



The International Committee on Contaminated Land

**Appropriate approaches for dealing with
groundwater pollution on contaminated land
AUSTRALIAN PERSPECTIVE**

Copenhagen, 4-5 October 2017



Australia



4500km



In Australia each State and Territory EPA/departments has legislative responsibility for managing site contamination



State and Territory legislation



Typically:

- ◆ legislation were created at different points in time in the different states/territories
- ◆ the use of land and groundwater varies, but the main source of drinking water in Australian urban areas is from surface waters/reservoirs and treated for use
- ◆ groundwater is important and is protected under Australian legislation, but most of the protection of resources focused on air, surface water, land and then groundwater over time



State and Territory legislation



Typically:

- ◆ the 'polluter pays' principle applies
- ◆ the principles of 'ecologically sustainable development' are embedded in legislation
- ◆ there is a standard approach to contaminated site assessment (through the *National Environment Protection (Assessment of Site Contamination) Measure 1999*) [NEPM] and National Remediation Framework (in development)
- ◆ there are also some national guidelines for surface waters, groundwater, drinking water standards



State and Territory legislation



Typically:

- ◆ each State or Territory has stand-alone or integrated legislation for dealing with site contamination
- ◆ use of environmental auditors
- ◆ we generally face similar challenges e.g. contaminants of concern, technologies, market drivers, etc.
- ◆ substantial variability between States and Territories



State and Territory legislation



Some of the variability between states relates to:

- ◆ how much groundwater is used and for what purposes in each state/territory
- ◆ what information/data is collected by EPA/departments
- ◆ whether there is mandatory / voluntary notification of contaminated sites
- ◆ different regulatory tools or mechanisms, depending on the primary legislation in the state/territory
 - compliance and enforcement mechanisms
 - remedial notices
 - how environmental audits and auditors operate
- ◆ Different funding mechanisms in place for financial assurances, orphaned sites funds, etc..



State and Territory legislation



Some of the variability between states relates to:

- ◆ groundwater remediation and management tools:
 - NSW/ACT: able to use environmental legislation to protect groundwater from pollution, restrict groundwater use and to assess and manage groundwater contamination as well as the planning system and use of contaminated land site auditors.
 - VIC: have ability to determine 'clean up to the extent practicable' (CUTEP) and identify 'groundwater quality restricted use zones' (GQRUZ)
 - SA: able to use the planning system / environmental audits to specify requirements & have groundwater prohibition areas (GPA)