S-Risk report - Exercice_experts_Simulation_11

Administrative information

Name: Exercice_experts_Simulation_11

Label: SC

Application: II Site specific risk assessment

Region: Wallonia

Description:

Main results

	Highest RI	Highest ExCR	Highest pRI	Highest CI
Chemical	(>1)	(>10^{-5})	(>1)	(>1)
Benzo(a)anthracene		3.874e-6		(Outdoor air CI)
Benzo(a)pyrene		5.459e-6		3.102e-1 (Outdoor air CI)

Conceptual site model

Scenario

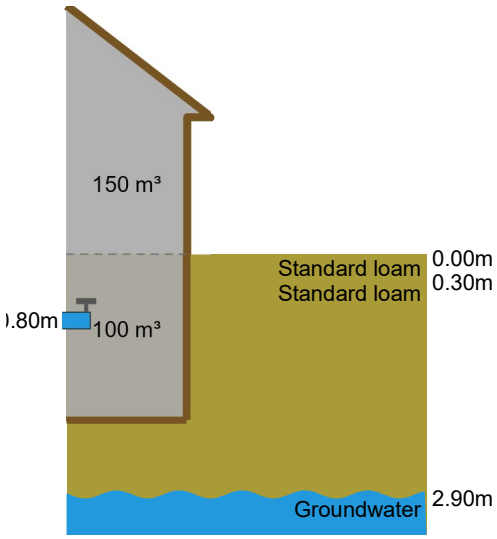
Land use: Agricultural_bis

Based on: Agricultural

Exposure routes

Oral		Inhalation		Dermal	
☑	soil & settled dust	☑	via outdoor air	☑	via soil & settled dust
☐	vegetables	☐	via indoor air	☐	via water (bath & shower)
☐	via meat & milk	☐	during showering		
☐	via eggs				
☐	via water				

Soil profile & concentrations



Site characteristics

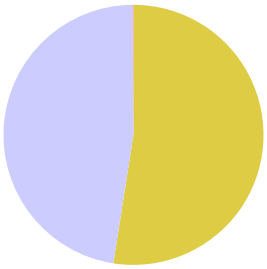
Building type		Basement
Floor thickness	m	0.1
Floor quality setting		Gaps and holes
Drinking water pipe depth	m	0.8
Length of the site	m	50.0

		Standard loam	Standard loam	Groundwater
Layer properties				
Top of layer	m	0.0	0.3	2.9
OM	%	2.5	2.1	
Clay content	%	14.0	15.0	
pH_{KCl}		5.800e+0	5.800e+0	
Concentrations		**mg/kg dm**	**mg/kg dm**	**µg/l (Calculated)**
Benzo(a)anthracene		2.200e+2	0	5.795e+0
Benzo(a)pyrene		3.100e+1	0	5.985e-1

Results per chemical

Benzo(a)anthracene

Risk indexes



Non-threshold, systemic	Age group 1	Age group 2	Age group 3	Lifelong
Oral ExCR for systemic non-threshold effects	9.842e-6	2.872e-6	1.201e-6	2.033e-6
Dermal ExCR for systemic non-threshold effects	4.005e-6	3.374e-6	1.396e-6	1.837e-6
Inhalation ExCR for systemic non-threshold effects	5.380e-9	5.538e-9	4.045e-9	4.332e-9
Overall ExCR for systemic non-threshold effects	1.385e-5	6.252e-6	2.601e-6	3.874e-6

Concentration indexes

	Concentration index	Limit value
CI Environment		**mg/m^3**
Water CI		
Outdoor air CI		
Indoor air CI		
CI Animal products		**mg/kg fw**
Beef CI		
Sheep meat CI		
Liver CI		
Kidney CI		
Milk CI		
Butter CI		
Egg CI		
CI feed crops		**mg/kg fw**
Grass CI		
Maize CI		

Exposure overview

	1-<6 yr		6-<15 yr		15-<71 yr	
	mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³	
Oral intake	**4.921e-4**		**1.436e-4**		**6.005e-5**	
intake via eggs	0	0.0%	0	0.0%	0	0.0%

	1-<6 yr		6-<15 yr		15-<71 yr	
	mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³	
intake via local vegetables	0	0.0%	0	0.0%	0	0.0%
intake via meat & milk	0	0.0%	0	0.0%	0	0.0%
soil & dust ingestion	4.921e-4	100.0%	1.436e-4	100.0%	6.005e-5	100.0%
intake via water	0	0.0%	0	0.0%	0	0.0%
Dermal intake	**2.003e-4**		**1.687e-4**		**6.981e-5**	
uptake via bathing	0	0.0%	0	0.0%	0	0.0%
uptake via showering	0	0.0%	0	0.0%	0	0.0%
uptake via soil & dust	2.003e-4	100.0%	1.687e-4	100.0%	6.981e-5	100.0%
Intake via inhalation	**4.891e-8**		**5.034e-8**		**3.677e-8**	
inhalation of indoor air	0	0.0%	0	0.0%	0	0.0%
inhalation of outdoor air	4.891e-8	100.0%	5.034e-8	100.0%	3.677e-8	100.0%
inhalation during showering	0	0.0%	0	0.0%	0	0.0%

(*) Refer to the full report for more information about these values.

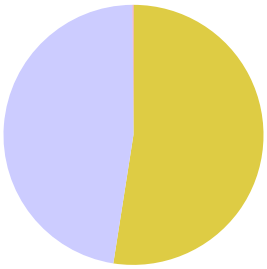
Local vs background exposure

	1-<6 yr		6-<15 yr		15-<71 yr	
	mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³	
Oral	**4.921e-4**		**1.436e-4**		**6.005e-5**	
background oral exposure	0	0.0%	0	0.0%	0	0.0%
local oral exposure	4.921e-4	100.0%	1.436e-4	100.0%	6.005e-5	100.0%
Inhal	**4.891e-8**		**5.034e-8**		**3.677e-8**	
background inhalation exposure	0	0.0%	0	0.0%	0	0.0%
local inhalation exposure	4.891e-8	100.0%	5.034e-8	100.0%	3.677e-8	100.0%

(*) Refer to the full report for more information about these values.

Benzo(a)pyrene

Risk indexes



Non-threshold, systemic	Age group 1	Age group 2	Age group 3	Lifelong
Oral ExCR for systemic non-threshold effects	1.387e-5	4.047e-6	1.692e-6	2.865e-6
Dermal ExCR for systemic non-threshold effects	5.644e-6	4.755e-6	1.967e-6	2.588e-6
Inhalation ExCR for systemic non-threshold effects	7.578e-9	7.800e-9	5.697e-9	6.102e-9
Overall ExCR for systemic non-threshold effects	1.952e-5	8.809e-6	3.665e-6	5.459e-6

Concentration indexes

	Concentration index	Limit value
CI Environment		**mg/m^3**
Water CI		1.000e-2
Outdoor air CI	3.102e-1	1.000e-6
Indoor air CI		
CI Animal products		**mg/kg fw**
Beef CI		
Sheep meat CI		
Liver CI		
Kidney CI		
Milk CI		
Butter CI		
Egg CI		
CI feed crops		**mg/kg fw**
Grass CI		
Maize CI		

Exposure overview

	1-<6 yr		6-<15 yr		15-<71 yr	
	mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³	
Oral intake	**6.934e-5**		**2.023e-5**		**8.461e-6**	
intake via eggs	0	0.0%	0	0.0%	0	0.0%

	1-<6 yr		6-<15 yr		15-<71 yr	
	mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³	
intake via local vegetables	0	0.0%	0	0.0%	0	0.0%
intake via meat & milk	0	0.0%	0	0.0%	0	0.0%
soil & dust ingestion	6.934e-5	100.0%	2.023e-5	100.0%	8.461e-6	100.0%
intake via water	0	0.0%	0	0.0%	0	0.0%
Dermal intake	**2.822e-5**		**2.377e-5**		**9.836e-6**	
uptake via bathing	0	0.0%	0	0.0%	0	0.0%
uptake via showering	0	0.0%	0	0.0%	0	0.0%
uptake via soil & dust	2.822e-5	100.0%	2.377e-5	100.0%	9.836e-6	100.0%
Intake via inhalation	**6.889e-9**		**7.091e-9**		**5.179e-9**	
inhalation of indoor air	0	0.0%	0	0.0%	0	0.0%
inhalation of outdoor air	6.889e-9	100.0%	7.091e-9	100.0%	5.179e-9	100.0%
inhalation during showering	0	0.0%	0	0.0%	0	0.0%

(*) Refer to the full report for more information about these values.

Local vs background exposure

	1-<6 yr		6-<15 yr		15-<71 yr	
	mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³		mg/kg bw·d or mg/m³	
Oral	**6.934e-5**		**2.023e-5**		**8.461e-6**	
background oral exposure	0	0.0%	0	0.0%	0	0.0%
local oral exposure	6.934e-5	100.0%	2.023e-5	100.0%	8.461e-6	100.0%
Inhal	**6.889e-9**		**7.091e-9**		**5.179e-9**	
background inhalation exposure	0	0.0%	0	0.0%	0	0.0%
local inhalation exposure	6.889e-9	100.0%	7.091e-9	100.0%	5.179e-9	100.0%

(*) Refer to the full report for more information about these values.

List of user-modified parameters

In the table below user-modified parameters are listed like they are saved in the system. If the format of the values shown is not immediately clear, refer to the extended report for more details.

Topic	Soil layer	Chemical	Parameter	Value	Comment
Scenario			scenarioName	Agricultural_bis	

Topic	Soil layer	Chemical	Parameter	Value	Comment
Scenario			sc.route	1,0,0,0,0,1,0,1,0,0	
Soil	Standard loam (0.0m)		Top of layer	0.0E0	
Soil	Standard loam (0.3m)		Clay content	1.5E1	
Soil	Standard loam (0.3m)		Organic matter content	2.1E0	
Soil	Standard loam (0.3m)		Top of layer	3.0E-1	
Soil	Standard loam (0.0m)	Benzo(a)anthracene	Measured soil layer concentration	220	
Soil	Standard loam (0.3m)	Benzo(a)anthracene	Measured soil layer concentration	0	
Soil	Standard loam (0.0m)	Benzo(a)pyrene	Measured soil layer concentration	31	
Soil	Standard loam (0.3m)	Benzo(a)pyrene	Measured soil layer concentration	0	
Water			Depth of the groundwater table	2.9	
Exposure			e.timeuse	[12,11.5,0.5,24,2,52],[11,9.7,1.38,22.08,2,52], [10,8.7,1.57,20.27,2,52],[9,10.6,1.12,20.72,2,52], [8,8.5,0.8,17.3,2,52],[8,9,1,18,2,52], [8,11.5,1.3,20.8,2,52],[8,11.5,1.5,21,2,52], [8,11.5,1.8,21.3,2,52],[8,11.5,1.7,21.2,2,52]	

Version: 1.3.0 - Calculated with version: 1.3.0 - Region: Wallonia