		9.00E-06	i		9.00E-06
Plutonium-241	14119-32-5	NA		9.00E-05	i		9.00E-06	i		9.00E-06
Samarium-151	15715-94-3	NA		2.00E-03	i		8.00E-04	i		8.00E-04
Strontium-90	10098-97-2	NA		5.00E-01	i		5.00E-02	i		5.00E-02
Technetium-99	14133-79-7	NA		1.90E+00	i		3.00E-01	i		3.00E-01
Tritium	10028-17-8	NA		2.27E-02	j					2.27E-02
Yttrium-90	10098-91-6	NA		3.00E-03	i		1.20E-03	i		1.20E-03

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) SPv[b] (per dry weight of plants)	Calculated from EPA (1999) SPv[c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr[d]
Uranium-232	14158-29-3	NA		1.70E-03	i		8.00E-04	i		8.00E-04
Uranium-233	13968-55-3	NA		1.70E-03	i		8.00E-04	i		8.00E-04
Uranium-234	13966-29-5	NA		1.70E-03	i		8.00E-04	i		8.00E-04
Uranium-235	15117-96-1	NA		1.70E-03	i		8.00E-04	i		8.00E-04
Uranium-236	13982-70-2	NA		1.70E-03	i		8.00E-04	i		8.00E-04
Uranium-238	7440-61-1	NA		1.70E-03	i		8.00E-04	i		8.00E-04
Actinium-227	14952-40-0	NA		7.00E-04	i		7.00E-05	i		7.00E-05
Americium-243	14993-75-0	NA		1.10E-03	i		5.00E-05	i		5.00E-05
Carbon-14	14762-75-5	NA		2.27E-02	j					2.27E-02
Cobalt-60	10198-40-0	NA		4.00E-03	i		1.40E-03	i		1.40E-03
Curium-242	15510-73-3	NA		1.70E-04	i		3.00E-06	i		3.00E-06
Curium-243	15757-87-6	NA		1.70E-04	i		3.00E-06	i		3.00E-06
Curium-244	13981-15-2	NA		1.70E-04	i		3.00E-06	i		3.00E-06
Europium-152	14683-23-9	NA		2.00E-03	i		8.00E-04	i		8.00E-04
Iodine-129	15046-84-1	NA		3.00E-02	i		1.00E-02	i		1.00E-02
Neptunium-237	13994-20-2	NA		2.00E-02	i		2.00E-03	i		2.00E-03
Nickel-59	14336-70-0	NA	3.20E-02	6.40E-03	f		1.20E-02	i		1.20E-02
Niobium-93	None	NA		4.00E-03	i		1.00E-03	i		1.00E-03
Plutonium-238	13981-16-3	NA		9.00E-05	i		9.00E-06	i		9.00E-06
Plutonium-240	14119-33-6	NA		9.00E-05	i		9.00E-06	i		9.00E-06
Plutonium-242	13982-10-0	NA		9.00E-05	i		9.00E-06	i		9.00E-06
Protactinium-231	14331-85-2	NA		5.00E-04	i		5.00E-05	i		5.00E-05
Radium-226	13982-63-3	NA		3.00E-03	i		3.00E-04	i		3.00E-04
Radium-228	15262-20-1	NA		3.00E-03	i		3.00E-04	i		3.00E-04
Ruthenium-106	13967-48-1	NA		1.50E-02	i		4.00E-03	i		4.00E-03
Selenium-79	None	NA		5.00E-03	i		5.00E-03	i		5.00E-03
Thorium-229	15594-54-4	NA		1.70E-04	i		1.70E-05	i		1.70E-05

Table C2-2. Terrestrial Soil-to-Plant Transfer Factors (SPr) for Ecological Receptors (mg/kg tissue wet weight/mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) SPv [b] (per dry weight of plants)	Calculated from EPA (1999) SPv [c] (adjusted to wet weight of plants)	Notes	Ecology Guidance SPr	SAIC Compiled SPr	Notes	Comments	Recommended SPr [d]
Thorium-232	7440-29-1	NA		1.70E-04	i		1.70E-05	i		1.70E-05
Tin-126	15832-50-5	NA		6.00E-03	i		1.20E-03	i		1.20E-03
Zirconium-93	15751-77-6	NA		4.00E-04	i		1.00E-04	i		1.00E-04

NA = Not applicable

[a] $\log_{10}$ of K_{ow} values in Table 4.1

[b] Published in Appendix C of EPA (1999), Table C-2

[c] Calculated or chosen as described in Appendix C, Sect. C-1.2 of EPA (1999), then multiplied by 0.2 to adjust to wet weight of plants

[d] Selection criteria described in Sect. 8.2.4.3

[e] Wet weight values calculated by using log K_{ow}: log SPv = 1.588 - 0.578 x log K_{ow} (Travis and Arms 1988) for dry weight and multiplying by 0.2 to adjust to wet weight

[f] EPA (1999) values published in Table C-2 multiplied by 0.2 to adjust to wet weight of plants

[g] Calculated from value for TCDD in Appendix C of EPA (1999), Table C-2 by multiplying by BEF, then multiplying by 0.2 to adjust to wet weight of plants

[h] Value for Aroclor 1254 from Appendix C of EPA (1999), Table C-2, was used for PCB mixtures

[i] Baes and others. (1984) (Figure 2.2) values multiplied by 0.2 to adjust to wet weight of plants

[j] Average of values for other inorganics published in Appendix C of EPA (1999), Table C-2, then multiplied by 0.2 to adjust to wet weight of plants

[k] HAZWRAP (1994), Table 4.4

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Organic Compounds										
Aromatic Halogenated Hydrocarbons										
4-Chloro-3-methylphenol	59-50-7	3.10	2.50E-06		4.47E+01	7.51E+00				7.51E+00
2,3,4,6-Tetrachlorophenol	58-90-2	4.42	3.51E-06		8.11E+02	1.36E+02				1.36E+02
Aromatic Nonhalogenated Hydrocarbons										
2-Nitrotoluene	88-72-2	2.30	5.75E-05		2.73E-01	4.60E-02				4.60E-02
4-Nitrobiphenyl	92-93-3	3.77	3.54E-06		1.63E+02	2.75E+01				2.75E+01
Benzaldehyde	100-52-7	1.48	4.18E-05		5.00E-02	8.41E-03				8.41E-03
Benzene	71-43-2	-4.99	1.78E+03		1.52E-16	2.55E-17				2.55E-17
Benzyl alcohol	100-51-6	1.10	3.78E-07		2.20E+00	3.69E-01				3.69E-01
Ethyl benzene	100-41-4	3.12	7.73E-03		1.53E-02	2.58E-03				2.58E-03
m-Xylene	108-38-3	3.20	9.26E-06		1.55E+01	2.60E+00				2.60E+00
o-Xylene	95-47-6	3.13	6.73E-06		1.79E+01	3.01E+00				3.01E+00
p-Xylene	106-42-3	3.17	6.89E-06		1.93E+01	3.24E+00				3.24E+00
Styrene	100-42-5	2.93	3.33E-03		2.21E-02	3.71E-03				3.71E-03
Toluene	108-88-3	2.67	6.13E-03		6.32E-03	1.06E-03				1.06E-03
Non-aromatic Nonhalogenated Hydrocarbons										
1,2-Epoxybutane	106-88-7	1.44	4.61E-04		4.16E-03	6.98E-04				6.98E-04
1,3-Butadiene	106-99-0	1.90	7.46E+00		7.91E-07	1.33E-07				1.33E-07
1,4-Dioxane	123-91-1	-0.27	4.89E-06	5.93E-03		9.96E-04				9.96E-04
1-Methylpropyl alcohol	78-92-2	0.61	1.02E-05		2.44E-02	4.10E-03				4.10E-03
1-Nitropropane	108-03-2	0.87	No data		No data	No data		1.00E+00		1.00E+00
2,2,4-Trimethylpentane	540-84-1	5.02	3.02E+00		4.11E-03	6.90E-04				6.90E-04
2-Butanone	78-93-3	0.28	3.61E-05		3.08E-03	5.18E-04				5.18E-04
2-Butenaldehyde (2-Butenal)	4170-30-3	No data	No data		No data	No data		1.00E+00		1.00E+00
2-Ethoxyethanol	110-80-5	-0.10	5.13E-02		8.52E-07	1.43E-07				1.43E-07
2-Heptanone	110-43-0	1.98	1.45E-04		4.97E-02	8.34E-03				8.34E-03
2-Hexanone	591-78-6	1.38	9.60E-05		1.72E-02	2.89E-03				2.89E-03
2-Methoxyethanol	109-86-4	0.25	8.24E-07		1.26E-01	2.11E-02				2.11E-02

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
2-Methyl-2-propanol	75-65-0	0.35	1.20E-05		1.10E-02	1.84E-03				1.84E-03
2-Methyl-2-propenenitrile	126-98-7	0.54	2.39E-04		8.80E-04	1.48E-04				1.48E-04
2-Methylaziridine	75-55-8	-0.60	9.74E-06		1.31E-03	2.20E-04				2.20E-04
2-Methylpropyl alcohol	78-83-1	0.76	1.20E-05		3.00E-02	5.04E-03				5.04E-03
2-Pentanone	107-87-9	0.91	6.46E-05		8.06E-03	1.36E-03				1.36E-03
2-Propanone (Acetone)	67-64-1	-0.22	2.88E-05	1.13E-03		1.89E-04				1.89E-04
2-Propene-1-ol	107-18-6	0.17	5.01E-06		1.69E-02	2.84E-03				2.84E-03
2-Propyl alcohol	67-63-0	0.05	8.12E-06		7.78E-03	1.31E-03				1.31E-03
3-Heptanone	106-35-4	No data	No data		No data	No data		1.00E+00		1.00E+00
3-Methyl-1-butanol	123-51-3	No data	No data		No data	No data		1.00E+00		1.00E+00
3-Methyl-2-butanone	563-80-4	No data	No data		No data	No data		1.00E+00		1.00E+00
3-Pentanone	96-22-0	0.99	8.05E-05		7.87E-03	1.32E-03				1.32E-03
4-Heptanone	123-19-3	No data	No data		No data	No data		1.00E+00		1.00E+00
4-Methyl-2-pentanone	108-10-1	1.19	1.25E-04		8.28E-03	1.39E-03				1.39E-03
4-Methyl-3-penten-2-one	141-79-7	No data	No data		No data	No data		1.00E+00		1.00E+00
5-Methyl-2-hexanone	110-12-3	No data	No data		No data	No data		1.00E+00		1.00E+00
Acetaldehyde	75-07-0	-0.22	7.89E-05		4.13E-04	6.93E-05				6.93E-05
Acetamide	60-35-5	-1.26	3.50E-09		7.28E-01	1.22E-01				1.22E-01
Acetic acid	64-19-7	-0.17	3.02E-07		1.22E-01	2.05E-02				2.05E-02
Acetic acid ethyl ester	141-78-6	0.73	1.35E-04		2.48E-03	4.17E-04				4.17E-04
Acetic acid n-butyl ester	123-86-4	1.73	3.31E-04		1.17E-02	1.97E-03				1.97E-03
Acetonitrile	75-05-8	-0.34	3.79E+01		6.40E-10	1.08E-10				1.08E-10
Acrolein	107-02-8	-0.01	9.34E-05		5.86E-04	9.84E-05				9.84E-05
Acrylonitrile	107-13-1	0.25	9.90E-05	1.04E-03		1.75E-04				1.75E-04
Bis(isopropyl)ether	108-20-3	No data	No data		No data	No data		1.00E+00		1.00E+00
Butane	106-97-8	2.89	9.59E+01		6.97E-07	1.17E-07				1.17E-07
Carbon disulfide	75-15-0	2.00	1.27E-02		5.94E-04	9.98E-05				9.98E-05
Cyanogen	460-19-5	0.81	4.96E-03		8.17E-05	1.37E-05				1.37E-05
Cyclohexane	110-82-7	3.44	1.95E-01		1.32E-03	2.22E-04				2.22E-04

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Cyclohexanone	108-94-1	0.81	1.20E-05		3.38E-02	5.69E-03				5.69E-03
Cyclohexene	110-83-8	2.86	3.98E-02		1.56E-03	2.62E-04				2.62E-04
Cyclopentane	287-92-3	3.00	1.86E-01		4.70E-04	7.90E-05				7.90E-05
Ethyl alcohol	64-17-5	0.31	6.29E-06		1.90E-02	3.19E-03				3.19E-03
Ethyl ether	60-29-7	0.89	1.29E-03		3.85E-04	6.47E-05				6.47E-05
Ethyl methacrylate	97-63-2	1.59	1.38E-04		2.00E-02	3.36E-03				3.36E-03
Formaldehyde	50-00-0	0.34	2.78E-04	4.65E-04		7.82E-05				7.82E-05
Formamide	75-12-7	-1.51	1.39E-09		9.91E-01	1.67E-01				1.67E-01
Formic acid	64-18-6	-0.54	2.49E-06		6.01E-03	1.01E-03				1.01E-03
Formic acid, methyl ester	107-31-3	-0.26	2.23E-04		1.31E-04	2.20E-05				2.20E-05
Glycidylaldehyde	765-34-4	-0.73	5.11E-07		1.83E-02	3.07E-03				3.07E-03
Methyl acetate	79-20-9	0.18	8.71E-05		9.98E-04	1.68E-04				1.68E-04
Methyl alcohol	67-56-1	-0.71	1.44E-04		6.80E-05	1.14E-05				1.14E-05
Methyl isocyanate	624-83-9	No data	No data		No data	No data			Reacts with water	1.00E+00
Methyl methacrylate	80-62-6	0.79	3.18E-04		1.22E-03	2.05E-04				2.05E-04
Methyl tert-butyl ether	1634-04-4	0.94	5.89E-04		9.52E-04	1.60E-04				1.60E-04
Methylacetylene	74-99-7	0.94	No data		No data	No data		1.00E+00		1.00E+00
Methylcyclohexane	108-87-2	4.10	4.36E-01		2.98E-03	5.00E-04				5.00E-04
N,N-Dimethylacetamide	127-19-5	No data	No data		No data	No data		1.00E+00		1.00E+00
n-Butyl alcohol	71-36-3	0.88	8.51E-06		5.68E-02	9.54E-03				9.54E-03
n-Heptane	142-82-5	4.66	2.28E+00		2.25E-03	3.79E-04				3.79E-04
n-Hexane	110-54-3	4.11	1.82E+00		7.32E-04	1.23E-04				1.23E-04
Nitromethane	75-52-5	-0.35	No data		No data	No data		1.00E+00		1.00E+00
n-Nonane	111-84-2	5.65	4.95E+00		1.17E-02	1.97E-03				1.97E-03
n-Octane	111-65-9	4.00	3.24E+00		3.14E-04	5.28E-05				5.28E-05
n-Pentane	109-66-0	3.21	1.26E+00		1.16E-04	1.96E-05				1.96E-05
n-Propionaldehyde	123-38-6	0.59	7.41E-05		3.20E-03	5.38E-04				5.38E-04
n-Propyl alcohol	71-23-8	0.25	6.85E-06		1.51E-02	2.53E-03				2.53E-03

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
n-Valeraldehyde	110-62-3	No data	No data		No data	No data		1.00E+00		1.00E+00
Oxirane	75-21-8	-0.30	1.67E-04		1.60E-04	2.69E-05				2.69E-05
p-Cymene	99-87-6	4.10	7.92E-03		1.64E-01	2.76E-02				2.76E-02
Phosgene	75-44-5	No data	No data		No data	No data		1.00E+00		1.00E+00
Propargyl alcohol	107-19-7	0.26	8.56E-06		1.24E-02	2.08E-03				2.08E-03
Propionic acid	79-09-4	0.33	4.46E-07		2.82E-01	4.73E-02				4.73E-02
Propionitrile	107-12-0	0.16	3.71E-05		2.23E-03	3.74E-04				3.74E-04
Propylene gylcol monomethyl ether	107-98-2	-0.18	1.04E-06		3.46E-02	5.81E-03				5.81E-03
p-tert-Butyltoluene	98-51-1	No data	No data		No data	No data		1.00E+00		1.00E+00
Triethylamine	121-44-8	0.16	1.04E-04		7.93E-04	1.33E-04				1.33E-04
Trimethylamine	75-50-3	0.16	6.61E-05		1.25E-03	2.10E-04				2.10E-04
Vinyl acetate	108-05-4	0.70	5.50E-04		5.64E-04	9.48E-05				9.48E-05
Non-aromatic Halogenated Hydrocarbons										
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	No data	1.00E-02		No data	No data		1.00E+00		1.00E+00
1,1,1,2-Tetrachloroethane	630-20-6	2.63	2.44E-03		1.45E-02	2.44E-03				2.44E-03
1,1,1-Trichloroethane	71-55-6	2.42	1.86E-02		1.14E-03	1.92E-04				1.92E-04
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	3.73	9.77E-02		5.37E-03	9.02E-04				9.02E-04
1,1,2,2-Tetrachloroethane	79-34-5	4.64	3.72E-04		1.32E+01	2.23E+00				2.23E+00
1,1,2,2-Tetrachloroethene	127-18-4	2.55	1.73E-02		1.66E-03	2.79E-04				2.79E-04
1,1,2-Trichloroethane	79-00-5	2.10	1.00E-03		9.56E-03	1.61E-03				1.61E-03
1,1,2-Trichloroethylene	79-01-6	2.43	1.06E-02		2.06E-03	3.46E-04				3.46E-04
1,1-Dichloroethane	75-34-3	1.79	5.75E-03		7.88E-04	1.32E-04				1.32E-04
1,1-Dichloroethene	75-35-4	2.12	2.55E-02		3.97E-04	6.68E-05				6.68E-05
1,2,2-Trichloro-1,1,2-trifluoroethane	76-13-1	3.16	5.28E-01		2.46E-04	4.13E-05				4.13E-05
1,2,3-Trichloropropane	96-18-4	2.25	3.80E-04		3.67E-02	6.16E-03				6.16E-03
1,2-Dibromo-3-chloropropane	96-12-8	2.34	1.97E-04		8.82E-02	1.48E-02				1.48E-02
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	2.82	8.20E-04		6.87E-02	1.15E-02				1.15E-02
1,2-Dichloroethane	107-06-2	1.46	1.27E-03		1.59E-03	2.67E-04				2.67E-04
1,2-Dichloroethylene	540-59-0	0.48	1.50E-01		1.21E-06	2.03E-07				2.03E-07

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
1,2-Dichloropropane	78-87-5	2.25	2.81E-03		4.96E-03	8.33E-04				8.33E-04
1,3-Dichloropropene	542-75-6	1.75	2.94E-03		1.38E-03	2.32E-04				2.32E-04
1,4-Dichloro-2-butene	764-41-0	0.87	1.06E-02		4.47E-05	7.52E-06				7.52E-06
1-Chloroethene	75-01-4	1.15	3.15E-01		2.95E-06	4.96E-07				4.96E-07
2,2-Dichloropropionic acid	75-99-0	0.78	6.43E-08		5.86E+00	9.84E-01				9.84E-01
2-Chloropropane	75-29-6	1.90	1.64E-02		3.61E-04	6.06E-05				6.06E-05
3-Chloropropene (allyl chloride)	107-05-1	0.95	1.09E-02		5.33E-05	8.96E-06				8.96E-06
Bromochloromethane	74-97-5	1.41	1.06E+03		1.67E-09	2.81E-10				2.81E-10
Bromodichloromethane	75-27-4	2.03	3.17E-03		2.53E-03	4.25E-04				4.25E-04
Bromoethene	593-60-2	1.07	2.76E-01		2.76E-06	4.65E-07				4.65E-07
Bromoform	75-25-2	2.35	6.16E-04		2.89E-02	4.85E-03				4.85E-03
Bromomethane	74-83-9	1.11	1.41E-02		6.09E-05	1.02E-05				1.02E-05
Carbon tetrachloride	56-23-5	2.72	2.87E-02	1.52E-03		2.56E-04				2.56E-04
Chlorodibromomethane	124-48-1	2.18	1.21E-03		9.59E-03	1.61E-03				1.61E-03
Chlorodifluoromethane	75-45-6	1.08	1.68E-01		4.69E-06	7.88E-07				7.88E-07
Chloroethane	75-00-3	3.10	1.80E+00		6.22E-05	1.05E-05				1.05E-05
Chloroform	67-66-3	1.95	4.03E-03	1.65E-03		2.78E-04				2.78E-04
Chloromethane	74-87-3	0.90	4.52E-02		1.13E-05	1.90E-06				1.90E-06
Chloropentafluoroethane	76-15-3	No data	No data		No data	No data		1.00E+00		1.00E+00
cis-1,2-Dichloroethene	156-59-2	1.98	4.51E-03		1.60E-03	2.69E-04				2.69E-04
cis-1,3-Dichloropropene	10061-01-5	No data	2.40E-01		No data	No data		1.00E+00		1.00E+00
Cyanogen bromide	506-68-3	No data	No data		No data	No data		1.00E+00		1.00E+00
Cyanogen chloride	506-77-4	0.20	No data		No data	No data		1.00E+00		1.00E+00
Dichlorodifluoromethane	75-71-8	2.16	2.58E+00		4.31E-06	7.24E-07				7.24E-07
Dichlorofluoromethane	75-43-4	No data	No data		No data	No data		1.00E+00		1.00E+00
Dichloromethane	75-09-2	1.26	2.38E-03		5.10E-04	8.57E-05				8.57E-05
Difluorodibromomethane	75-61-6	No data	No data		No data	No data		1.00E+00		1.00E+00
Hexafluoroacetone	684-16-2	No data	No data		No data	No data		1.00E+00		1.00E+00
Iodomethane	74-88-4	1.69	5.49E-03		6.42E-04	1.08E-04				1.08E-04

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Methylene bromide	74-95-3	1.62	2.64E-02		1.12E-04	1.89E-05				1.89E-05
Pentachloroethane	76-01-7	3.05	2.45E-03		4.03E-02	6.78E-03				6.78E-03
trans-1,2-Dichloroethene	156-60-5	1.98	7.44E-03		9.70E-04	1.63E-04				1.63E-04
trans-1,3-Dichloropropene	10061-02-6	2.06	No data		No data	No data		1.00E+00		1.00E+00
Trichloroacetic acid	76-03-9	1.33	1.80E-07		8.11E+00	1.36E+00				1.36E+00
Trichlorofluoroethane	27154-33-2	No data	No data		No data	No data		1.00E+00		1.00E+00
Trichlorofluoromethane	75-69-4	2.53	1.37E-01		2.03E-04	3.40E-05				3.40E-05
Trifluorobromomethane	75-63-8	1.86	No data		No data	No data		1.00E+00		1.00E+00
Dioxin and Furan Compounds										
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	8.20	7.50E-06	9.10E+05		1.53E+05				1.53E+05
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	7.92	5.30E-05	8.30E+05		1.39E+05				1.39E+05
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	7.92	5.30E-05	8.30E+05		1.39E+05				1.39E+05
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	7.79	1.20E-05	5.20E+05		8.74E+04				8.74E+04
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	7.25	1.40E-05	1.62E+05		2.72E+04				2.72E+04
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	7.25	1.20E-05	5.20E+05		8.74E+04				8.74E+04
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	7.25	6.10E-06	1.62E+05		2.72E+04				2.72E+04
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	7.25	1.20E-05	5.20E+05		8.74E+04				8.74E+04
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	7.25	1.00E-05	1.62E+05		2.72E+04				2.72E+04
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	6.64	2.60E-06	2.39E+05		4.02E+04				4.02E+04
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	6.79	6.20E-06	9.75E+04		1.64E+04				1.64E+04
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	7.25	1.00E-05	1.62E+05		2.72E+04				2.72E+04
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	6.92	6.20E-06	9.75E+04		1.64E+04				1.64E+04
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	6.64	1.60E-05	6.55E+04		1.10E+04				1.10E+04
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	6.53	8.60E-06	4.57E+04		7.68E+03				7.68E+03
Dibenzofuran	132-64-9	4.33	1.30E-05		1.76E+02	2.95E+01				2.95E+01
Octachlorodibenzo(p)dioxin	3268-87-9	8.20	6.76E-06	2.36E+06		3.97E+05				3.97E+05
Octachlorodibenzofuran	39001-02-0	8.78	1.90E-06	2.28E+06		3.83E+05				3.83E+05
PCBs										
Polychlorinated biphenyls (PCBs)[f]	1336-36-3	7.31		3.09E+02		5.19E+01				5.19E+01

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	7.08	1.91E-04		1.02E+04	1.71E+03				1.71E+03
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	7.12	3.01E-04		7.10E+03	1.19E+03				1.19E+03
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	No data	No data		No data	No data		1.00E+00		1.00E+00
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	No data	No data		No data	No data		1.00E+00		1.00E+00
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	No data	No data		No data	No data		1.00E+00		1.00E+00
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	No data	No data		No data	No data		1.00E+00		1.00E+00
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	No data	No data		No data	No data		1.00E+00		1.00E+00
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	No data	No data		No data	No data		1.00E+00		1.00E+00
2',3,4,4',5-Pentachlorobiphenyl	no cas #	No data	No data		No data	No data		1.00E+00		1.00E+00
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	7.12	No data		No data	No data		1.00E+00		1.00E+00
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	7.41	5.92E-05		7.32E+04	1.23E+04				1.23E+04
3,3',4,4',5-Pentachlorobiphenyl	no cas #	No data	No data		No data	No data		1.00E+00		1.00E+00
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	No data	No data		No data	No data		1.00E+00		1.00E+00
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	No data	No data		No data	No data		1.00E+00		1.00E+00
Phthalates										
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	5.20	1.10E-08	2.33E+03		3.92E+02				3.92E+02
Butylbenzyl phthalate	85-68-7	4.41	1.91E-06		1.47E+03	2.47E+02				2.47E+02
Dibutyl phthalate	84-74-2	4.72	1.43E-06		4.16E+03	6.99E+02				6.99E+02
Diethyl phthalate	84-66-2	4.44	5.48E-07		5.41E+03	9.09E+02				9.09E+02
Dimethylphthalate	131-11-3	1.63	1.01E-07		3.04E+01	5.11E+00				5.11E+00
n-Dioctyl phthalate	117-84-0	9.33	7.68E-07	6.30E+08		1.06E+08				1.06E+08
Light Polycyclic Aromatic Hydrocarbons (molecular weight <200 g/mole)										
2-Chloronapthalene	91-58-7	4.07	1.43E-04		8.41E+00	1.41E+00				1.41E+00
2-Methyl naphthalene	91-57-6	3.86	4.01E-04		1.80E+00	3.02E-01				3.02E-01
5-Nitroacenaphthene	602-87-9	No data	No data		No data	No data		1.00E+00		1.00E+00
Acenaphthene	83-32-9	3.96	2.00E-04		4.66E+00	7.84E-01				7.84E-01
Acenaphthylene	208-96-8	4.07	1.18E-04		1.02E+01	1.72E+00				1.72E+00
Anthracene	120-12-7	4.47	1.11E-04		2.90E+01	4.87E+00				4.87E+00
Fluorene	86-73-7	4.18	8.42E-05		1.88E+01	3.16E+00				3.16E+00

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Indene	95-13-6	No data	No data		No data	No data		1.00E+00		1.00E+00
Naphthalene	91-20-3	3.37	4.82E-04		4.53E-01	7.62E-02				7.62E-02
Phenanthrene	85-01-8	4.55	1.88E-01		2.08E-02	3.50E-03				3.50E-03
Pyrene	129-00-0	5.00	1.14E-08		1.04E+06	1.74E+05				1.74E+05
Heavy Polycyclic Aromatic Hydrocarbons (molecular weight >200 g/mole)										
3-Methylcholanthrene	56-49-5	7.11	1.24E-07		1.68E+07	2.82E+06				2.82E+06
5-Methylchrysene	3697-24-3	No data	No data		No data	No data		1.00E+00		1.00E+00
Benzo(a)anthracene	56-55-3	5.68	3.62E-06	1.72E+04		2.90E+03				2.90E+03
Benzo(a)pyrene	50-32-8	6.13	8.36E-07	2.25E+05		3.78E+04				3.78E+04
Benzo(b)fluoranthene	205-99-2	6.20	6.18E-06	3.65E+05		6.13E+04				6.13E+04
Benzo(e)pyrene	192-97-2	7.40	4.62E-07		9.19E+06	1.55E+06				1.55E+06
Benzo(g,h,i)perylene	191-24-2	7.10	7.02E-06		2.90E+05	4.87E+04				4.87E+04
Benzo(j)fluoranthene	205-82-3	6.44	No data		No data	No data		1.00E+00		1.00E+00
Benzo(k)fluoranthene	207-08-9	6.20	4.15E-07	5.40E+05		9.08E+04		1.00E+00		9.08E+04
Benzo[a,i]pyrene	191-30-0	No data	No data		No data	No data				1.00E+00
Chrysene	218-01-9	5.74	1.21E-06	5.97E+04		1.00E+04				1.00E+04
Dibenz(a,h)anthracene	53-70-3	6.55	1.12E-08	4.68E+07		7.87E+06				7.87E+06
Dibenz[a,h]acridine	226-36-8	No data	No data		No data	No data		1.00E+00		1.00E+00
Dibenz[a,j]acridine	224-42-0	No data	No data		No data	No data		1.00E+00		1.00E+00
Dibenzo(a,e)fluoranthene	5385-75-1	No data	No data		No data	No data		1.00E+00		1.00E+00
Dibenzo(a,h)fluoranthene	no cas #	No data	No data		No data	No data		1.00E+00		1.00E+00
Dibenzo[a,e]pyrene	192-65-4	No data	No data		No data	No data		1.00E+00		1.00E+00
Dibenzo[a,h]pyrene	189-64-0	No data	No data		No data	No data		1.00E+00		1.00E+00
Dibenzo[a,i]pyrene	189-55-9	7.29	1.41E-08		2.30E+08	3.87E+07				3.87E+07
Fluoranthene	206-44-0	5.08	9.33E-06		1.55E+03	2.61E+02				2.61E+02
Hexachloronaphthalene	1335-87-1	7.59	1.41E-04		4.80E+04	8.07E+03				8.07E+03
Indeno(1,2,3-cd)pyrene	193-39-5	6.91	4.86E-09	2.67E+08		4.49E+07				4.49E+07
Octachloronaphthalene	2234-13-1	6.42	1.02E-04		3.77E+03	6.33E+02				6.33E+02
Pentachloronaphthalene	1321-64-8	No data	No data		No data	No data		1.00E+00		1.00E+00

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Tetrachloronaphthalene	1335-88-2	No data	No data		No data	No data		1.00E+00		1.00E+00
Trichloronaphthalene	1321-65-9	No data	No data		No data	No data		1.00E+00		1.00E+00
Light Substituted Benzene Compounds (MW <200 g/mole)										
1,2,3-Trichlorobenzene	87-61-6	4.05	2.84E-03		4.00E-01	6.73E-02				6.73E-02
1,2,4-Trichlorobenzene	120-82-1	3.99	2.61E-03		3.78E-01	6.36E-02				6.36E-02
1,2,4-Trimethyl benzene	95-63-6	3.65	5.75E-03		7.49E-02	1.26E-02				1.26E-02
1,2-Dichlorobenzene	95-50-1	3.45	2.11E-03		1.24E-01	2.08E-02				2.08E-02
1,3,5-Trimethyl benzene	108-67-8	3.42	7.81E-03		3.14E-02	5.28E-03				5.28E-03
1,3-Dichlorobenzene	541-73-1	3.53	1.11E+02		2.89E-06	4.86E-07				4.86E-07
1,3-Dinitrobenzene	99-65-0	1.49	1.25E-07	1.43E-01		2.40E-02				2.40E-02
1,4-Dichlorobenzene	106-46-7	3.41	2.80E-03		8.58E-02	1.44E-02				1.44E-02
1,4-Dinitrobenzene	100-25-4	1.50	No data		No data	No data		1.00E+00		1.00E+00
2,4,5-Trichlorophenol	95-95-4	3.87	5.64E-06		1.31E+02	2.20E+01				2.20E+01
2,4,6-Trichlorophenol	88-06-2	3.71	4.06E-06		1.24E+02	2.08E+01				2.08E+01
2,4-Dichlorophenol	120-83-2	3.04	2.38E-07		4.03E+02	6.78E+01				6.78E+01
2,4-Dimethylphenol	105-67-9	2.36	4.27E-09		4.27E+03	7.17E+02				7.17E+02
2,4-Dinitrophenol	51-28-5	1.52	4.82E-09		4.80E+02	8.07E+01				8.07E+01
2,4-Dinitrotoluene	121-14-2	2.00	1.46E-07	5.10E+01		8.57E+00				8.57E+00
2,6-Dinitrotoluene	606-20-2	1.89	1.30E-07	4.41E+01		7.41E+00				7.41E+00
2-Chlorophenol	95-57-8	2.16	1.66E-05		6.75E-01	1.13E-01				1.13E-01
2-Chlorotoluene	95-49-8	3.54	6.41E-02		5.09E-03	8.55E-04				8.55E-04
2-Nitrophenol	88-75-5	1.79	1.46E-05		3.09E-01	5.19E-02				5.19E-02
4,6-Dinitro-o-cresol	534-52-1	2.85	1.40E-06		4.32E+01	7.25E+00				7.25E+00
4-Chlorotoluene	106-43-4	3.33	No data		No data	No data		1.00E+00		1.00E+00
4-Nitrophenol	100-02-7	1.91	7.32E-09		8.26E+02	1.39E+02				1.39E+02
alpha-Methylstyrene	98-83-9	3.46	5.91E-03		4.62E-02	7.76E-03				7.76E-03
Aniline	62-53-3	0.98	2.28E-06		2.71E-01	4.56E-02				4.56E-02
Benzotrichloride	98-07-7	2.92	9.81E-04		7.33E-02	1.23E-02				1.23E-02
Benzyl chloride	100-44-7	0.36	4.13E-04		3.29E-04	5.52E-05				5.52E-05

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Bromobenzene	108-86-1	2.99	2.09E-03		4.09E-02	6.87E-03				6.87E-03
Chlorobenzene	108-90-7	2.79	4.38E-03		1.19E-02	2.01E-03				2.01E-03
Cumene	98-82-8	3.61	1.29E-02		3.05E-02	5.13E-03				5.13E-03
m-Cresol	108-39-4	1.96	8.93E-07		7.63E+00	1.28E+00				1.28E+00
n-Butyl benzene	104-51-8	4.28	1.29E-02		1.57E-01	2.64E-02				2.64E-02
Nitrobenzene	98-95-3	1.83	2.06E-05	2.43E-01		4.08E-02				4.08E-02
n-Propyl benzene	103-65-1	3.69	1.10E-02		4.33E-02	7.28E-03				7.28E-03
o-Cresol	95-48-7	2.02	1.62E-06		4.90E+00	8.24E-01				8.24E-01
o-Dinitrobenzene	528-29-0	1.60	No data		No data	No data		1.00E+00		1.00E+00
o-Nitroaniline	88-74-4	1.85	1.17E-06		4.46E+00	7.50E-01				7.50E-01
o-Toluidine	95-53-4	1.34	2.43E-06		6.15E-01	1.03E-01				1.03E-01
p-Chloroaniline	106-47-8	1.87	1.17E-06		4.68E+00	7.86E-01				7.86E-01
p-Cresol	106-44-5	1.94	7.99E-07		8.13E+00	1.37E+00				1.37E+00
Phenol	108-95-2	1.48	5.95E-07		3.51E+00	5.91E-01				5.91E-01
p-Nitrochlorobenzene	100-00-5	2.39	No data		No data	No data		1.00E+00		1.00E+00
p-Toluidine	106-49-0	1.40	6.50E-06		2.66E-01	4.48E-02				4.48E-02
sec-Butyl benzene	135-98-8	4.57	1.39E-02		2.97E-01	4.99E-02				4.99E-02
tert-Butyl benzene	98-06-6	4.11	1.19E-02		1.12E-01	1.88E-02				1.88E-02
Toluene-2,6-diamine	823-40-5	1.45	1.24E-11		1.60E+05	2.68E+04				2.68E+04
Trimethyl benzene	25551-13-7	3.40	5.75E-03		4.06E-02	6.82E-03				6.82E-03
Other Light Semivolatile Compounds (molecular weight <200 g/mole)										
1,1'-Biphenyl	92-52-4	3.90	2.77E-04		2.87E+00	4.82E-01				4.82E-01
1,1-Dimethylhydrazine	57-14-7	0.60	1.64E-06		1.47E-01	2.47E-02				2.47E-02
1,2-Dimethylhydrazine	540-73-8	-1.37	6.95E-08		2.81E-02	4.72E-03				4.72E-03
1,2-Diphenylhydrazine	122-66-7	2.94	1.28E-07		5.90E+02	9.92E+01				9.92E+01
1,3-Propane sultone	1120-71-4	-0.52	2.36E-06		6.57E-03	1.10E-03				1.10E-03
2,4-Toluene diisocyante	584-84-9	No data	No data		No data	No data			Decomposes rapidly in water	1.00E+00
2-Chloroacetophenone	532-27-4	2.59	8.71E-07		3.72E+01	6.25E+00				6.25E+00

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
2-Propenoic acid	79-10-7	0.33	4.46E-07		2.82E-01	4.73E-02				4.73E-02
4,4-Methylenedianiline	101-77-9	3.38	2.81E-08		7.90E+03	1.33E+03				1.33E+03
Acetophenone	98-86-2	1.64	1.03E-05		3.03E-01	5.09E-02				5.09E-02
Benzoic acid	65-85-0	1.86	1.54E-06		3.47E+00	5.84E-01				5.84E-01
bis(2-Chloroethoxy)methane	111-91-1	7.59	7.00E-09		9.67E+08	1.63E+08				1.63E+08
bis(2-Chloroethyl) ether	111-44-4	1.30	2.13E-05		6.37E-02	1.07E-02				1.07E-02
Chlorocyclopentadiene	41851-50-7	2.43	2.24E-02		9.66E-04	1.62E-04				1.62E-04
Cyclohexanol	108-93-0	1.23	5.75E-06		1.98E-01	3.33E-02				3.33E-02
Dichloroisopropyl ether	108-60-1	2.58	1.13E-04		2.77E-01	4.65E-02				4.65E-02
Dichloromethyl ether	542-88-1	-0.38	3.70E-03		5.95E-06	9.99E-07				9.99E-07
Dichloropentadiene	no cas #	No data	No data		No data	No data		1.00E+00		1.00E+00
Dimethyl sulfate	77-78-1	0.32	4.01E-06		3.04E-02	5.11E-03				5.11E-03
Dimethylaniline	121-69-7	-0.88	1.39E-05		4.66E-04	7.83E-05				7.83E-05
Di-n-propylnitrosamine	621-64-7	1.38	5.43E-08		3.04E+01	5.10E+00				5.10E+00
Diphenyl ether	101-84-8	4.21	2.49E-04		6.85E+00	1.15E+00				1.15E+00
Epichlorohydrin	106-89-8	0.25	3.08E-05		3.35E-03	5.63E-04				5.63E-04
Ethyl carbamate (urethane)	51-79-6	-0.15	No data		No data	No data		1.00E+00		1.00E+00
Ethyl methanesulfonate	62-50-0	0.05	8.87E-08		7.11E-01	1.19E-01				1.19E-01
Ethylene dibromide	106-93-4	1.75	4.47E-04		9.13E-03	1.53E-03				1.53E-03
Ethylene glycol	107-21-1	-0.91	1.80E-09		3.30E+00	5.54E-01				5.54E-01
Ethylene glycol monobutyl ether	111-76-2	1.55	5.26E-07		4.81E+00	8.08E-01				8.08E-01
Ethylene glycol monoethyl ether acetate	111-15-9	0.62	1.77E-06		1.44E-01	2.42E-02				2.42E-02
Ethylene thiourea	96-45-7	-0.64	1.52E-10		7.62E+01	1.28E+01				1.28E+01
Furfural	98-01-1	0.96	3.71E-06		1.58E-01	2.66E-02				2.66E-02
Maleic hydrazide	123-33-1	-0.74	6.59E-03		1.38E-06	2.32E-07				2.32E-07
Malononitrile	109-77-3	0.04	No data		No data	No data		1.00E+00		1.00E+00
Methyl styrene (mixed isomers)	25013-15-4	3.35	No data		No data	No data		1.00E+00		1.00E+00
Methylhydrazine	60-34-4	-1.06	No data		No data	No data		1.00E+00		1.00E+00
N,N-Diphenylamine	122-39-4	3.50	3.47E-07		8.61E+02	1.45E+02				1.45E+02

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Nitric acid, propyl ester	627-13-4	No data	No data		No data	No data		1.00E+00		1.00E+00
N-Nitrosodi-n-butylamine	924-16-3	2.41	5.47E-05		3.77E-01	6.33E-02				6.33E-02
N-Nitrosomorpholine	59-89-2	0.98	4.18E-08		1.48E+01	2.49E+00				2.49E+00
N-Nitroso-N,N-dimethylamine	62-75-9	-0.47	7.80E-07		2.26E-02	3.80E-03				3.80E-03
o-Anisidine	90-04-0	1.18	1.38E-06		7.31E-01	1.23E-01				1.23E-01
Oxalic acid	144-62-7	No data	No data		No data	No data		1.00E+00		1.00E+00
Phthalic anhydride	85-44-9	-0.60	6.28E-09		2.03E+00	3.42E-01				3.42E-01
p-Phthalic acid	100-21-0	0.82	1.04E-08		4.04E+01	6.79E+00				6.79E+00
Pyridine	110-86-1	0.67	6.86E-03		4.21E-05	7.08E-06				7.08E-06
Quinoline	91-22-5	2.03	2.70E-07		3.00E+01	5.05E+00				5.05E+00
Quinone	106-51-4	0.20	4.79E-04		1.91E-04	3.20E-05				3.20E-05
Safrole	94-59-7	2.66	1.19E-05		3.20E+00	5.37E-01				5.37E-01
Tetrahydrofuran	109-99-9	0.45	No data		No data	No data		1.00E+00		1.00E+00
Other Heavy Semivolatile Compounds (molecular weight >200 g/mole)										
1,2,4,5-Tetrachlorobenzene	95-94-3	4.64	1.18E-03		4.13E+00	6.95E-01				6.95E-01
1,3,5-Trinitrobenzene	99-35-4	1.18	8.66E-08		1.16E+01	1.95E+00				1.95E+00
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	4.17	No data		No data	No data		1.00E+00		1.00E+00
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	-2.70	No data		No data	No data		1.00E+00		1.00E+00
2-sec-Butyl-4,6-dinitrophenol	88-85-7	3.14	4.56E-07		2.71E+02	4.55E+01				4.55E+01
3,3'-Dimethoxybenzidine	119-90-4	1.81	3.36E-10		1.41E+04	2.37E+03				2.37E+03
3,3-Dichlorobenzidine	91-94-1	3.58	2.08E-08		1.72E+04	2.90E+03				2.90E+03
4-Bromophenylphenyl ether	101-55-3	5.00	1.17E-04		1.01E+02	1.70E+01				1.70E+01
Ammonium perfluorooctanoate	3825-26-1	No data	No data		No data	No data		1.00E+00		1.00E+00
Azobenzene	103-33-3	3.82	4.98E-06		1.31E+02	2.21E+01				2.21E+01
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfid	96-69-5	No data	No data		No data	No data		1.00E+00		1.00E+00
Captan	133-06-2	2.35	5.94E-06		2.99E+00	5.03E-01				5.03E-01
Chlorobenzilate	510-15-6	4.38	7.24E-08		3.57E+04	6.00E+03				6.00E+03
Dibutylphosphate	107-66-4	No data	No data		No data	No data		1.00E+00		1.00E+00
Dimethyl aminoazobenzene	60-11-7	4.58	4.00E-10		1.05E+07	1.77E+06				1.77E+06

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Hexachlorobenzene	118-74-1	5.50	5.35E-04	7.57E+01		1.27E+01				1.27E+01
Hexachlorobutadiene	87-68-3	4.73	2.39E-02	2.55E-01		4.29E-02				4.29E-02
Hexachlorocyclopentadiene	77-47-4	5.04	1.72E-02	5.47E-01		9.19E-02				9.19E-02
Hexachloroethane	67-72-1	3.98	3.60E-03		2.72E-01	4.58E-02				4.58E-02
Hexachlorophene	70-30-4	7.54	4.88E-10		1.23E+10	2.06E+09				2.06E+09
Hexamethylene-1,5-diisocyanate	822-06-0	1.27	2.66E-07		4.77E+00	8.02E-01				8.02E-01
Mirex	2385-85-5	6.89	5.27E-04		2.31E+03	3.88E+02				3.88E+02
Nitrofen	1836-75-5	5.53	1.69E-06		2.56E+04	4.31E+03				4.31E+03
Pentachlorobenzene	608-93-5	5.09	2.43E-02	6.04E-01		1.02E-01				1.02E-01
Pentachloronitrobenzene	82-68-8	4.64	2.86E-02	1.71E-01		2.87E-02				2.87E-02
Pentachlorophenol	87-86-5	5.08	1.41E-05	1.02E+03		1.71E+02				1.71E+02
Picric acid	88-89-1	2.03	3.79E-13		2.14E+07	3.60E+06				3.60E+06
Pronamide	23950-58-5	3.51	9.05E-06		3.38E+01	5.69E+00				5.69E+00
Strychnine	57-24-9	1.93	4.90E-13		1.30E+07	2.18E+06				2.18E+06
Terphenyls	26140-60-3	No data	No data		No data	No data		1.00E+00		1.00E+00
Tributyl phosphate	126-73-8	4.00	1.50E-07		6.78E+03	1.14E+03				1.14E+03
Trifluralin	1582-09-8	5.34	3.99E-05		6.82E+02	1.15E+02				1.15E+02
Triphenylamine	603-34-9	No data	No data		No data	No data		1.00E+00		1.00E+00
Herbicides and Organochlorinated Pesticides										
2,4,5-T	93-76-5	3.36	8.70E-09		2.43E+04	4.09E+03				4.09E+03
2,4-D and esters	94-75-7	2.81	1.37E-10		4.02E+05	6.76E+04				6.76E+04
4,4-DDD	72-54-8	6.20	8.43E-05		2.66E+03	4.47E+02				4.47E+02
4,4-DDE	72-55-9	6.26	1.24E-04	2.08E+03		3.50E+02				3.50E+02
4,4-DDT	50-29-3	6.00	1.30E-05		1.06E+04	1.78E+03				1.78E+03
Aldrin	309-00-2	6.18	1.35E-07		1.58E+06	2.65E+05				2.65E+05
alpha-BHC	319-84-6	3.80	6.78E-06		9.17E+01	1.54E+01				1.54E+01
beta-BHC	319-85-7	3.83	3.46E-07		1.95E+03	3.28E+02				3.28E+02
Chlordane	57-74-9	5.94	2.64E-05		4.46E+03	7.49E+02				7.49E+02
Delta-BHC	319-86-8	4.14	8.17E-07		1.75E+03	2.95E+02				2.95E+02

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Dieldrin	60-57-1	5.27	3.51E-09		6.52E+06	1.10E+06				1.10E+06
Endothall	145-73-3	-0.87	2.59E-10		2.56E+01	4.29E+00				4.29E+00
Endrin	72-20-8	4.89	1.19E-06		7.61E+03	1.28E+03				1.28E+03
gamma-BHC (Lindane)	58-89-9	3.72	1.56E-06		3.27E+02	5.50E+01				5.50E+01
Heptachlor	76-44-8	5.02	5.87E-06	2.09E+03		3.51E+02				3.51E+02
Isodrin	465-73-6	3.55	1.04E-05		3.24E+01	5.45E+00				5.45E+00
Methoxychlor	72-43-5	4.53	6.33E-06		5.84E+02	9.82E+01				9.82E+01
Silvex (2,4,5-TP)	93-72-1	4.07	6.23E-03		1.95E-01	3.28E-02				3.28E-02
Toxaphene	8001-35-2	5.50	4.51E-04		8.92E+01	1.50E+01				1.50E+01
Inorganic Chemicals and Compounds										
Metals										
Aluminum	7429-90-5	NA	NA	0.00E+00						0.00E+00
Antimony	7440-36-0	NA	NA	0.00E+00						0.00E+00
Arsenic	7440-38-2	NA	NA	0.00E+00						0.00E+00
Barium	7440-39-3	NA	NA	0.00E+00						0.00E+00
Beryllium	7440-41-7	NA	NA	0.00E+00						0.00E+00
Bismuth	7440-69-9	NA	NA	0.00E+00						0.00E+00
Boron	7440-42-8	NA	NA	0.00E+00						0.00E+00
Cadmium	7440-43-9	NA	NA	0.00E+00						0.00E+00
Calcium	7440-70-2	NA	NA	0.00E+00						0.00E+00
Chromium (and VI)	18540-29-9	NA	NA	0.00E+00						0.00E+00
Cobalt	7440-48-4	NA	NA	0.00E+00						0.00E+00
Copper	7440-50-8	NA	NA	0.00E+00						0.00E+00
Iron	7439-89-6	NA	NA	0.00E+00						0.00E+00
Lead	7439-92-1	NA	NA	0.00E+00						0.00E+00
Lithium	7439-93-2	NA	NA	0.00E+00						0.00E+00
Magnesium	7439-95-4	NA	NA	0.00E+00						0.00E+00
Manganese	7439-96-5	NA	NA	0.00E+00						0.00E+00
Mercury	7439-97-6	NA	NA	1.80E+03		3.03E+02				3.03E+02

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Molybdenum	7439-98-7	NA	NA	0.00E+00						0.00E+00
Nickel	7440-02-0	NA	NA	0.00E+00						0.00E+00
Potassium	7440-09-7	NA	NA	0.00E+00						0.00E+00
Rhodium	7440-16-6	NA	NA	0.00E+00						0.00E+00
Selenium	7782-49-2	NA	NA	0.00E+00						0.00E+00
Silicon	7440-21-3	NA	NA	0.00E+00						0.00E+00
Silver	7440-22-4	NA	NA	0.00E+00						0.00E+00
Sodium	7440-23-5	NA	NA	0.00E+00						0.00E+00
Strontium	7440-24-6	NA	NA	0.00E+00						0.00E+00
Tantalum	7440-25-7	NA	NA	0.00E+00						0.00E+00
Thallium	7440-28-0	NA	NA	0.00E+00						0.00E+00
Tin	7440-31-5	NA	NA	0.00E+00						0.00E+00
Tungsten	7440-33-7	NA	NA	0.00E+00						0.00E+00
Uranium	7440-61-1	NA	NA	0.00E+00						0.00E+00
Vanadium	7440-62-2	NA	NA	0.00E+00						0.00E+00
Yttrium	7440-65-5	NA	NA	0.00E+00						0.00E+00
Zinc	7440-66-6	NA	NA	0.00E+00						0.00E+00
Zirconium	7440-67-7	NA	NA	0.00E+00						0.00E+00
Non-metals and Anions										
Ammonia/Ammonium	7664-41-7	NA	NA	0.00E+00						0.00E+00
Bromide	24959-67-9	NA	NA	0.00E+00						0.00E+00
Chloride	16887-00-6	NA	NA	0.00E+00						0.00E+00
Cyanide	57-12-5	NA	NA	0.00E+00						0.00E+00
Fluoride	16984-48-8	NA	NA	0.00E+00						0.00E+00
Hydroxide	14280-30-9	NA	NA	0.00E+00						0.00E+00
Iodine	7553-56-2	NA	NA	0.00E+00						0.00E+00
Nitrate	14797-55-8	NA	NA	0.00E+00						0.00E+00
Nitrite	14797-65-0	NA	NA	0.00E+00						0.00E+00
Phosphate	14265-44-2	NA	NA	0.00E+00						0.00E+00

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Phosphorus	7723-14-0	NA	NA	0.00E+00						0.00E+00
Sulfate	14808-79-8	NA	NA	0.00E+00						0.00E+00
Total Sulfur	63705-05-5	NA	NA	0.00E+00						0.00E+00
Priority Pollutants										
Carbon Dioxide	124-38-9	NA	NA					1.00E+00		1.00E+00
Nitrogen Dioxide	10102-44-0	NA	NA					1.00E+00		1.00E+00
Ozone	10028-15-6	NA	NA					1.00E+00		1.00E+00
Particulate Matter	No CAS #	NA	NA	NA						NA
Sulfur Dioxode	7446-09-5	NA	NA					1.00E+00		1.00E+00
Radionuclides										
Americium-241	1596-10-2	NA	NA	0.00E+00						0.00E+00
Antimony-125	14234-35-6	NA	NA	0.00E+00						0.00E+00
Barium-137	13981-97-0	NA	NA	0.00E+00						0.00E+00
Cadmium-113	None	NA	NA	0.00E+00						0.00E+00
Cesium-134	13967-70-9	NA	NA	0.00E+00						0.00E+00
Cesium-137	10045-97-3	NA	NA	0.00E+00						0.00E+00
Europium-154	15585-10-1	NA	NA	0.00E+00						0.00E+00
Europium-155	14391-16-3	NA	NA	0.00E+00						0.00E+00
Nickel-63	13981-37-8	NA	NA	0.00E+00						0.00E+00
Plutonium-239	15117-48-3	NA	NA	0.00E+00						0.00E+00
Plutonium-241	14119-32-5	NA	NA	0.00E+00						0.00E+00
Samarium-151	15715-94-3	NA	NA	0.00E+00						0.00E+00
Strontium-90	10098-97-2	NA	NA	0.00E+00						0.00E+00
Technetium-99	14133-79-7	NA	NA	0.00E+00						0.00E+00
Tritium	10028-17-8	NA	NA	0.00E+00						0.00E+00
Yttrium-90	10098-91-6	NA	NA	0.00E+00						0.00E+00
Uranium-232	14158-29-3	NA	NA	0.00E+00						0.00E+00
Uranium-233	13968-55-3	NA	NA	0.00E+00						0.00E+00
Uranium-234	13966-29-5	NA	NA	0.00E+00						0.00E+00

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]
Uranium-235	15117-96-1	NA	NA	0.00E+00						0.00E+00
Uranium-236	13982-70-2	NA	NA	0.00E+00						0.00E+00
Uranium-238	7440-61-1	NA	NA	0.00E+00						0.00E+00
Actinium-227	14952-40-0	NA	NA	0.00E+00						0.00E+00
Americium-243	14993-75-0	NA	NA	0.00E+00						0.00E+00
Carbon-14	14762-75-5	NA	NA	0.00E+00						0.00E+00
Cobalt-60	10198-40-0	NA	NA	0.00E+00						0.00E+00
Curium-242	15510-73-3	NA	NA	0.00E+00						0.00E+00
Curium-243	15757-87-6	NA	NA	0.00E+00						0.00E+00
Curium-244	13981-15-2	NA	NA	0.00E+00						0.00E+00
Europium-152	14683-23-9	NA	NA	0.00E+00						0.00E+00
Iodine-129	15046-84-1	NA	NA	0.00E+00						0.00E+00
Neptunium-237	13994-20-2	NA	NA	0.00E+00						0.00E+00
Nickel-59	14336-70-0	NA	NA	0.00E+00						0.00E+00
Niobium-93	None	NA	NA	0.00E+00						0.00E+00
Plutonium-238	13981-16-3	NA	NA	0.00E+00						0.00E+00
Plutonium-240	14119-33-6	NA	NA	0.00E+00						0.00E+00
Plutonium-242	13982-10-0	NA	NA	0.00E+00						0.00E+00
Protactinium-231	14331-85-2	NA	NA	0.00E+00						0.00E+00
Radium-226	13982-63-3	NA	NA	0.00E+00						0.00E+00
Radium-228	15262-20-1	NA	NA	0.00E+00						0.00E+00
Ruthenium-106	13967-48-1	NA	NA	0.00E+00						0.00E+00
Selenium-79	None	NA	NA	0.00E+00						0.00E+00
Thorium-229	15594-54-4	NA	NA	0.00E+00						0.00E+00
Thorium-232	7440-29-1	NA	NA	0.00E+00						0.00E+00
Tin-126	15832-50-5	NA	NA	0.00E+00						0.00E+00
Zirconium-93	15751-77-6	NA	NA	0.00E+00						0.00E+00

NA = Not applicable

[a] $\log_{10}$ of K_{ow} values in Table 4.1

Table C2-3. Terrestrial Air-to-Plant Transfer Factors (APv) for Ecological Receptors (mg/kg tissue wet weight/mg/m^3 air)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	H[b] (atm x m^3/mol)	EPA (1999) APv[c] (kg air/kg dry wt)	APv Calculated by EPA (1999) Methods[d] (kg air/kg dry wt)	APv Adjusted to Wet Weight of Plants and Volume of Air (m^3 air/kg wet wt)[e]	Ecology Guidance APv	Default APv	Comments	Recommended APv[f]

[b] H values from Appendix B Table B-1-1

[c] Data published in Appendix C of EPA (1999), Table C-7

[d] Calculated as described in Appendix C, Sect. C-1.7 of EPA (1999): $APv = \rho_{air} \times B_{vol} / ((1-f_{water}) \times \rho_{forage} \times 100)$ and $\log(B_{vol}) = 1.605 \log K_{ow} - \log(H/RT) - 1.654$

where ρ_{air} = density of air, 1.19 g/L

B_{vol} = volumetric air-to-plant transfer

f_{water} = fraction of water in plants

ρ_{forage} = density of forage, 770 g/L

100 = uncertainty factor

R = gas-law constant, 8.025E-5 atm m^3/(deg mole)

T = temperature, 298 deg K

e Adjusted by dividing by the density of air (1.19 kg/m^3) and multiplying by 0.2 to adjust from dry weight to wet weight of plants

[f] Selection criteria described in Sect. 8.2.4.3

[g] Value for Aroclor 1254 from Appendix C of EPA (1999), Table C-7, was used for PCB mixtures

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
Organic Compounds										
Aromatic Halogenated Hydrocarbons										
4-Chloro-3-methylphenol	59-50-7	3.10		2.47E+01	e		5.00E-02	f		2.47E+01
2,3,4,6-Tetrachlorophenol	58-90-2	4.42		2.98E+02	e					2.98E+02
Aromatic Nonhalogenated Hydrocarbons										
2-Nitrotoluene	88-72-2	2.30		5.47E+00	e					5.47E+00
4-Nitrobiphenyl	92-93-3	3.77		8.74E+01	e					8.74E+01
Benzaldehyde	100-52-7	1.48		1.16E+00	e					1.16E+00
Benzene	71-43-2	-4.99		5.84E-06	e		5.00E-02	f		5.84E-06
Benzyl alcohol	100-51-6	1.10		5.69E-01	e					5.69E-01
Ethyl benzene	100-41-4	3.12		2.58E+01	e		5.00E-02	f		2.58E+01
m-Xylene	108-38-3	3.20		2.99E+01	e		5.00E-02	f		2.99E+01
o-Xylene	95-47-6	3.13		2.62E+01	e		5.00E-02	f		2.62E+01
p-Xylene	106-42-3	3.17		2.82E+01	e		5.00E-02	f		2.82E+01
Styrene	100-42-5	2.93		1.79E+01	e					1.79E+01
Toluene	108-88-3	2.67		1.09E+01	e		5.00E-02	f		1.09E+01
Non-aromatic Nonhalogenated Hydrocarbons										
1,2-Epoxybutane	106-88-7	1.44		1.08E+00	e					1.08E+00
1,3-Butadiene	106-99-0	1.90		2.57E+00	e					2.57E+00
1,4-Dioxane	123-91-1	-0.27	4.31E-02		e					4.31E-02
1-Methylpropyl alcohol	78-92-2	0.61		2.26E-01	e					2.26E-01
1-Nitropropane	108-03-2	0.87		3.69E-01	e					3.69E-01
2,2,4-Trimethylpentane	540-84-1	5.02		9.23E+02	e					9.23E+02
2-Butanone	78-93-3	0.28		1.21E-01	e		5.00E-02	f		1.21E-01
2-Butenaldehyde (2-Butenal)	4170-30-3	No data		No data			1.00E+01		Default	1.00E+01
2-Ethoxyethanol	110-80-5	-0.10		5.92E-02	e					5.92E-02
2-Heptanone	110-43-0	1.98		2.99E+00	e					2.99E+00
2-Hexanone	591-78-6	1.38		9.64E-01	e					9.64E-01
2-Methoxyethanol	109-86-4	0.25		1.15E-01	e					1.15E-01
2-Methyl-2-propanol	75-65-0	0.35		1.38E-01	e					1.38E-01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
2-Methyl-2-propenenitrile	126-98-7	0.54		1.98E-01	e					1.98E-01
2-Methylaziridine	75-55-8	-0.60		2.29E-02	e					2.29E-02
2-Methylpropyl alcohol	78-83-1	0.76		3.00E-01	e					3.00E-01
2-Pentanone	107-87-9	0.91		3.97E-01	e					3.97E-01
2-Propanone (Acetone)	67-64-1	-0.22	4.70E-02		e		5.00E-02	f		4.70E-02
2-Propene-1-ol	107-18-6	0.17		9.85E-02	e					9.85E-02
2-Propyl alcohol	67-63-0	0.05		7.85E-02	e					7.85E-02
3-Heptanone	106-35-4	No data		No data			1.00E+01		Default	1.00E+01
3-Methyl-1-butanol	123-51-3	No data		No data			1.00E+01		Default	1.00E+01
3-Methyl-2-butanone	563-80-4	No data		No data			1.00E+01		Default	1.00E+01
3-Pentanone	96-22-0	0.99		4.62E-01	e					4.62E-01
4-Heptanone	123-19-3	No data		No data			1.00E+01		Default	1.00E+01
4-Methyl-2-pentanone	108-10-1	1.19		6.74E-01	e		5.00E-02	f		6.74E-01
4-Methyl-3-penten-2-one	141-79-7	No data		No data			1.00E+01		Default	1.00E+01
5-Methyl-2-hexanone	110-12-3	No data		No data			1.00E+01		Default	1.00E+01
Acetaldehyde	75-07-0	-0.22		4.72E-02	e					4.72E-02
Acetamide	60-35-5	-1.26		6.64E-03	e					6.64E-03
Acetic acid	64-19-7	-0.17		5.19E-02	e					5.19E-02
Acetic acid ethyl ester	141-78-6	0.73		2.83E-01	e					2.83E-01
Acetic acid n-butyl ester	123-86-4	1.73		1.87E+00	e					1.87E+00
Acetonitrile	75-05-8	-0.34		3.76E-02	e					3.76E-02
Acrolein	107-02-8	-0.01		7.03E-02	e					7.03E-02
Acrylonitrile	107-13-1	0.25	1.15E-01		e					1.15E-01
Bis(isopropyl)ether	108-20-3	No data		No data			1.00E+01		Default	1.00E+01
Butane	106-97-8	2.89		1.66E+01	e					1.66E+01
Carbon disulfide	75-15-0	2.00		3.10E+00	e					3.10E+00
Cyanogen	460-19-5	0.81		3.28E-01	e					3.28E-01
Cyclohexane	110-82-7	3.44		4.69E+01	e					4.69E+01
Cyclohexanone	108-94-1	0.81		3.29E-01	e					3.29E-01
Cyclohexene	110-83-8	2.86		1.57E+01	e					1.57E+01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
Cyclopentane	287-92-3	3.00		2.05E+01	e					2.05E+01
Ethyl alcohol	64-17-5	0.31		1.28E-01	e					1.28E-01
Ethyl ether	60-29-7	0.89		3.83E-01	e					3.83E-01
Ethyl methacrylate	97-63-2	1.59		1.43E+00	e					1.43E+00
Formaldehyde	50-00-0	0.34	1.36E-01		e					1.36E-01
Formamide	75-12-7	-1.51		4.14E-03	e					4.14E-03
Formic acid	64-18-6	-0.54		2.59E-02	e					2.59E-02
Formic acid, methyl ester	107-31-3	-0.26		4.34E-02	e					4.34E-02
Glycidylaldehyde	765-34-4	-0.73		1.80E-02	e					1.80E-02
Methyl acetate	79-20-9	0.18		1.00E-01	e					1.00E-01
Methyl alcohol	67-56-1	-0.71		1.87E-02	e					1.87E-02
Methyl isocyanate	624-83-9	No data		No data					Reacts with water	NA
Methyl methacrylate	80-62-6	0.79		3.17E-01	e					3.17E-01
Methyl tert-butyl ether	1634-04-4	0.94		4.21E-01	e					4.21E-01
Methylacetylene	74-99-7	0.94		4.21E-01	e					4.21E-01
Methylcyclohexane	108-87-2	4.10		1.63E+02	e					1.63E+02
N,N-Dimethylacetamide	127-19-5	No data		No data			1.00E+01		Default	1.00E+01
n-Butyl alcohol	71-36-3	0.88		3.76E-01	e					3.76E-01
n-Heptane	142-82-5	4.66		4.68E+02	e					4.68E+02
n-Hexane	110-54-3	4.11		1.66E+02	e					1.66E+02
Nitromethane	75-52-5	-0.35		3.69E-02	e					3.69E-02
n-Nonane	111-84-2	5.65		3.03E+03	e					3.03E+03
n-Octane	111-65-9	4.00		1.35E+02	e					1.35E+02
n-Pentane	109-66-0	3.21		3.04E+01	e					3.04E+01
n-Propionaldehyde	123-38-6	0.59		2.17E-01	e					2.17E-01
n-Propyl alcohol	71-23-8	0.25		1.14E-01	e					1.14E-01
n-Valeraldehyde	110-62-3	No data		No data			1.00E+01		Default	1.00E+01
Oxirane	75-21-8	-0.30		4.06E-02	e					4.06E-02
p-Cymene	99-87-6	4.10		1.63E+02	e					1.63E+02

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
Phosgene	75-44-5	No data		No data			1.00E+01		Default	1.00E+01
Propargyl alcohol	107-19-7	0.26		1.17E-01	e					1.17E-01
Propionic acid	79-09-4	0.33		1.33E-01	e					1.33E-01
Propionitrile	107-12-0	0.16		9.66E-02	e					9.66E-02
Propylene gylcol monomethyl ether	107-98-2	-0.18		5.09E-02	e					5.09E-02
p-tert-Butyltoluene	98-51-1	No data		No data			1.00E+01		Default	1.00E+01
Triethylamine	121-44-8	0.16		9.66E-02	e					9.66E-02
Trimethylamine	75-50-3	0.16		9.66E-02	e					9.66E-02
Vinyl acetate	108-05-4	0.70		2.67E-01	e					2.67E-01
Non-aromatic Halogenated Hydrocarbons										
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	No data		No data			1.00E+01		Default	1.00E+01
1,1,1,2-Tetrachloroethane	630-20-6	2.63		1.02E+01	e					1.02E+01
1,1,1-Trichloroethane	71-55-6	2.42		6.88E+00	e					6.88E+00
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	3.73		8.11E+01	e					8.11E+01
1,1,2,2-Tetrachloroethane	79-34-5	4.64		4.54E+02	e		5.00E-02	f		4.54E+02
1,1,2,2-Tetrachloroethene	127-18-4	2.55		8.68E+00	e		5.00E-02	f		8.68E+00
1,1,2-Trichloroethane	79-00-5	2.10		3.73E+00	e					3.73E+00
1,1,2-Trichloroethylene	79-01-6	2.43		7.02E+00	e		5.00E-02	f		7.02E+00
1,1-Dichloroethane	75-34-3	1.79		2.10E+00	e					2.10E+00
1,1-Dichloroethene	75-35-4	2.12		3.90E+00	e					3.90E+00
1,2,2-Trichloro-1,1,2-trifluoroethane	76-13-1	3.16		2.77E+01	e					2.77E+01
1,2,3-Trichloropropane	96-18-4	2.25		4.98E+00	e					4.98E+00
1,2-Dibromo-3-chloropropane	96-12-8	2.34		5.90E+00	e					5.90E+00
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	2.82		1.46E+01	e					1.46E+01
1,2-Dichloroethane	107-06-2	1.46		1.13E+00	e		5.00E-02	f		1.13E+00
1,2-Dichloroethylene	540-59-0	0.48		1.77E-01	e					1.77E-01
1,2-Dichloropropane	78-87-5	2.25		4.98E+00	e					4.98E+00
1,3-Dichloropropene	542-75-6	1.75		1.93E+00	e					1.93E+00
1,4-Dichloro-2-butene	764-41-0	0.87		3.70E-01	e					3.70E-01
1-Chloroethene	75-01-4	1.15		6.20E-01	e					6.20E-01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
2,2-Dichloropropionic acid	75-99-0	0.78		3.10E-01	e					3.10E-01
2-Chloropropane	75-29-6	1.90		2.57E+00	e					2.57E+00
3-Chloropropene (allyl chloride)	107-05-1	0.95		4.32E-01	e					4.32E-01
Bromochloromethane	74-97-5	1.41		1.02E+00	e					1.02E+00
Bromodichloromethane	75-27-4	2.03		3.26E+00	e					3.26E+00
Bromoethene	593-60-2	1.07		5.34E-01	e					5.34E-01
Bromoform	75-25-2	2.35		6.01E+00	e					6.01E+00
Bromomethane	74-83-9	1.11		5.84E-01	e					5.84E-01
Carbon tetrachloride	56-23-5	2.72	1.20E+01		e					1.20E+01
Chlorodibromomethane	124-48-1	2.18		4.33E+00	e					4.33E+00
Chlorodifluoromethane	75-45-6	1.08		5.47E-01	e					5.47E-01
Chloroethane	75-00-3	3.10		2.47E+01	e					2.47E+01
Chloroform	67-66-3	1.95	2.82E+00		e		5.00E-02	f		2.82E+00
Chloromethane	74-87-3	0.90		3.92E-01	e					3.92E-01
Chloropentafluoroethane	76-15-3	No data		No data			1.00E+01		Default	1.00E+01
cis-1,2-Dichloroethene	156-59-2	1.98		3.00E+00	e		5.00E-02	f		3.00E+00
cis-1,3-Dichloropropene	10061-01-5	No data		No data			1.00E+01		Default	1.00E+01
Cyanogen bromide	506-68-3	No data		No data			1.00E+01		Default	1.00E+01
Cyanogen chloride	506-77-4	0.20		1.04E-01	e					1.04E-01
Dichlorodifluoromethane	75-71-8	2.16		4.19E+00	e					4.19E+00
Dichlorofluoromethane	75-43-4	No data		No data			1.00E+01		Default	1.00E+01
Dichloromethane	75-09-2	1.26		7.62E-01	e					7.62E-01
Difluorodibromomethane	75-61-6	No data		No data			1.00E+01		Default	1.00E+01
Hexafluoroacetone	684-16-2	No data		No data			1.00E+01		Default	1.00E+01
Iodomethane	74-88-4	1.69		1.73E+00	e					1.73E+00
Methylene bromide	74-95-3	1.62		1.52E+00	e					1.52E+00
Pentachloroethane	76-01-7	3.05		2.25E+01	e					2.25E+01
trans-1,2-Dichloroethene	156-60-5	1.98		3.00E+00	e		5.00E-02	f		3.00E+00
trans-1,3-Dichloropropene	10061-02-6	2.06		3.48E+00	e					3.48E+00
Trichloroacetic acid	76-03-9	1.33		8.78E-01	e					8.78E-01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
Trichlorofluoroethane	27154-33-2	No data		No data			1.00E+01		Default	1.00E+01
Trichlorofluoromethane	75-69-4	2.53		8.46E+00	e					8.46E+00
Trifluorobromomethane	75-63-8	1.86		2.38E+00	e					2.38E+00
Dioxin and Furan Compounds										
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	35822-46-9	8.20	8.10E-02		g		3.70E+05	e		8.10E-02
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	7.92	1.70E-02		g		2.19E+05	e		1.70E-02
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	7.92	6.20E-01		g		2.19E+05	e		6.20E-01
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	39227-28-6	7.79	4.90E-01		g		1.71E+05	e		4.90E-01
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	7.25	1.21E-01		g		6.20E+04	e		1.21E-01
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	57653-85-7	7.25	1.90E-01		g		6.20E+04	e		1.90E-01
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	7.25	3.00E-01		g		6.20E+04	e		3.00E-01
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	19408-74-3	7.25	2.20E-01		g		6.20E+04	e		2.20E-01
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	7.25	1.00E+00		g		6.20E+04	e		1.00E+00
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	40321-76-4	6.64	1.46E+00		g		1.96E+04	e		1.46E+00
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	6.79	3.20E-01		g		2.60E+04	e		3.20E-01
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	7.25	1.07E+00		g		6.20E+04	e		1.07E+00
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	6.92	2.54E+00		g		3.32E+04	e		2.54E+00
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1746-01-6	6.64	1.59E+00				1.96E+04	e		1.59E+00
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	6.53	1.27E+00		g		1.59E+04	e		1.27E+00
Dibenzofuran	132-64-9	4.33		2.51E+02	e		5.00E-02	e		2.51E+02
Octachlorodibenzo(p)dioxin	3268-87-9	8.20	1.90E-02		g		3.71E+05	e		1.90E-02
Octachlorodibenzofuran	39001-02-0	8.78	2.50E-02		g		1.11E+06	e		2.50E-02
PCBs										
Polychlorinated biphenyls (PCBs)[h]	1336-36-3	7.31	1.13E+00				5.80E+00	f		1.13E+00
2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	7.08		4.49E+04	e					4.49E+04
2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	7.12		4.84E+04	e					4.84E+04
2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	No data		No data			1.00E+01		Default	1.00E+01
2,3,3',4,4',5,5'-Heptachlorobiphenyl	no cas #	No data		No data			1.00E+01		Default	1.00E+01
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	No data		No data			1.00E+01		Default	1.00E+01
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	No data		No data			1.00E+01		Default	1.00E+01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
2,3',4,4',5,5'-Hexachlorobiphenyl	no cas #	No data		No data			1.00E+01		Default	1.00E+01
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	No data		No data			1.00E+01		Default	1.00E+01
2',3,4,4',5-Pentachlorobiphenyl	no cas #	No data		No data			1.00E+01		Default	1.00E+01
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	7.12		4.84E+04	e					4.84E+04
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	7.41		8.34E+04	e					8.34E+04
3,3',4,4',5-Pentachlorobiphenyl	no cas #	No data		No data			1.00E+01		Default	1.00E+01
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	No data		No data			1.00E+01		Default	1.00E+01
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	No data		No data			1.00E+01		Default	1.00E+01
Phthalates										
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	5.20	1.31E+03		e		5.00E-02	f		1.31E+03
Butylbenzyl phthalate	85-68-7	4.41		2.94E+02	e		5.00E-02	f		2.94E+02
Dibutyl phthalate	84-74-2	4.72		5.25E+02	e		5.00E-02	f		5.25E+02
Diethyl phthalate	84-66-2	4.44		3.07E+02	e		5.00E-02	f		3.07E+02
Dimethylphthalate	131-11-3	1.63		1.56E+00	e					1.56E+00
n-Dioctyl phthalate	117-84-0	9.33	3.13E+06		e		5.00E-02	f		3.13E+06
Light Polycyclic Aromatic Hydrocarbons (molecular weight <200 g/mole)										
2-Chloronapthalene	91-58-7	4.07		1.53E+02	e					1.53E+02
2-Methyl naphthalene	91-57-6	3.86		1.04E+02	e		5.00E-02	f		1.04E+02
5-Nitroacenaphthene	602-87-9	No data		No data			1.00E+01		Default	1.00E+01
Acenaphthene	83-32-9	3.96		1.26E+02	e					1.26E+02
Acenaphthylene	208-96-8	4.07		1.54E+02	e					1.54E+02
Anthracene	120-12-7	4.47		3.27E+02	e		5.00E-02	f		3.27E+02
Fluorene	86-73-7	4.18		1.89E+02	e					1.89E+02
Indene	95-13-6	No data		No data			1.00E+01		Default	1.00E+01
Naphthalene	91-20-3	3.37		4.13E+01	e		5.00E-02	f		4.13E+01
Phenanthrene	85-01-8	4.55		3.81E+02	e		5.00E-02	f		3.81E+02
Pyrene	129-00-0	5.00		8.89E+02	e		5.00E-02	f		8.89E+02
Heavy Polycyclic Aromatic Hydrocarbons (molecular weight >200 g/mole)										
3-Methylcholanthrene	56-49-5	7.11		4.75E+04	e					4.75E+04
5-Methylchrysene	3697-24-3	No data		No data			1.00E+01		Default	1.00E+01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) BAF-S [b]	BAF-S Calculated by EPA (1999) Methods [c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S [d]
Benzo(a)anthracene	56-55-3	5.68	3.00E-02				5.00E-02	f		3.00E-02
Benzo(a)pyrene	50-32-8	6.13	7.00E-02				5.00E-02	f		7.30E-02
Benzo(b)fluoranthene	205-99-2	6.20	7.00E-02				5.00E-02	f		7.00E-02
Benzo(e)pyrene	192-97-2	7.40		8.21E+04	e					8.21E+04
Benzo(g,h,i)perylene	191-24-2	7.10		4.67E+04	e		5.00E-02	f		4.67E+04
Benzo(j)fluoranthene	205-82-3	6.44		1.34E+04	e					1.34E+04
Benzo(k)fluoranthene	207-08-9	6.20	8.00E-02				5.00E-02	f		8.00E-02
Benzo[a,i]pyrene	191-30-0	No data		No data			1.00E+01		Default	1.00E+01
Chrysene	218-01-9	5.74	4.00E-02				5.00E-02	f		4.00E-02
Dibenz(a,h)anthracene	53-70-3	6.55	7.00E-02				5.00E-02	f		7.00E-02
Dibenz[a,h]acridine	226-36-8	No data		No data			1.00E+01		Default	1.00E+01
Dibenz[a,j]acridine	224-42-0	No data		No data			1.00E+01		Default	1.00E+01
Dibenzo(a,e)fluoranthene	5385-75-1	No data		No data			1.00E+01		Default	1.00E+01
Dibenzo(a,h)fluoranthene	no cas #	No data		No data			1.00E+01		Default	1.00E+01
Dibenzo[a,e]pyrene	192-65-4	No data		No data			1.00E+01		Default	1.00E+01
Dibenzo[a,h]pyrene	189-64-0	No data		No data			1.00E+01		Default	1.00E+01
Dibenzo[a,i]pyrene	189-55-9	7.29		6.68E+04	e					6.68E+04
Fluoranthene	206-44-0	5.08		1.04E+03	e		5.00E-02	f		1.04E+03
Hexachloronaphthalene	1335-87-1	7.59		1.18E+05	e					1.18E+05
Indeno(1,2,3-cd)pyrene	193-39-5	6.91	8.00E-02				5.00E-02	f		8.00E-02
Octachloronaphthalene	2234-13-1	6.42		1.29E+04	e					1.29E+04
Pentachloronaphthalene	1321-64-8	No data		No data			1.00E+01		Default	1.00E+01
Tetrachloronaphthalene	1335-88-2	No data		No data			1.00E+01		Default	1.00E+01
Trichloronaphthalene	1321-65-9	No data		No data			1.00E+01		Default	1.00E+01
Light Substituted Benzene Compounds (MW <200 g/mole)										
1,2,3-Trichlorobenzene	87-61-6	4.05		1.47E+02	e					1.47E+02
1,2,4-Trichlorobenzene	120-82-1	3.99		1.32E+02	e					1.32E+02
1,2,4-Trimethyl benzene	95-63-6	3.65		6.97E+01	e					6.97E+01
1,2-Dichlorobenzene	95-50-1	3.45		4.74E+01	e					4.74E+01
1,3,5-Trimethyl benzene	108-67-8	3.42		4.52E+01	e					4.52E+01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
1,3-Dichlorobenzene	541-73-1	3.53		5.56E+01	e					5.56E+01
1,3-Dinitrobenzene	99-65-0	1.49	1.19E+00		e					1.19E+00
1,4-Dichlorobenzene	106-46-7	3.41		4.45E+01	e					4.45E+01
1,4-Dinitrobenzene	100-25-4	1.50		1.21E+00	e					1.21E+00
2,4,5-Trichlorophenol	95-95-4	3.87		1.06E+02	e					1.06E+02
2,4,6-Trichlorophenol	88-06-2	3.71		7.83E+01	e					7.83E+01
2,4-Dichlorophenol	120-83-2	3.04		2.20E+01	e					2.20E+01
2,4-Dimethylphenol	105-67-9	2.36		6.12E+00	e					6.12E+00
2,4-Dinitrophenol	51-28-5	1.52		1.25E+00	e					1.25E+00
2,4-Dinitrotoluene	121-14-2	2.00	3.08E+00		e					3.08E+00
2,6-Dinitrotoluene	606-20-2	1.89	2.51E+00		e		5.00E-02	f		2.51E+00
2-Chlorophenol	95-57-8	2.16		4.21E+00	e					4.21E+00
2-Chlorotoluene	95-49-8	3.54		5.63E+01	e					5.63E+01
2-Nitrophenol	88-75-5	1.79		2.09E+00	e					2.09E+00
4,6-Dinitro-o-cresol	534-52-1	2.85		1.54E+01	e					1.54E+01
4-Chlorotoluene	106-43-4	3.33		3.81E+01	e					3.81E+01
4-Nitrophenol	100-02-7	1.91		2.62E+00	e		5.00E-02	f		2.62E+00
alpha-Methylstyrene	98-83-9	3.46		4.90E+01	e					4.90E+01
Aniline	62-53-3	0.98		4.54E-01	e					4.54E-01
Benzotrichloride	98-07-7	2.92		1.76E+01	e					1.76E+01
Benzyl chloride	100-44-7	0.36		1.41E-01	e					1.41E-01
Bromobenzene	108-86-1	2.99		2.01E+01	e					2.01E+01
Chlorobenzene	108-90-7	2.79		1.38E+01	e		5.00E-02	f		1.38E+01
Cumene	98-82-8	3.61		6.50E+01	e					6.50E+01
m-Cresol	108-39-4	1.96		2.87E+00	e					2.87E+00
n-Butyl benzene	104-51-8	4.28		2.29E+02	e					2.29E+02
Nitrobenzene	98-95-3	1.83	2.26E+00		e					2.26E+00
n-Propyl benzene	103-65-1	3.69		7.52E+01	e					7.52E+01
o-Cresol	95-48-7	2.02		3.23E+00	e					3.23E+00
o-Dinitrobenzene	528-29-0	1.60		1.46E+00	e					1.46E+00

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
o-Nitroaniline	88-74-4	1.85		2.34E+00	e					2.34E+00
o-Toluidine	95-53-4	1.34		8.95E-01	e					8.95E-01
p-Chloroaniline	106-47-8	1.87		2.43E+00	e					2.43E+00
p-Cresol	106-44-5	1.94		2.77E+00	e					2.77E+00
Phenol	108-95-2	1.48		1.16E+00	e		5.00E-02	f		1.16E+00
p-Nitrochlorobenzene	100-00-5	2.39		6.48E+00	e					6.48E+00
p-Toluidine	106-49-0	1.40		1.00E+00	e					1.00E+00
sec-Butyl benzene	135-98-8	4.57		3.95E+02	e					3.95E+02
tert-Butyl benzene	98-06-6	4.11		1.66E+02	e					1.66E+02
Toluene-2,6-diamine	823-40-5	1.45		1.11E+00	e					1.11E+00
Trimethyl benzene	25551-13-7	3.40		4.35E+01	e					4.35E+01
Other Light Semivolatile Compounds (molecular weight <200 g/mole)										
1,1'-Biphenyl	92-52-4	3.90		1.12E+02	e					1.12E+02
1,1-Dimethylhydrazine	57-14-7	0.60		2.20E-01	e					2.20E-01
1,2-Dimethylhydrazine	540-73-8	-1.37		5.42E-03	e					5.42E-03
1,2-Diphenylhydrazine	122-66-7	2.94		1.83E+01	e					1.83E+01
1,3-Propane sultone	1120-71-4	-0.52		2.66E-02	e					2.66E-02
2,4-Toluene diisocyante	584-84-9	No data		No data					Decomposes rapidly in water	NA
2-Chloroacetophenone	532-27-4	2.59		9.53E+00	e					9.53E+00
2-Propenoic acid	79-10-7	0.33		1.33E-01	e					1.33E-01
4,4-Methylenedianiline	101-77-9	3.38		4.19E+01	e					4.19E+01
Acetophenone	98-86-2	1.64		1.58E+00	e					1.58E+00
Benzoic acid	65-85-0	1.86		2.38E+00	e					2.38E+00
bis(2-Chloroethoxy)methane	111-91-1	7.59		1.18E+05	e					1.18E+05
bis(2-Chloroethyl) ether	111-44-4	1.30		8.31E-01	e					8.31E-01
Chlorocyclopentadiene	41851-50-7	2.43		6.99E+00	e					6.99E+00
Cyclohexanol	108-93-0	1.23		7.27E-01	e					7.27E-01
Dichloroisopropyl ether	108-60-1	2.58		9.27E+00	e					9.27E+00

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) BAF-S [b]	BAF-S Calculated by EPA (1999) Methods [c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S [d]
Dichloromethyl ether	542-88-1	-0.38		3.49E-02	e					3.49E-02
Dichloropentadiene	no cas #	No data		No data			1.00E+01		Default	1.00E+01
Dimethyl sulfate	77-78-1	0.32		1.30E-01	e					1.30E-01
Dimethylaniline	121-69-7	-0.88		1.36E-02	e					1.36E-02
Di-n-propylnitrosamine	621-64-7	1.38		9.65E-01	e					9.65E-01
Diphenyl ether	101-84-8	4.21		2.00E+02	e					2.00E+02
Epichlorohydrin	106-89-8	0.25		1.15E-01	e					1.15E-01
Ethyl carbamate (urethane)	51-79-6	-0.15		5.38E-02	e					5.38E-02
Ethyl methanesulfonate	62-50-0	0.05		7.84E-02	e					7.84E-02
Ethylene dibromide	106-93-4	1.75		1.94E+00	e					1.94E+00
Ethylene glycol	107-21-1	-0.91		1.27E-02	e					1.27E-02
Ethylene glycol monobutyl ether	111-76-2	1.55		1.34E+00	e					1.34E+00
Ethylene glycol monoethyl ether acetate	111-15-9	0.62		2.30E-01	e					2.30E-01
Ethylene thiourea	96-45-7	-0.64		2.13E-02	e					2.13E-02
Furfural	98-01-1	0.96		4.37E-01	e					4.37E-01
Maleic hydrazide	123-33-1	-0.74		1.77E-02	e					1.77E-02
Malononitrile	109-77-3	0.04		7.70E-02	e					7.70E-02
Methyl styrene (mixed isomers)	25013-15-4	3.35		3.96E+01	e					3.96E+01
Methylhydrazine	60-34-4	-1.06		9.68E-03	e					9.68E-03
N,N-Diphenylamine	122-39-4	3.50		5.25E+01	e					5.25E+01
Nitric acid, propyl ester	627-13-4	No data		No data			1.00E+01		Default	1.00E+01
N-Nitrosodi-n-butylamine	924-16-3	2.41		6.73E+00	e					6.73E+00
N-Nitrosomorpholine	59-89-2	0.98		4.54E-01	e					4.54E-01
N-Nitroso-N,N-dimethylamine	62-75-9	-0.47		2.94E-02	e					2.94E-02
o-Anisidine	90-04-0	1.18		6.61E-01	e					6.61E-01
Oxalic acid	144-62-7	No data		No data			1.00E+01		Default	1.00E+01
Phthalic anhydride	85-44-9	-0.60		2.30E-02						2.30E-02
p-Phthalic acid	100-21-0	0.82		3.37E-01	e					3.37E-01
Pyridine	110-86-1	0.67		2.53E-01	e					2.53E-01
Quinoline	91-22-5	2.03		3.29E+00	e					3.29E+00

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
Quinone	106-51-4	0.20		1.04E-01	e					1.04E-01
Safrole	94-59-7	2.66		1.08E+01	e					1.08E+01
Tetrahydrofuran	109-99-9	0.45		1.66E-01	e					1.66E-01
Other Heavy Semivolatile Compounds (molecular weight >200 g/mole)										
1,2,4,5-Tetrachlorobenzene	95-94-3	4.64		4.51E+02	e					4.51E+02
1,3,5-Trinitrobenzene	99-35-4	1.18		6.60E-01	e					6.60E-01
2,6-Bis(tert-butyl)-4-methylphenol	128-37-0	4.17		1.86E+02	e					1.86E+02
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	-2.70		4.39E-04	e					4.39E-04
2-sec-Butyl-4,6-dinitrophenol	88-85-7	3.14		2.66E+01	e					2.66E+01
3,3'-Dimethoxybenzidine	119-90-4	1.81		2.17E+00	e					2.17E+00
3,3-Dichlorobenzidine	91-94-1	3.58		6.05E+01	e					6.05E+01
4-Bromophenylphenyl ether	101-55-3	5.00		8.89E+02	e					8.89E+02
Ammonium perfluorooctanoate	3825-26-1	No data		No data			1.00E+01		Default	1.00E+01
Azobenzene	103-33-3	3.82		9.61E+01	e					9.61E+01
Bis(3-tert-butyl-4-hydroxy-6-methyl-phenyl)sulfide	96-69-5	No data		No data			1.00E+01		Default	1.00E+01
Captan	133-06-2	2.35		6.01E+00	e					6.01E+00
Chlorobenzilate	510-15-6	4.38		2.76E+02	e					2.76E+02
Dibutylphosphate	107-66-4	No data		No data			1.00E+01		Default	1.00E+01
Dimethyl aminoazobenzene	60-11-7	4.58		4.03E+02	e					4.03E+02
Hexachlorobenzene	118-74-1	5.50	2.29E+03		e					2.29E+03
Hexachlorobutadiene	87-68-3	4.73	5.35E+02		e					5.35E+02
Hexachlorocyclopentadiene	77-47-4	5.04	7.45E+02		e					9.59E+02
Hexachloroethane	67-72-1	3.98		1.31E+02	e					1.31E+02
Hexachlorophene	70-30-4	7.54		1.07E+05	e					1.07E+05
Hexamethylene-1,5-diisocyanate	822-06-0	1.27		7.89E-01	e					7.89E-01
Mirex	2385-85-5	6.89		3.14E+04	e					3.14E+04
Nitrofen	1836-75-5	5.53		2.42E+03	e					2.42E+03
Pentachlorobenzene	608-93-5	5.09	1.05E+03		e					1.05E+03
Pentachloronitrobenzene	82-68-8	4.64	4.51E+02		e					4.51E+02
Pentachlorophenol	87-86-5	5.08	1.03E+03		e					1.03E+03

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
Picric acid	88-89-1	2.03		3.29E+00	e					3.29E+00
Pronamide	23950-58-5	3.51		5.36E+01	e					5.36E+01
Strychnine	57-24-9	1.93		2.72E+00	e					2.72E+00
Terphenyls	26140-60-3	No data		No data			1.00E+01		Default	1.00E+01
Tributyl phosphate	126-73-8	4.00		1.35E+02	e					1.35E+02
Trifluralin	1582-09-8	5.34		1.69E+03	e					1.69E+03
Triphenylamine	603-34-9	No data		No data			1.00E+01		Default	1.00E+01
Herbicides and Organochlorinated Pesticides										
2,4,5-T	93-76-5	3.36		4.03E+01	e					4.03E+01
2,4-D and esters	94-75-7	2.81		1.43E+01	e					1.43E+01
4,4-DDD	72-54-8	6.20		8.55E+03	e		3.30E+00	f		8.55E+03
4,4-DDE	72-55-9	6.26	1.26E+00				1.70E+00	f		1.26E+00
4,4-DDT	50-29-3	6.00		1.26E+00	e		5.70E-01	f		1.26E+00
Aldrin	309-00-2	6.18		8.21E+03	e		5.60E-01	f		8.21E+03
alpha-BHC	319-84-6	3.80		9.24E+01	e		2.60E+00	f		9.24E+01
beta-BHC	319-85-7	3.83		9.85E+01	e		2.60E+00	f		9.85E+01
Chlordane	57-74-9	5.94		5.21E+03	e		1.60E+00	f		5.21E+03
Delta-BHC	319-86-8	4.14		1.76E+02	e		2.60E+00	f		1.76E+02
Dieldrin	60-57-1	5.27		1.48E+03	e		5.50E+00	f		1.48E+03
Endothall	145-73-3	-0.87		1.39E-02	e					1.39E-02
Endrin	72-20-8	4.89		7.25E+02	e		1.90E+00	f		7.25E+02
gamma-BHC (Lindane)	58-89-9	3.72		7.96E+01	e		2.60E+00	f		7.96E+01
Heptachlor	76-44-8	5.02	1.40E+00				1.00E+00	f		1.26E+00
Isodrin	465-73-6	3.55		5.77E+01	e		5.50E+00	f		5.77E+01
Methoxychlor	72-43-5	4.53		3.64E+02	e		5.70E-01	f		3.64E+02
Silvex (2,4,5-TP)	93-72-1	4.07		1.55E+02	e					1.55E+02
Toxaphene	8001-35-2	5.50		2.28E+03	e					2.28E+03
Inorganic Chemicals and Compounds										
Metals										
Aluminum	7429-90-5	NA	2.20E-01		i		7.50E-02			2.20E-01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
Antimony	7440-36-0	NA	2.20E-01		i		8.10E-02	j		8.10E-02
Arsenic	7440-38-2	NA	1.10E-01				5.23E-01	k		1.10E-01
Barium	7440-39-3	NA	2.20E-01		i		1.05E-01	j		1.05E-01
Beryllium	7440-41-7	NA	2.20E-01		i		4.50E-02	j		4.50E-02
Bismuth	7440-69-9	NA		2.20E-01	i					2.20E-01
Boron	7440-42-8	NA		2.20E-01	i					2.20E-01
Cadmium	7440-43-9	NA	9.60E-01				4.07E+01	k		9.60E-01
Calcium	7440-70-2	NA		2.20E-01	i		5.42E-01	j		5.42E-01
Chromium (and VI)	18540-29-9	NA	1.00E-02				3.16E+00	k		1.00E-02
Cobalt	7440-48-4	NA		2.20E-01	i		1.20E-01	j		1.20E-01
Copper	7440-50-8	NA	4.00E-02				1.53E+00	k		4.00E-02
Iron	7439-89-6	NA		2.20E-01	i		4.20E-02	j		4.20E-02
Lead	7439-92-1	NA	3.00E-02				See note l			See note l
Lithium	7439-93-2	NA		2.20E-01	i		2.28E-01	j		2.28E-01
Magnesium	7439-95-4	NA		2.20E-01	i		2.40E-01	j		2.40E-01
Manganese	7439-96-5	NA		2.20E-01	i		1.24E-01	k		1.24E-01
Mercury	7439-97-6	NA	4.00E-02				2.06E+01	k		4.00E-02
Molybdenum	7439-98-7	NA		2.20E-01	i					2.20E-01
Nickel	7440-02-0	NA	2.00E-02				4.73E+00	k		2.00E-02
Potassium	7440-09-7	NA		2.20E-01	i					2.20E-01
Rhodium	7440-16-6	NA		2.20E-01	i					2.20E-01
Selenium	7782-49-2	NA	2.20E-01		i		1.37E+01	k		1.37E+01
Silicon	7440-21-3	NA		2.20E-01	i					2.20E-01
Silver	7440-22-4	NA	2.20E-01		i		9.26E-01	j		9.26E-01
Sodium	7440-23-5	NA		2.20E-01	i		4.53E+00	j		4.53E+00
Strontium	7440-24-6	NA		2.20E-01	i					2.20E-01
Tantalum	7440-25-7	NA		2.20E-01	i					2.20E-01
Thallium	7440-28-0	NA	2.20E-01		i		1.70E-02	j		1.70E-02
Tin	7440-31-5	NA		2.20E-01	i					2.20E-01
Tungsten	7440-33-7	NA		2.20E-01	i					2.20E-01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
Uranium	7440-61-1	NA		2.20E-01	i		3.30E-02	j		3.30E-02
Vanadium	7440-62-2	NA		2.20E-01	i		6.60E-02	j		6.60E-02
Yttrium	7440-65-5	NA		2.20E-01	i					2.20E-01
Zinc	7440-66-6	NA	5.60E-01				4.95E+01	k		5.60E-01
Zirconium	7440-67-7	NA		2.20E-01	i					2.20E-01
Non-metals and Anions										
Ammonia/Ammonium	7664-41-7	NA					1.00E+00		Default	1.00E+00
Bromide	24959-67-9	NA		2.20E-01	i					2.20E-01
Chloride	16887-00-6	NA		2.20E-01	i					2.20E-01
Cyanide	57-12-5	NA	1.12E+00							1.12E+00
Fluoride	16984-48-8	NA		2.20E-01	i					2.20E-01
Hydroxide	14280-30-9	NA		NA					Depends on pH	NA
Iodine	7553-56-2	NA		2.20E-01	i					2.20E-01
Nitrate	14797-55-8	NA		2.20E-01	i					2.20E-01
Nitrite	14797-65-0	NA		2.20E-01	i					2.20E-01
Phosphate	14265-44-2	NA		2.20E-01	i					2.20E-01
Phosphorus	7723-14-0	NA		2.20E-01	i					2.20E-01
Sulfate	14808-79-8	NA		2.20E-01	i					2.20E-01
Total Sulfur	63705-05-5	NA		2.20E-01	i					2.20E-01
Priority Pollutants										
Carbon Dioxide	124-38-9	NA		NA						NA
Nitrogen Dioxide	10102-44-0	NA					1.00E+00		Default	1.00E+00
Ozone	10028-15-6	NA					1.00E+00		Default	1.00E+00
Particulate Matter	No CAS #	NA		NA						1.00E+00
Sulfur Dioxode	7446-09-5	NA					1.00E+00		Default	NA
Radionuclides										
Americium-241	1596-10-2	NA		2.20E-01	i		3.12E+00	j		3.12E+00
Antimony-125	14234-35-6	NA	2.20E-01		i		8.10E-02	j		8.10E-02
Barium-137	13981-97-0	NA	2.20E-01		i		1.05E-01	j		1.05E-01
Cadmium-113	None	NA	9.60E-01				3.16E+00	k		3.16E+00

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow}[a]	EPA (1999) BAF-S[b]	BAF-S Calculated by EPA (1999) Methods[c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S[d]
Cesium-134	13967-70-9	NA		2.20E-01	i					2.20E-01
Cesium-137	10045-97-3	NA		2.20E-01	i					2.20E-01
Europium-154	15585-10-1	NA		2.20E-01	i					2.20E-01
Europium-155	14391-16-3	NA		2.20E-01	i					2.20E-01
Nickel-63	13981-37-8	NA	2.00E-02				4.73E+00	k		2.00E-02
Plutonium-239	15117-48-3	NA		2.20E-01	i		3.92E+00	j		3.92E+00
Plutonium-241	14119-32-5	NA		2.20E-01	i		3.92E+00	j		3.92E+00
Samarium-151	15715-94-3	NA		2.20E-01	i					2.20E-01
Strontium-90	10098-97-2	NA		2.20E-01	i					2.20E-01
Technetium-99	14133-79-7	NA		2.20E-01	i					2.20E-01
Tritium	10028-17-8	NA		2.20E-01	i					2.20E-01
Yttrium-90	10098-91-6	NA		2.20E-01	i					2.20E-01
Uranium-232	14158-29-3	NA		2.20E-01	i		3.30E-02	j		3.30E-02
Uranium-233	13968-55-3	NA		2.20E-01	i		3.30E-02	j		3.30E-02
Uranium-234	13966-29-5	NA		2.20E-01	i		3.30E-02	j		3.30E-02
Uranium-235	15117-96-1	NA		2.20E-01	i		3.30E-02	j		3.30E-02
Uranium-236	13982-70-2	NA		2.20E-01	i		3.30E-02	j		3.30E-02
Uranium-238	7440-61-1	NA		2.20E-01	i		3.30E-02	j		3.30E-02
Actinium-227	14952-40-0	NA		2.20E-01	i					2.20E-01
Americium-243	14993-75-0	NA		2.20E-01	i		3.12E+00	j		3.12E+00
Carbon-14	14762-75-5	NA		2.20E-01	i					2.20E-01
Cobalt-60	10198-40-0	NA		2.20E-01	i		1.20E-01	j		1.20E-01
Curium-242	15510-73-3	NA		2.20E-01	i		1.18E+00	j		1.18E+00
Curium-243	15757-87-6	NA		2.20E-01	i		1.18E+00	j		1.18E+00
Curium-244	13981-15-2	NA		2.20E-01	i		1.18E+00	j		1.18E+00
Europium-152	14683-23-9	NA		2.20E-01	i					2.20E-01
Iodine-129	15046-84-1	NA		2.20E-01	i					2.20E-01
Neptunium-237	13994-20-2	NA		2.20E-01	i					2.20E-01
Nickel-59	14336-70-0	NA	2.00E-02				4.73E+00	k		2.00E-02
Niobium-93	None	NA		2.20E-01	i					2.20E-01

Table C2-4. Terrestrial Soil-to-Invertebrate Transfer Factors (BAF-S) for Ecological Receptors (mg/kg tissue wet weight / mg/kg soil)

Constituent of Potential Concern	CAS Registry Number	Log K_{ow} [a]	EPA (1999) BAF-S [b]	BAF-S Calculated by EPA (1999) Methods [c]	Notes	Ecology Guidance BAF-S	SAIC Compiled BAF-S	Notes	Comments	Recommended BAF-S [d]
Plutonium-238	13981-16-3	NA		2.20E-01	i		9.25E+00	j		9.25E+00
Plutonium-240	14119-33-6	NA		2.20E-01	i		3.92E+00	j		3.92E+00
Plutonium-242	13982-10-0	NA		2.20E-01	i		3.92E+00	j		3.92E+00
Protactinium-231	14331-85-2	NA		2.20E-01	i					2.20E-01
Radium-226	13982-63-3	NA		2.20E-01	i					2.20E-01
Radium-228	15262-20-1	NA		2.20E-01	i					2.20E-01
Ruthenium-106	13967-48-1	NA		2.20E-01	i					2.20E-01
Selenium-79	None	NA	2.20E-01		j		1.37E+01	k		1.37E+01
Thorium-229	15594-54-4	NA		2.20E-01	i					2.20E-01
Thorium-232	7440-29-1	NA		2.20E-01	i					2.20E-01
Tin-126	15832-50-5	NA		2.20E-01	i					2.20E-01
Zirconium-93	15751-77-6	NA		2.20E-01	i					2.20E-01

NA = Not applicable

[a] $\log_{10}$ of K_{ow} values in Table 4.1

[b] Data published in Appendix C of EPA (1999), Table C-1

[c] Calculated or chosen as described in Appendix C, Sect. C-1.1 of EPA (1999)

[d] Selection criteria described in Sect. 8.2.4.3

[e] Calculated by using log K_{ow}: log BAF-S = 0.819 x log K_{ow} -1.146 (Southworth, Beauchamp, and Schmieder 1978)

[f] HAZWRAP (1994), Table 4.4

[g] Calculated from value for TCDD in Appendix C of EPA (1999), Table C-1, by multiplying by BEF

[h] Value for Aroclor 1254 from Appendix C of EPA (1999), Table C-1, was used for PCB mixtures

[i] Average of values for other inorganics as published in Appendix C of EPA (1999), Table C-1

[j] DOE (1996), Appendix G, Table G.39 (mean values)

[k] Sample and others. (1998), Table 11 (90th percentile values)

[l] Calculated by using existing concentrations of lead and calcium: BAF = 0.2 x C_{wormPb} / C_{soilPb}

where log C_{wormPb} = 1.16 + (0.916 x log C_{soilPb}) - (0.326 x log C_{soilCa}) (Corp and Morgan 1991)