

Environment Protection Authority

Site contamination: professional certification

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Abbreviations

ASC NEPM	<i>National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)</i>
CEMP	construction environment management plan
CPD	continuing professional development
CSM	conceptual site model
CUO	clean-up order
EPA	Environment Protection Authority (South Australia)
EP Act	<i>Environment Protection Act 1993</i>
EPO	environment protection order
EPP	environment protection policy
ISO	International Organisation of Standards (Switzerland)
(the) Regulations	<i>Environment Protection Regulations 2009</i>
SCAO	site contamination assessment order
SRO	site remediation order
SRP	site remediation plan
SSRA	site-specific risk assessment
WQP	<i>Environment Protection (Water Quality) Policy 2015</i>

1 Introduction

1.1 Background

The Environment Protection Authority (**EPA**) is South Australia's independent environment protection regulator.

The EPA protects, restores and improves the environment through the risk-based regulation of pollution, waste, noise and radiation. The EPA works closely with industry, the community and government to protect our unique natural environment while supporting economic growth and improving wellbeing.

Site contamination¹ is an important environmental, health, economic and planning issue and can have implications for land-owners and occupiers, developers, councils, planning authorities, government and local communities.

The assessment and remediation of site contamination is complex and requires professionals with specialist knowledge, experience, skills and competencies as described in the *National Environment Protection (Assessment of Site Contamination) Measure 1999* (as amended 2013)².

Currently persons may hold themselves out as a site contamination practitioner (or consultant) without having the necessary qualification or experience to do so. This has and continues to:

- pose a significant risk to human health (from inappropriate assessment and 'sign-off')
- may contribute to significant financial loss to property owners and future owners
- cause severe personal hardship to unaware property owners and future property owners
- cause confusion and the presentation of unreliable information for planning authorities
- result in the inappropriate development of land impacted by site contamination.

As a result the community can lose confidence in the regulator, professional bodies, consultant organisations and the site contamination profession.

For many professions in South Australia it is an offence to practice without being appropriately qualified, and registered, certified or licenced. The EPA considers that decisions around site contamination are significant (both in cost and risk to human health) and as such certification of persons who practice in the area of site contamination assessment and remediation is warranted.

Many Australian jurisdictions (including South Australia³) have legislative schemes that accredit site contamination auditors. The requirements for a person to be accredited as an auditor are set intentionally high. The audit schemes do not (and are not intended to) accredit persons who are not initially accredited as an auditor. For the purpose of this document these people will be referred to as site contamination professionals. It is acknowledged that auditors can practise as an auditor or as a site contamination professional (subject to legislative rules).

Until 2014 there was no scheme for the certification of a person as a site contamination professional. This is possibly due to there being no single degree or tertiary qualification for a site contamination professional (which is still the case). Historically, practitioners have 'evolved' or emerged from a science or engineering undergraduate degree or other related professions.

Site contamination practitioners typically come from a multitude of relevant tertiary qualifications and professions. These include chemists, hydrogeologists, ecologists, toxicologists, engineers, physicists, soil scientists, microbiologists,

¹ Site contamination is defined in section 5B of the EP Act

² Schedule B9 of the NEPM

³ See Division 4 of Part 10A of the EP Act

geologists and environmental scientists. Typically small and large teams are formed to resolve the complexities associated with site contamination. This is unlikely to change. It is acknowledged that some tertiary institutions offer entry level postgraduate qualifications or training for site contamination. Similarly some organisations also offer short courses and training.

1.2 Factors contributing to poor quality reports and documentation

Poor quality work can result in significant cost and stress for current and future land-owners.

A number of factors contribute to real and perceived issues of poor quality work, such as lack of scientific rigour and detail in reports and documentation produced by persons holding themselves out as site contamination professionals.

Poor quality work can potentially be attributed to one or more factors including:

- a lack of experience, knowledge and skills of the person undertaking the work
- persons working outside their area of technical speciality
- persons working outside their area of geographical experience
- persons working outside their area of jurisdictional experience (and hence knowledge of applicable laws, regulations and guidelines)
- persons not adhering to an acceptable code of ethical and professional conduct
- potential conflict of interest and insufficient resources allocated by proponents for persons to conduct adequate investigations and assessments
- persons not working in accordance with jurisdictional or national guidance
- a lack of clear guidance regarding expected scope of work and deliverables
- incompetence, low fees and client pressure
- inadequate review, capability or competency by the employer.

The implementation of a policy to recognise certification bodies and to require the use of certified professions will address most of the issues outlined above.

1.3 Purpose

The purpose of this policy is to facilitate an improvement in the quality, reliability and accountability of site contamination reports and documentation provided to government, planning authorities, land-owners and those who have liability for site contamination. It also provides an approach on how and when the EPA will recognise schemes that certify persons as site contamination professionals.

1.4 Legislation

The *Environment Protection Act 1993* (EP Act) defines⁴ a site contamination consultant as:

a person other than a site contamination auditor who, for fee or reward, assesses the existence or nature or extent of site contamination.

The legislation provides a dual meaning for a person – either a natural person or a body corporate.

The EP Act provides the Authority with circumstances in which it can require the use of professionals with specified qualifications. These are discussed further in Section 4.

⁴ Section 3 of the EP Act

The EP Act established the following offences for the provision of a false or misleading information and reports:

- **Section 119 – False or misleading information**

A person must not make a statement that is false or misleading in a material particular (whether by reason of the inclusion or omission of any particular) in any information furnished, or record kept, under this Act.

Penalty:

- a If the offender is a body corporate – Division 1 fine⁵;*
- b If the offender is a natural person – Division 3 fine⁶.*

- **Section 120A – False or misleading reports**

A person who makes a false or misleading report to the Authority, another administering agency or a person engaged in the administration of this Act is guilty of an offence if –

- a the person knows the report is false or misleading; and*
- b the report is of a kind that would reasonably call for investigation or action by the Authority or another administering agency.*

Penalty – Division 4 fine⁷.

1.5 Section 83A – Notification of site contamination of underground water

Section 83A of the EP Act requires a specific person (owner, occupier, site contamination auditor and/or site contamination consultant) to notify the EPA in writing as soon as reasonably practicable after becoming aware of the existence of site contamination at a site or in the vicinity of a site that affects or threatens water occurring naturally under the ground or introduced to an aquifer or other area under the ground.

Whether or not a person is certified does not alter the definition of a site contamination consultant that is prescribed by the EP Act.

The requirement for notification will apply regardless of whether or not a person, who is acting as a 'site contamination consultant', is certified.

1.6 Commencement of policy

Sections 2 and 3 of this policy will commence on 1 **mm** 2017.

Section 4 of this policy will commence on 1 **mm** 2018.

1.7 Site contamination audit system

The EPA has established, administers and regulates a site contamination audit system in accordance with the EP Act. The EPA has adopted many of the principles and processes from the system to develop this policy.

1.8 Non-derogation

Nothing in this document is intended to derogate from or fetter the powers of the EPA and authorised officers under the EP Act and the Regulations.

⁵ Division 1 fine – \$60,000 at the time of publication

⁶ Division 3 fine – \$30,000 at the time of publication

⁷ Division 4 fine – \$15,000

1.9 Acknowledgement

The EPA gratefully acknowledges the work undertaken by the Western Australia Department of Environmental Regulation and has adopted many of the principles and text described in this document (see References).

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2 Certification bodies – minimum standards

2.1 Overview

The EPA is aware that multiple organisations have formed schemes that purport to certify site contamination professions.

The EPA will consider each scheme that seeks recognition for the purpose of certifying persons as site contamination professionals or practitioners, on its merits. Each scheme must demonstrate to the EPA, in writing, that it meets and will continue to meet the minimum standards for recognition. These standards are described below.

2.2 International standard

In 2013, a joint Australian New Zealand Standard for conformity assessment was approved on behalf of the Council of Australian Standards and on behalf of the Council of Standards New Zealand. Principles and requirements for bodies certifying persons against specific requirements, including the development and maintenance of certification schemes for persons are covered in *AS/NZS ISO/IEC 17024:2013 Conformity assessment – general requirements for bodies operating certification of persons*⁸. Schemes should demonstrate conformance with this standard.

2.3 Certification of natural persons

The EPA will only recognise schemes that certify natural persons (individuals), and will not recognise schemes that only provide corporate or company certification.

2.4 Governance

The following elements and standards are considered essential for any scheme:

- an independent competency based board/governing council that is established for the purpose of certification
- the board/governing council should consist of an independent chair, and relevant senior representatives from government and the site contamination profession
- a specialist committee that examines, tests and makes recommendations in relation to certification (initial and ongoing) to the board/governing council
- an independent specialist committee to assess, investigate and make recommendations in relation to any complaint made against a person or the scheme.

2.5 Essential scheme elements

The following elements and standards are considered essential for any site contamination certification scheme to be recognised by the EPA:

- national scheme
- independent scheme that does not limit certification based on a requirement to be a member of another organisation
- transparent and clearly documented procedures (application, assessment, certification, appeal and governance)
- ability, willingness, documented and clear requirements and methods to suspend or withdraw certification
- ability, willingness, documented and clear methods to hear, resolve and act on complaints
- requirement for continuing professional development (>50 hours per annum or pro rata equivalent)
- will seek written regulator feedback for applicants in relation to ethical and professional practice
- uses persons recognised as suitable by the EPA as assessors

⁸ AS/ANZ ISO/IEC 17024:2013

- has relevant ethical and professional conduct requirements.

2.6 Testing of competency

The EPA considers the testing of competency is a core factor for scheme recognition.

The need for competency testing was agreed through national and regulator consultation in 2013–14. The consultation process is described in *Certification of Site Contamination Practitioners Scheme* (CRC CARE 2014) and summarised on the CRC CARE website⁹. Similarly Schedule B9 of the NEPM sets out details of qualifications and experience for site contamination consultants.

The certification body must clearly define the specialist area for which a practitioner is certified, and align required competencies, and knowledge, experience and abilities with the tasks that a practitioner would reasonably be expected to undertake working within that specialty area to a proficient level¹⁰.

Methods employed to recognise competent environmental practitioners to carry out specific tasks or activities may include prescribing detailed criteria that the practitioner must meet (such as education and years of experience); specifying the completion of a particular training course and/or passing an examination; requiring certification by, or membership of, a particular professional organisation; specifying particular qualifications with associated specialties; or requiring approval by a government official or the EPA.

The following elements and standards are considered essential for any site contamination certification scheme to be recognised by the EPA:

- Rigorous testing of all applicants who request certification (written application, case study assessment and interview) – except in special circumstances when the applicant is an accredited auditor
- Minimum education requirements (≥3 year relevant degree in science or engineering)
- Minimum professional practice requirements (>5 years or pro rata equivalent)
- Proven competency standards (in accordance with the NEPM):
 - determining the nature, causes and significance of site contamination
 - preliminary assessment of site contamination
 - detailed assessment of site contamination
 - risk assessment of site contamination
 - remediation and management of site contamination
 - professional practice in relation to site contamination (through the presentation of relevant reports/work);
- Referee testing

2.7 Certification

The scheme must be able to provide and maintain a register and provide clear identification of certification. It is important that certification is uncomplicated and readily understood by those who rely on the use of certified practitioners. For example schemes should avoid multiple certification levels as these may result in confusion by end-users.

⁹ www.crccare.com/products-and-services/certification-scheme/certification-scheme

¹⁰ The aim of this recognition scheme is to identify practitioners with a high level of competence within their speciality field. Therefore, the requirement for aligning competencies with knowledge, experience and abilities requires testing to a 'proficient' level. This should not preclude certification bodies from certifying practitioners at other levels, such as 'developing' or 'advanced'. However, this will be supplementary to the requirements of this scheme.

2.8 Ethical and professional conduct

Applicants to the certification body must sign and agree to abide by a code of conduct committing to ethical and professional conduct addressing the following elements:

- acting with integrity, honesty and good faith
- providing advice based on sound, evidence-based scientific information
- avoiding and/or disclosing and managing conflicts of interest
- maintaining and improving professional skills and knowledge
- undertaking services within acquired level of competence and capability and seeking peer review where necessary
- undertaking services in accordance with laws, regulations, policies and guidelines relevant to the service being provided
- presenting reports in a transparent manner and avoiding any misrepresentation or obfuscation of information
- respecting confidentiality of information.

2.9 Recertification

The certification body must reassess certified practitioners at a period of no more than every three years to ensure that the practitioner continues to meet the requirements of the certification scheme. Continuing professional development of the practitioner should form a key element of this recertification assessment.

2.10 Complaints

The certification body must have:

- written, clear and fair procedures to show how it will investigate, manage and respond to complaints in relation to persons that it certifies
- written and clear procedures to show how it will, where necessary, implement disciplinary action including the suspension and withdrawal of certification.

The EPA considers this a very important function of the certification body. The certification body is not merely professional membership for people with a common interest in site contamination. Rather it is a body that actively encourages best practice and requires adherence to professional standards and, in the event of non-compliance, will where appropriate withdraw a person's certification.

2.11 Appeals process

The certification body must have written, clear and fair procedures to show how it will investigate, manage and respond to any appeals that it may receive in relation to a decision that it makes.

3 Certification body recognition

3.1 EPA assessment process

Certification bodies seeking to be recognised must provide a detailed statement (accompanied by a statutory declaration) to the EPA demonstrating how it generally conforms to AS/NZS ISO/IEC 17024:2013 Conformity assessment – general requirements for bodies operating certification of persons.

The required statement will provide evidence that supports the claims in the application, including details of:

- the structure of the organisation, policies and procedures to ensure that the certification activities are undertaken competently and impartially
- the scope of certification and how this is determined for each specialist area
- the tasks defined for specialist areas and the associated competencies required by candidates to undertake those tasks to a proficient level
- the process of how prerequisites including education/training, years of experience and skills are identified and aligned with competence requirements
- the application form used by practitioners applying for certification
- the format of interviews or examinations used to rigorously assess the competencies of candidates
- an example list of interview/examination questions to assess candidates in specialist areas and criteria against which the answers are assessed
- names, qualifications and experience of assessors, including specialist area experts
- the documented process for receiving, evaluating and making decisions on complaints regarding a practitioner's conduct or performance
- evidence of how complaints have been addressed in the past, including details of instances where a practitioner's certification has been suspended, withdrawn or scope reduced as a result of an investigation into a complaint
- documented evidence of how past appeals have been assessed and resolved.

3.2 Application

Schemes seeking recognition by the EPA must lodge an application, along with all supporting material to:

Manager Site Contamination
Environment Protection Authority
GPO Box 2607
Adelaide SA 5001
Email: epasitecontam@epa.sa.gov.au

3.3 EPA recognition committee

The EPA will establish a committee to assess, review and monitor recognition of certification bodies. The committee will make recommendations to the EPA Chief Executive who will approve (or not approve) recognition of a certification body.

3.4 Monitoring and review

Certification bodies recognised through this process must provide documentation to the EPA detailing the method and results of an internal audit (accompanied by a statutory declaration) conducted at an interval of no longer than every three years, to verify that the body generally conforms to AS/ANZ ISO/EIC 17024:2013 and the principles listed in section 3.1.

If the EPA, after reviewing the internal audit is unsatisfied with the evidence provided, it may request further detail to support the outcome of the audit. The EPA may also decide, at its discretion based on the information provided, to suspend recognition of a certification body pending the outcome of a duplicated full application process.

3.5 Review of a scheme's complaints process

The EPA may, from time to time, request details from the certification body regarding complaints that have been received and how these complaints have been evaluated and addressed. The EPA has the discretion to suspend or cancel recognition of a certification body if complaints received about the conduct of practitioners certified under the scheme are not, in the view of the EPA, adequately addressed.

3.6 Receipt of complaints by the EPA

Any person may lodge a complaint against a certification body or a certified person to the EPA and it will advise the certification body of the complaint and provide it with the opportunity to respond in relation to that complaint. The EPA will, where appropriate, investigate all complaints and document its decision.

3.7 Withdrawal or suspension of recognition

The EPA may suspend or withdraw its recognition of a certification body.

There is cause for suspension or withdrawal if the EPA is satisfied that the certification body:

- obtained its recognition improperly
- has contravened the EP Act or any other relevant Act (eg provision of false or misleading information)
- has ceased to undertake the activities expected of the certification body
- is trading while financially insolvent
- is not eligible for recognition due to events that would disqualify the certification body's application
- failed to effectively manage a complaint or series of complaints.

A suspension may be for a specified period, or until the fulfilment of specified conditions, and may be expressed to have effect at a specified future time, or to have effect at a specified future time unless a specified condition is fulfilled.

Withdrawal may be permanent or for a specified period or until the fulfilment of specified conditions.

The EPA will, before suspending or withdrawing its recognition:

- give written notice to the certification body of the proposed action specifying the reasons for the proposed action
- allow the certification body at least 14 days within which to make submissions to the EPA in relation to the proposed action.

It is the certification body's responsibility to, as soon as reasonably practicable, inform those whom it has certified, that the body is not recognised by the EPA and, as a result, those whom it has certified may no longer be recognised as certified by the EPA. In such circumstances, the EPA will work quickly to resolve any necessary arrangements with certified practitioners to avoid any disruption to their practice.

3.8 Voluntary surrender of recognition

A certification body may request that the EPA suspend or withdraw its recognition.

3.9 Appeals

An appeal of any EPA decision may be made to the EPA Chief Executive. The grounds for the appeal must be described in detail.

The EPA will, if so requested by the certifying body to whom an appealable decision relates, state in writing the reasons for its decision.

3.10 Publication of EPA recognition

The names of certification schemes that have been successfully recognised through this process will be listed on the EPA website. The recognised certification bodies will also be able to publicise the recognition of its scheme(s) in its own promotional material. Certification bodies must ensure that they maintain an up-to-date, publicly available register of practitioners who are currently certified under its recognised schemes. Consideration should be given to measures that enable recognition and certification status to be easily identified by consumers and misrepresentation to be minimised.

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4 Use of certified professionals

4.1 EPA regulated sites

The EPA regulates site contamination using the instruments that are available under the EP Act. These instruments include (but are not limited to):

- site contamination assessment orders
- site remediation orders
- voluntary site contamination assessment proposals
- voluntary site remediation proposals.

From the date of commencement of this policy, all work regulated by the EPA through the use of statutory instruments will require the preparation, or review and approval, by a certified site contamination professional.

4.2 EPA licence conditions

The EPA, where appropriate, grants environmental authorisations (licences) in accordance with Part 6 of the EP Act. Section 45 states that 'the Authority may impose conditions of an environmental authorisation with respect to such matters as are contemplated by this Act or as the Authority considers necessary or expedient for the purposes of this Act'.

Section 52 states 'the Authority may, by conditions of an environmental authorisation, require the holder of the authorisation to carry out specified tests and environmental monitoring relating to the activity undertaken pursuant to the authorisation, or activities previously undertaken at the place to which the authorisation relates, and to make specified reports to the Authority on the results of such tests and monitoring'.

Section 52 also states that the condition may include 'requirements as to the qualifications of the person undertaking the evaluation process'.

From the date of commencement of this policy, the EPA will, where applicable, gradually amend licence conditions to include that specified/relevant reports must be prepared or reviewed and approved by a certified site contamination professional.

4.3 EPA review of reports

Section 14 of the EP Act establishes Powers of Authority:

The Authority may, for the purpose of performing its functions, exercise any powers that are necessary or expedient for, or incidental to, the performance of its functions and in particular may (a) obtain expert or technical advice from a person on such terms and conditions as the Authority thinks fit

The EPA is frequently asked to review reports prepared in relation to site contamination. These requests can originate from planning authorities, licence (authorisation) holders, site contamination consultants, lawyers (transfer of liability agreements) and land-owners.

From the date of commencement of this policy, all site contamination reports presented to the EPA for its review must be prepared or reviewed and approved by a certified site contamination professional.

4.4 EPA managed assessment or remediation projects

In 2016, the South Australian Government committed funding to the EPA to manage existing contaminated orphan sites over a period of four years. This funding commitment recognises the importance the government places on dealing with the issue of historic contamination.

An orphan site is a term used to describe a situation where the original polluter no longer exists, cannot be found/identified, or is unable to carry out or pay the costs of the required assessment or remediation. This funding commitment means that the EPA can now undertake assessment work where it can demonstrate there is a significant public health risk.

From the date of commencement of this policy, all work commissioned and/or managed by the EPA must be prepared, or reviewed and approved by a certified site contamination professional.

4.5 Recommendation to planning authorities

From the date of commencement of this policy, the EPA will recommend to planning authorities, as part of the site contamination planning framework that with the exception of site contamination audit reports, they only accept reports prepared or reviewed and approved by a certified site contamination professionals.

4.6 Recommendation to persons with liability for site contamination

From the date of commencement of this policy, the EPA will recommend to persons with liability for site contamination, that with the exception of site contamination audit reports, they only engage certified site contamination professionals to prepare, or review and approve reports in relation to site contamination.

4.7 Recommendation to ACLCA

From the date of commencement of this policy, the EPA will recommend to the Australian Contaminated Land Consultants Association (SA Branch) that it require its membership to have a certified professional included as part of membership renewal.

5 References

WA DER 2016, *Certification of Environmental Practitioners in Australia and New Zealand – A Framework for the Recognition of Non-government Environmental Practitioner Certification Bodies*, WA Department of Environmental Regulation, Perth, WA.

CRC CARE 2014, *Certification of Site Contamination Practitioners Scheme – consultation document*, Cooperative Research Centre for Contamination Assessment and Remediation of the Environment, Callaghan, NSW.

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