POLLUTEv10

Version 10.00

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Case 5: Hydraulic trap - Finite mass source

THE DARCY VELOCITY (Flux) THROUGH THE LAYERS Va = -0.001 m/a

Layer Properties

Layer	Thickness	Number of Sublayers	Coefficient of Hydrodynamic Dispersion	Matrix Porosity	Distributon Coefficient	Dry Density
Aquitard	4 m	4	0.01 m²/a	0.4	0 cm³/g	1.5 g/cm³

Boundary Conditions

Finite Mass Top Boundary

Initial Concentration	1000 mg/L
Rate of increase	0 mg/L/yr
Volume of Leachate Collected	0.3 m/a
Reference height of Leachate	7.5 m

Fixed Outflow Bottom Boundary

Landfill Length	200 m
Landfill Width	1 m
Base Thickness	1 m
Base Porosity	0.35
Base Outflow Velocity	3.8 m/a

Laplace Transform Parameters

TAU	7
N	20
SIG	0
RNU	2

Maximum Base Concentration Parameters

Depth of Search	4 m
Lower Time Limit	25 year
Upper Time Limit	400 year
Base Concentration Accuracy	0.01
Maximum Search Attempts	25

Maximum Base Concentration and Time of Occurrence

Time yr	Depth m	Concentration mg/L	Preceeding Time	Preceeding Concentration	Exceeding Time	Exceeding Concentration
2.1E+02	0.00000E+00	7.74269E-01				
	1.00000E+00	2.23632E+01				
	2.00000E+00	2.45291E+01				
	3.00000E+00	1.42998E+01				
	4.00000E+00	2.21990E+00	2.1E+02	2.21994E+00	2.1E+02	2.21985E+00

Number of Search Attempts = 8