

Australian and international guidelines for urban soil in residential areas



Element (mg/kg)	Australia NEPC ¹ (2013)			California CEPA ² (2005)	Canada CCME ³ (2013)	Norway NPCA ⁴ (2009)	United States EPA ⁵ (2013)
	Residential A	Residential B	Recreational C				
Arsenic	100	500	300	0.07	12	12	0.61
Cadmium	20	150	90	1.7	10	12.2	7
Chromium VI	100	500	300	17	0.4	75	0.29
Copper	6,000	30,000	17,000	3,000	63	150	310
Lead	300	1,200	600	80*	140	90	400
Manganese	3,800	14,000	19,000	-	-	-	180
Mercury (inorganic)	40	120	80	18	6.6	1.5	2.3 <small>Mercuric chloride and other mercury salts</small>
Nickel	400	1,200	1,200	1,600	50	90	150 <small>Nickel soluble salts</small>
Zinc	7,400	60,000	30,000	23,000	200	300	2,300

¹National Environment Protection Measure (NEPM), 2013. Schedule B1: Guideline on Investigation Levels For Soil and Groundwater. http://www.comlaw.gov.au/Details/F2013C00288/Html/Volume_2
Residential A - with garden/accessible soil (home grown produce <10% fruit and vegetable intake (no poultry), also includes childcare centres, preschools and primary schools.
Residential B - with minimal opportunities for soil access; includes dwellings with fully and permanently paved yard space such as high-rise buildings and apartments.
Residential C - Public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths.

²The California soil lead level was lowered from 150 to 80 mg/kg in 2009 to keep blood lead exposures below 1 µg/dL <http://oehha.ca.gov/risk/pdf/LeadCHHSL091709.pdf>

³Canadian Conference on Medical Education (CCME), 2013. Soil Quality Guidelines for the Protection of Environ. & Human Health. <http://st-ts.ccme.ca/>

⁴Norwegian Pollution Control Authority (NPCA), 2009. Soil contamination in day-care centers and playgrounds. <http://www.miljodirektoratet.no/old/klif/publikasjoner/2550/ta2550.pdf>

⁵United States Environmental Protection Agency (EPA), 2013. Regional Screening Levels. <http://www.epa.gov/region9/superfund/prg/>

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