Chemical name: Naphthalene

Level II calculation: (six compartment model)
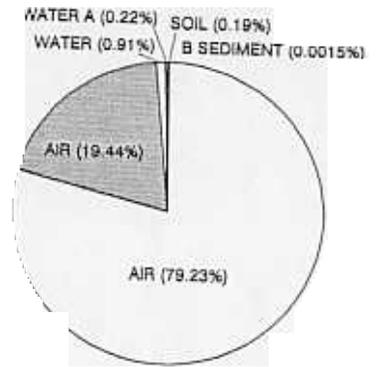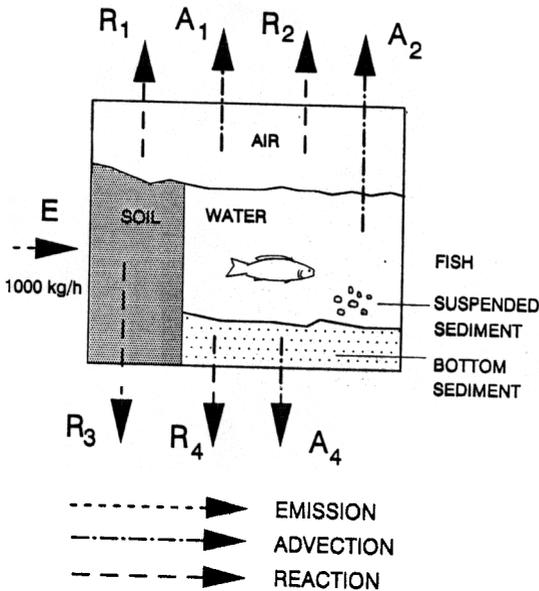
Distribution of removal rates
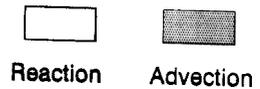
Compartment	Half-life h	D Values Reaction mol/Pa h	Advection mol/Pa h	Conc'n mol/m3	Loss Reaction kg/h	Loss Advection kg/h	Removal
Air	17	1.64E+09	4.03E+08	1.52E-09	792.344	194.370	
Water	170	1.90E+07	4.65E+06	8.74E-08	9.134	2.241	
Soil	1700	3.94E+06		4.03E-06	1.8963		
Biota (fish)				1.02E-05			
Suspended sediment				2.52E-05			
Bottom sediment	5500	2.70E+04	4.29E+03	8.06E-06	1.30E-02	2.07E-03	1.51E-03
Total		1.67E+09	4.08E+08		803.39	196.61	100
R + A			2.08E+09			1000	

f = 3.759E-06 Pa
Total Amt= 26436 kg

Overall residence time = 26.44 h
Reaction time = 32.91 h
Advection time = 134.46 h

Figure 1.8 Fugacity Level II calculation for naphthalene in a generic environment (dimensions defined in Table 1.2).