Schedule B4 and Schedule B7
Health risk assessment

Schedule B4 contains

- Risk assessment framework for contaminated sites and
- Guidance on the tiered approach for health risk assessments

Schedule B7 contains

- Details of the generic land-use scenarios
- Derivation of the HILs

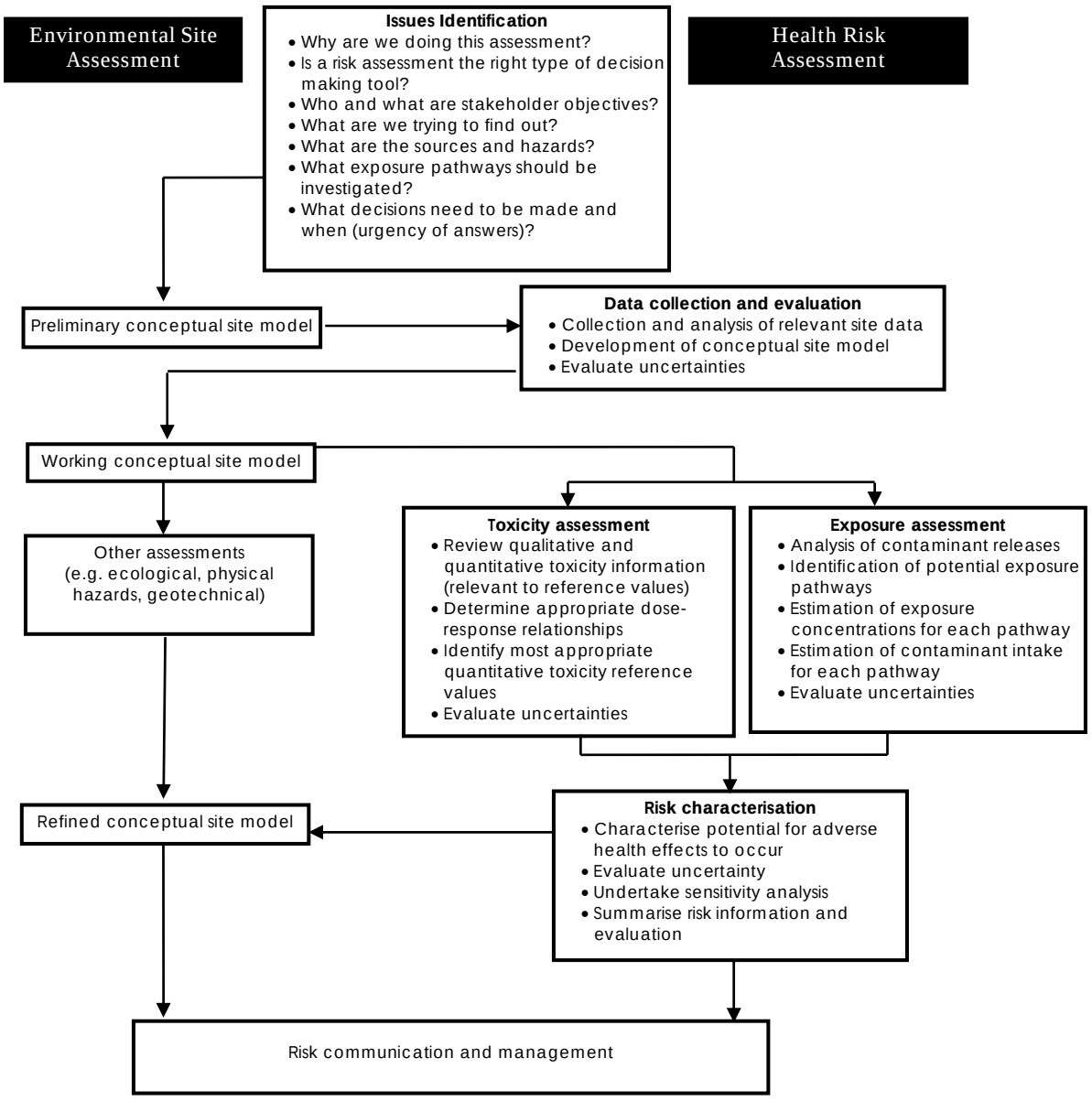
The variation incorporates

- updated toxicity reference values based on best available science
- Australian-specific exposure factors
- additional exposure pathways

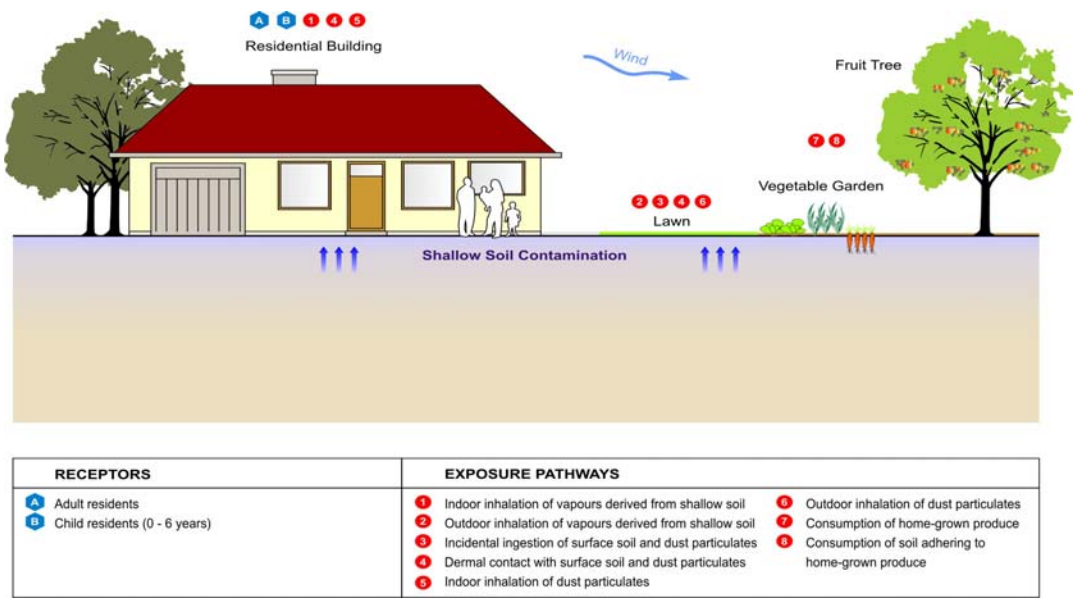
Four land-use scenarios have been developed for the HILs (and HSLs)

A Low density residential with home garden/accessible soil, children's daycare centres, preschools & primary schools
B High density residential – without home gardens
C Recreational – parks, playgrounds, playing fields & secondary schools
D Commercial/industrial premises

Risk Assessment Framework



Health-based investigation levels (mg/kg)		
Chemical in soil	**Low density residential A**	**High density residential B**
Metals and Inorganics		
arsenic (assumes 70% bioavailability)	100	500
Beryllium	70	100
Boron	5,000	40,000
cadmium	20	140
chromium (VI)	100	500
copper	7,000	30,000
lead (assumes 50% bioavailability)	300	1,200
Manganese	3,000	8,000
methyl mercury	7	30
mercury (inorganic)	200	600
nickel	400	900
selenium	200	1,500
zinc	8,000	60,000
Cyanide (free)	250	400
Polycyclic Aromatic Hydrocarbons (PAHs)		
Benzo(a)pyrene TEQ	3	4
PAHs	300	400
Phenols		
Phenol	3,000	50,000
Pentachlorophenol	100	150
Cresols	400	5,500
Organochlorine Pesticides		
DDT+DDE+DDD	260	700
aldrin and dieldrin	7	10
chlordane	50	100
Endosulfan	300	460
Endrin	10	20
Heptachlor	7	10
HCB	10	20
methoxychlor	400	550
mirex	10	20
Toxaphene	20	35
Phenoxyacetic Acid Herbicides		
2,4,5-T	700	1,000
2,4-D	1,000	2,000
MCPA	700	1,000
MCPB	700	1,000
Mecoprop	700	1,000
Picloram	5,000	8000
Other Pesticides		
Atrazine	360	550
Chlorpyrifos	170	400
Bifenthrin	600	900
Other Organics		
PCBs	1	2
PBDE flame retardants (Br1-Br9)	1	2



Conceptual site model for low density residential land use scenario

Levels marginally in excess of the HILs do not imply unacceptability or that a significant health risk is likely to be present.

Exceeding a HIL means simply that further investigation is needed and triggers a requirement for a more detailed ('Tier 2') risk assessment. The decision on whether clean-up is required, and if so to what extent, should be based on site-specific assessment

HILs are not clean-up levels or targets for clean-up.