Annex 5

Calculations on fate and removal rates

Table 1: Comparison of D4 compartment degradation half-lives (INPUT) to removal half-lives (OUTPUT) using SimpleBox fate modeling (applying the defaults as in EUSES). Compartment removal half-lives are taken for the regional scale.

Compartment	D4 INPUT Half-life **degradation** (days)	Remarks on input	OUTPUT SimpleBox Half-life of **removal** (days)	Major process contributing to removal half life
Air	14		1	Advection
Fresh water	17	Hydrolysis halflife used	2	Volatilization + sedimentation
Natural soil	33	t1/2 soil = 2 x t1/2 water	17	Volatilization + degradation
Fresh water sediment	596	(242 days @ 24°C)	188	Resuspension

Table 2: Comparison of D5 compartment degradation half-lives (INPUT) to removal half-lives (OUTPUT) using SimpleBox fate modeling (applying the defaults as in EUSES). Compartment removal half-lives are taken for the regional scale.

Compartment	D4 INPUT Half-life **degradation** (days)	Remarks on input	OUTPUT SimpleBox Half-life of **removal** (days)	Major process contributing to removal half life
Air	10.4		1	Advection
Fresh water	315	Hydrolysis halflife used	1	Sedimentation
Natural soil	630	t1/2 soil = 2 x t1/2 water	17	Volatilization + degradation
Fresh water sediment	2952	(1200 days @ 24°C)	253	Resuspension