



National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No. 1)

The NATIONAL ENVIRONMENT PROTECTION COUNCIL makes the following National Environment Protection Measure under subsection 20(1) of the *National Environment Protection Council Act 1994* of the Commonwealth, the *National Environment Protection Council (New South Wales) Act 1995* of New South Wales, the *National Environment Protection Council (Victoria) Act 1995* of Victoria, the *National Environment Protection Council (Queensland) Act 1994* of Queensland, the *National Environment Protection Council (Western Australia) Act 1996* of Western Australia, the *National Environment Protection Council (South Australia) Act 1995* of South Australia, the *National Environment Protection Council (Tasmania) Act 1995* of Tasmania, the *National Environment Protection Council (Northern Territory) Act 1994* of the Northern Territory, and the *National Environment Protection Council Act 1994* of the Australian Capital Territory.

Dated: 11 April 2013

Mr Theo Hooy

National Environment Protection Council Executive Officer on behalf of the

National Environment Protection Council

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1 Name of measure

This measure may be cited as the *National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No. 1)*.

2 Commencement

This measure commences on the day after it is registered.

3 Authority

This measure is made under the *National Environment Protection Council Act 1994* and the equivalent provision of the corresponding Act of each participating State and Territory.

4 Schedule(s)

Each instrument that is specified in a Schedule to this instrument is amended or repealed as set out in the applicable items in the Schedule concerned, and any other item in a Schedule to this instrument has effect according to its terms.

Schedule 1—Amendments

National Environment Protection (Assessment of Site Contamination) Measure 1999

1 Introductory note

Omit “NEPC”, substitute “National Environment Protection Council”.

2 Section 3 (definition of *Contamination*)

After “added”, insert “as a direct or indirect result of human activity”.

3 Section 3 (definition of *Health Risk Management*)

Omit “alternative actions and selecting options in response to”, substitute “and implementing appropriate options to address risks identified from”.

4 Section 3 (definitions of *Investigation level and Response Level*)

Repeal the definitions.

5 Section 3

Insert:

Investigation or Screening Level means the concentration of a contaminant above which further appropriate investigation and evaluation will be required.

6 Section 3 (definition of *Risk*)

Omit “hazardous agent” (wherever occurring), substitute “chemical substance”.

7 Section 6 (principle 3)

Omit “Levels or Response”, substitute “or Screening”.

8 Section 6 (principle 5)

Repeal the principle, substitute:

(5) Planning and development

Authorities of participating jurisdictions (at local and State government level) that consent to developments, or changes in land use, should ensure a site that is being considered for development or a change in land use, and that the authorities ought reasonably know if it has a history of use that is indicative of potential contamination, is suitable for its intended use.

(5A) Decommissioning of industrial activities

Industries, including mining and mineral processing industries, are responsible for ensuring that, when equipment on a site is dismantled or a site is otherwise decommissioned, appropriate measures are taken to leave the site in a safe and stable condition in order to prevent or, as far as practical, minimise adverse long-term environmental (physical, social and economic) impacts.

9 Section 6 (principle 7)

Repeal the principle, substitute:

(7) Community engagement

If a community could reasonably have an interest in the potential site contamination, community engagement should start at an early stage of, and continue throughout, the process of assessment of site contamination.

10 Section 6 (principle 10)

Repeal the principle, substitute:

(10) Site assessment process

The recommended general process for the assessment of site contamination is shown in Schedule A. The assessment should be conducted by professionals who have the relevant qualifications, competencies and experience.

11 Section 6 (principle 11)

Omit “a contaminant”, substitute “contamination”.

12 Section 6 (principle 12)

Repeal the principle, substitute:

(11A) Work health and safety

There should be appropriate work health and safety measures (including training) in place for any personnel involved in the assessment of site contamination, in accordance with the applicable work health and safety legislation.

(12) Environmental impact

The assessment of site contamination should include a consideration of risks to water resources and other ecological risks.

During the assessment, the on-site and off-site impacts of contaminants should be appropriately managed to prevent adverse impacts, particularly impacts relating to air emissions, surface water and groundwater.

13 Section 6 (principle 13)

Omit “implement data quality objectives, and”, substitute “develop data quality objectives and implement”.

14 Section 6 (principle 13)

Omit “equivalent organisation”, substitute “organisation recognised under NATA’s Mutual Recognition Agreement (MRA) Network”.

15 Section 6 (principle 14)

Repeal the principle, substitute:

(14) Risk assessment

The initial assessment of human health risks and ecological risks may be undertaken by comparing levels of contaminants on the site with appropriate investigation or screening levels or, if necessary, by undertaking a site-specific risk assessment. The initial assessment may be followed by a more detailed assessment of human health risks and ecological risks.

An assessment of human health risks and ecological risks should, if practicable, take into account any additive, synergistic and antagonistic effects of mixing chemical substances.

16 Section 6 (principle 15)

Omit “the need to adequately protect”, substitute “adequately protecting”.

17 Section 6 (principle 15)

After “wherever they live;”, insert:

- that the environmental values of water are maintained for future generations;

18 Section 6 (principle 16)

Omit “if practicable;”.

19 Section 6 (principle 16)

After “appropriate management strategy.”, insert:

When deciding which option to choose, the sustainability (environmental, economic and social) of each option should be considered, in terms of achieving an appropriate balance between the benefits and effects of undertaking the option.

20 Section 6 (principle 17)

Omit the first sentence, substitute:

In the assessment of site contamination the following sources are recognised as requiring specialised forms of assessment and initially, information should be sought from the relevant environmental protection agency for advice on assessing sites with:

- (a) unexploded ordnance;
- (b) radioactive substances;
- (c) pathogenic materials and waste;
- (d) contaminated sediments;
- (e) explosive gas mixtures.

21 Section 6 (principle 18)

Omit “Aboriginal and Torres Strait Islander Commission, the Australian Heritage Commission”, substitute “National Congress of Australia’s First Peoples, the Australian Heritage Council”.

22 Subsection 7(1)

Omit “recommended”, substitute “general”.

23 Subsection 7(2)

Omit “that form part of this Measure”.

24 Section 8

Omit “which indicates”, substitute “indicating”.

25 Section 8

Omit the second sentence, substitute:

The preliminary investigation usually involves:

- (a) establishing a site history to identify the characteristics of the site (such as the location and layout of the site, the building construction on the site, the geological setting, current and past activities at the site, current and past uses of the site, and heritage considerations); and
- (b) inspecting the site; and
- (c) interviewing representatives for the site.

26 Section 8

Omit “definition.”, substitute “evaluation.”.

27 Section 8

Omit “and staining”, substitute “or staining”.

28 Section 8

Omit “investigation levels in Schedule B(1)”, substitute “applicable investigation or screening levels”.

29 Section 8

Omit “incorporate the”, substitute “involve both”.

30 Subsection 9(2)

Omit “next following”, substitute “immediately after”.

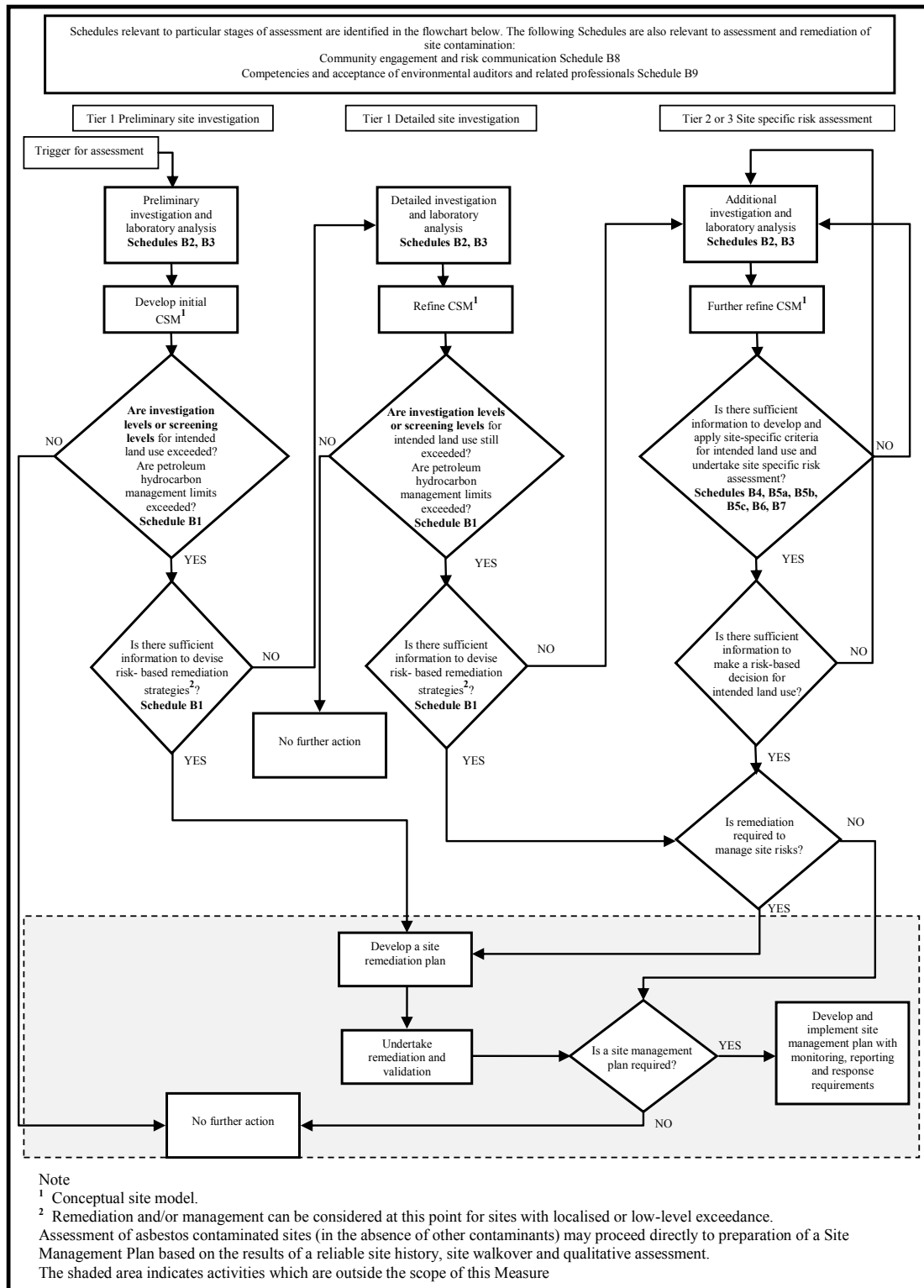
31 Section 10

Omit “five years from the date of commencement”, substitute “every 10 years after the measure was last amended”.

32 Schedule A

Repeal the Schedule, substitute:

Schedule A—Recommended general process for assessment of site contamination



33 Schedule B

Repeal the Schedule, substitute:

Schedule B—General guidelines for the assessment of site contamination

The following general guidelines provide guidance on the possible ways of achieving the desired environmental outcome (PART 3 of the Measure) for the assessment of site contamination and should only be considered in relation to the assessment of site contamination.

Index of guidelines

Schedule B1—Guideline on Investigation Levels for Soil and Groundwater

Schedule B2—Guideline on Site Characterisation

Appendix A Possible analytes for soil contamination

Appendix B Data quality objective (DQO) process

Appendix C Assessment of data quality

Appendix D Example data presentation on scale drawings and borehole logs

Appendix E Dioxins and dioxin-like compounds

Schedule B3—Guideline on Laboratory Analysis of Potentially Contaminated Soils

Appendix A Determination of total recoverable hydrocarbons (TRH) in soil

Schedule B4—Guideline on Site-Specific Health Risk Assessment Methodology

Appendix A Structure of a risk assessment report

Schedule B5a—Guideline on Ecological Risk Assessment

Appendix A Summary of the EILs for fresh and aged contaminants in soil with various land uses

Appendix B Mixtures of chemicals

Schedule B5b—Guideline on Methodology to Derive Ecological Investigation Levels in Contaminated Soils

Appendix A Review and comparison of frameworks for deriving soil quality guidelines in other countries

Appendix B Method for deriving EILs that protect aquatic ecosystems

Schedule B5c—Guideline on Ecological Investigation Levels for Arsenic, Chromium (III), Copper, DDT, Lead, Naphthalene, Nickel and Zinc

Appendix A Raw toxicity for arsenic

Appendix B Raw toxicity for chromium (III)

Appendix C Raw toxicity for copper

Appendix D Explanation of the selection of the soil properties that control the added contaminant limits for copper

Appendix E Raw toxicity for DDT

Appendix F Raw toxicity for lead

Appendix G Raw toxicity for naphthalene

Appendix H Raw toxicity for nickel

Appendix I Raw toxicity for zinc

Schedule B6—Guideline on the Framework for Risk-Based Assessment of Groundwater Contamination

Schedule B7—Guideline on derivation of health-based investigation levels

Appendix A1 Derivation of HILs for Metals and Inorganics

Schedule 1 Amendments

Appendix A2 Derivation of HILs for PAHs and Phenols

Appendix A3 Derivation of HILs for Organochlorine Pesticides

Appendix A4 Derivation of HILs for Herbicides and Other Pesticides

Appendix A5 Derivation of HILs for PCBs and PBDEs

Appendix A6 Derivation of HILs for Volatile Organic Carbon Compounds

Appendix B Equations for derivation of HILs and Interim HILs

Appendix C Derivation of HILs for Generic Land Uses

Appendix D Blood lead model assumptions

Schedule B8—Guideline on Community Engagement and Risk Communication

Schedule B9—Guideline on Competencies and Acceptance of Environmental Auditors and Related Professionals
