

## Site contamination consultant

Updated July 2018<sup>1</sup>

*EPA 665/18: This information sheet has been prepared to provide guidance to persons selecting a site contamination consultant for the engagement of services for the assessment and remediation of site contamination in South Australia.*

### Introduction

The assessment and remediation of site contamination is a complex and specialised professional area involving a wide range of disciplines. Site contamination consultants undertaking assessment and remediation of site contamination in South Australia should have skills and knowledge of human health and environmental issues that may be associated with site contamination.

### What is a site contamination consultant?

A site contamination consultant (consultant) is defined in section 3(1) of the *Environment Protection Act 1993* (EP Act) as a person other than a site contamination auditor<sup>2</sup> who for fee or reward, assesses the existence or nature or extent of site contamination.

In South Australia, a site contamination or environmental consultancy is a company that employs a range of professional and technical staff or individuals qualified in the assessment and/or remediation of site contamination. Some site contamination consultancies employ persons who are site contamination auditors (auditors) accredited by the Environment Protection Authority (EPA)<sup>3</sup>, as well as certified site contamination practitioners for the assessment and remediation of site contamination.

The [National Environment Protection \(Assessment of Site Contamination\) Measure 1999](#) (ASC NEPM) as amended in 2013, provides further information on defining a consultant, which includes an environmental consultant. The EPA considers a site contamination consultant and an environmental consultant to have a similar meaning. A site contamination practitioner is a person who undertakes the assessment and remediation of site contamination and is certified by a practitioner certification body recognised by the EPA<sup>4</sup>.

The engagement of a consultant is undertaken in accordance with the terms and conditions of that company, or in some cases, as mutually agreed to complete an agreed scope of works. A consultant's role is to design, prepare and carry out the assessment and/or remediation work in accordance with the scope of works required by the client or person liable for the site contamination.

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<sup>1</sup> This information sheet supersedes the EPA Information Sheet *Selecting a site contamination consultant* (2014)

<sup>2</sup> Site contamination auditor is defined in section 3(1) of the EP Act

<sup>3</sup> Refer to the EPA publication [Guidelines for the site contamination audit system \(2015\)](#)

<sup>4</sup> Refer to the EPA publication [Site contamination policy: certification of practitioners \(2018\)](#)

## When to use a site contamination consultant

A consultant can be engaged to assess or remediate site contamination for a range of purposes. Assessment is usually undertaken where site contamination exists or where there is a reasonable suspicion of site contamination (resulting in the potential for risks to human health or the environment) due to a known potentially contaminating activity (current or previous) occurring on the land<sup>5</sup>.

In South Australia, the core principle of the assessment and remediation of site contamination is risk-based decision making as described in the ASC NEPM.

For development or continuation of an existing non-sensitive (eg commercial and/or industrial) land use, assessment and remediation by a qualified and experienced consultant should generally be acceptable. For further information on using a consultant for the assessment and remediation of non-sensitive land use, refer to relevant guidelines issued by the EPA<sup>6</sup>.

The EPA does not consider it acceptable for a consultant to prepare a report that provides opinions on the suitability of land for a sensitive use<sup>7</sup> where site contamination is suspected or known to exist at a site. In these instances, the EPA expects the use of an independent auditor, accredited by the EPA, to independently review the work undertaken by the consultant and provide an expert opinion on the suitability of the site for its intended use<sup>8</sup>.

## How to find a site contamination consultant

Selecting a consultant should be undertaken with care, as the quality and results of the assessment and/or remediation undertaken is dependent on the competency of the consultant. Selection should be similar to the process used when acquiring any professional service.

The EPA recommends consideration of all of the following factors to assist in finding an appropriately experienced consultant:

- contact a company that employs an auditor accredited by the EPA. Refer to the auditor register available on the [EPA website](#) or
- contact the South Australian branch of the Australian Contaminated Land Consultants Association (ACLCA) for a list of current members on 08 8353 8151 or visit their [website](#) or
- seek advice from a trusted person who has previously engaged a consultant who successfully demonstrated acceptable standards of competency and completed similar projects successfully.

In all cases the EPA recommends that you determine the name(s) of the individual professional(s) who will be working on your project, confirm with trusted referees how that person performed on other similar projects and how that person added value to their project(s).

## Selecting a site contamination consultant

[Appendix 1](#) of this document outlines a clear and useful approach to the selection and engagement of a consultant.

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<sup>5</sup> The definition of a prescribed potentially contaminating activity is also described in clause 50 of the *Environment Protection Regulations 2009*

<sup>6</sup> Relevant guidelines for the assessment and remediation of site contamination are available on the [EPA website](#)

<sup>7</sup> Sensitive use is defined in section 3(1) of the EP Act as meaning: (a) use for residential purposes; or (b) use for a pre-school within the meaning of the *Development Regulations 1993*; or (c) use for a primary school; or (d) use of a kind prescribed by regulation

<sup>8</sup> For information in relation to site contamination auditors, refer to the EPA Information Sheet [Site contamination auditors \(2015\)](#)

In some circumstances, the consultant may engage other specialists for selected components of the assessment and/or remediation work not within their area of expertise. If this should be necessary, it is recommended that the consultant clearly identify such professionals including their position, who will be supervising them, and exactly what portion of the assessment and/or remediation work will be subcontracted. For example, in some instances specialist soil gas (vapour) sampling may be necessary at a site, which may be subcontracted directly to specialists with this expertise. Demonstration of one's professional qualifications, experience and overall costs associated with any subcontracted work should be clearly outlined to the client.

Overall, when comparing quotes from several consultants, consideration and recognition should be given to any value – adding tasks in the proposal that may be beneficial to the project over time. In some circumstances the cheapest quote may not always be the best.

## Qualifications and experience

It is important that the selected consultant has and is able to demonstrate a broad range of appropriate competencies, knowledge and experience relevant to the work to be undertaken as summarised in [Appendix 2](#):

- relevant qualifications and experience in the assessment of site contamination in accordance with the Schedules of the ASC NEPM
- relevant professional competencies as described in Schedule B9 of the ASC NEPM
- comprehensive knowledge of the EP Act and associated legislation, policies and guidelines
- knowledge of relevant scientific literature for the assessment and remediation of site contamination for human health and the environment
- comprehensive knowledge of the site contamination audit system used in South Australia
- knowledge and experience in engaging with the general community.

Consultants should be able to demonstrate a commitment to training and professional development, and relevant certification with EPA recognised practitioner certification bodies.

## Outcomes of engagement of a site contamination consultant

The outcome of the engagement of a consultant is the completion of the scope of work, ability to amend a scope of work, and the completion of reports to the client. Reports prepared by consultants should be able to withstand scientific and public scrutiny, and the information contained in the reports should provide an accurate representation of the assessment and/or remediation work completed at a site.

It is acknowledged that in some instances, the scope of a consultant's assessment and/or remediation work may be limited by agreement with the client and the person liable<sup>9</sup> for site contamination. In this case, the report should specifically identify the limitations relating to the scope of work and detail where this may not comply with relevant national standards and guidelines issued by the EPA.

## Opinions on the existence of site contamination

Section 103ZA of the EP Act requires that an auditor or consultant must, in any written report, qualify any statement or opinion as to the existence of site contamination at the site by specifying the land uses that were taken into account in forming that opinion. In order to do this, the assessment and remediation of site contamination must have been carried out in accordance with the ASC NEPM and relevant guidance published by the EPA<sup>10</sup>.

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<sup>9</sup> Refer to the EPA publication [Site contamination: regulatory and orphan site management framework \(2017\)](#)

<sup>10</sup> Relevant publications for the assessment and remediation of site contamination are available on the [EPA website](#), in particular [Guidelines for the assessment and remediation of site contamination \(2018\)](#)

## False or misleading information and reports

Section 103ZB of the EP Act requires specifically that a person must not make a statement that the person knows to be false or misleading in a material particular (whether by reason of the inclusion or omission of any particular) in any information furnished to a site contamination auditor or consultant that might be relied on by the auditor or consultant in preparing a report relating to site contamination. There are significant penalties for breaching this section of the EP Act. For further information and to prepare an 'Honesty in reporting' declaration, refer to the EPA publication *Guidelines for the assessment and remediation of site contamination (2018)*.

## Disclaimer

This publication is a guide only and does not necessarily provide adequate information in relation to every situation. This publication seeks to explain your possible obligations in a helpful and accessible way. In doing so, however, some detail may not be captured. It is important, therefore, that you seek appropriate advice regarding your obligations, including legal advice.

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## Further information

### Legislation

[Online legislation](#) is freely available. Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet  
Adelaide Service SA Centre  
108 North Terrace  
Adelaide SA 5000

Telephone: 13 23 24  
Facsimile: (08) 8204 1909  
Website: [shop.service.sa.gov.au](http://shop.service.sa.gov.au)  
Email: [ServiceSAcustomerservice@sa.gov.au](mailto:ServiceSAcustomerservice@sa.gov.au)

### General information

Environment Protection Authority  
GPO Box 2607  
Adelaide SA 5001

Telephone: (08) 8204 2004  
Facsimile: (08) 8124 4670  
Freecall: 1800 623 445 (country)  
Website: [www.epa.sa.gov.au](http://www.epa.sa.gov.au)  
Email: [epainfo@sa.gov.au](mailto:epainfo@sa.gov.au)

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The EPA welcomes written comments on and suggestions for improvements to any of its site contamination publications. These should be addressed to the Manager, Site Contamination at the above address.

## Appendix 1      Approach to the selection and engagement of a site contamination consultant

The following steps provide assistance when selecting a consultant:

- 1 Compile a shortlist of consultants following the above recommendations.
- 2 Ask each consultant to provide a proposal which includes a scope of works, methodology, project team, experience/qualifications, timing and cost estimates.
- 3 Request from each consultant a record of previous projects that have similar site contamination issues to your project's requirements.
- 4 Request a list of clients who are able to provide an independent opinion on the technical and management skills of the consultant.
- 5 Obtain the names and degree of input of persons to be involved in your project. It is important for the consultant to include details of the staff that will work on the project as this provides additional confirmation of the technical competence of the consultant (refer to Appendix 2).
- 6 Ensure that the staff selected have worked on the projects described in (3) above.
- 7 Seek detailed estimates of costs and confirm that the scope of the works is clearly defined and will fulfill your requirements.
- 8 Check that there will be a peer review of all phases of the works by a person who is a senior professional within the company.
- 9 Ask the consultant to explain the procedure for any additional services (and cost estimates) that may be identified as necessary during the progress of the works (eg if contamination is identified that requires further investigations) which may not be specified in the original contract.
- 10 Clarify who is to seek any approvals that may be necessary under the EP Act or any other Act (eg *Natural Resource Management Act 2004*, *Development Act 1993*).
- 11 Check that the company holds an acceptable level of professional indemnity and public liability insurance relevant to the scope and nature of work proposed.

## Appendix 2 Site contamination consultant competencies

Schedule B9—Competencies and acceptance of environmental auditors and related professionals of the ASC NEPM provides details of key competencies for professionals undertaking the assessment of site contamination.

A consultant engaged to undertake the assessment and remediation of site contamination and the preparation of reports should be able to demonstrate a level of qualification<sup>11</sup> and experience relevant to the work being undertaken.

Specific skills and experience that may be considered necessary of a site contamination consultant are:

- assessment of contaminant exposure pathways ie preparation of conceptual site models
- contaminated site assessment and management
- evaluation and interpretation of chemical and analytical data
- soil sampling design and methodology
- soil gas sampling design and methodology
- groundwater sampling design and methodology
- identification of potential human health and environmental risks
- quality control/quality assurance procedures
- air quality (volatile emissions and dust) assessment relating to contamination
- assessment of impacts on groundwater from contaminated sites
- environmental chemistry
- environmental sampling
- environmental toxicology
- geology
- human health and ecological risk assessment relating to contamination
- human toxicology
- hydrogeology
- collection of historical information and identification of contaminants of concern from past industrial land uses
- work health and safety relating to contamination
- remediation technologies and geo-technology
- soil science
- statutory and environmental planning.

In some instances, it may be necessary to engage persons with knowledge and expertise in specialist areas such as:

- groundwater fate and transport modelling
- vapour intrusion and risk assessments
- human health risk assessments
- specialist remediation technologies ie large-scale thermal treatment of soil and groundwater.

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<sup>11</sup> Qualifications include demonstration of professional certification. Refer to EPA publication *Site contamination policy: certification of practitioners (2018)*

The EPA expects site contamination consultants recognise circumstances where supporting professional advice may be required by specialists or experts (as needed on a case-by-case basis). In addition, the engagement of a site contamination auditor and regulatory involvement by the EPA may also be required. Where necessary, it is recommended that a site contamination auditor be engaged at the early stages of any assessment or remediation work.

For example, the investigation and management of asbestos soil contamination should be conducted by a competent person. The ASC NEPM describes a competent professional in the context of the assessment of asbestos as being a person:

... who has acquired through training or experience and qualification, the knowledge and skills to identify, investigate and assess asbestos in the context of an environmental site assessment. This includes identifying the potential for asbestos contamination from site history information.