

Site contamination consultant

Updated February 2014¹

EPA 665/14: This information sheet has been prepared to provide guidance on the knowledge, qualifications, expertise and experience relevant for site contamination consultants carrying out the assessment and remediation of site contamination in South Australia. It is also intended to assist the community in the process of selecting a site contamination consultant.

Introduction

The assessment and remediation of site contamination is a complex and specialised profession involving a wide range of disciplines. The [National Environment Protection \(Assessment of Site Contamination\) Measure 1999](#) (the ASC NEPM) as amended in 2013, provides guidance on the competencies and experience that are essential for environmental professionals, including consultants, carrying out the assessment and remediation of site contamination.

In implementing the ASC NEPM, the Environment Protection Authority (EPA) expects that site contamination consultants involved in the assessment and remediation of site contamination in South Australia are appropriately qualified and experienced and are able to demonstrate a wide range of skills and knowledge of human health and environmental issues that may be associated with site contamination.

Definition of a site contamination consultant

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

In South Australia, a site contamination consultant is a company that employs a range of professional and technical staff or an individual person. The ASC NEPM provides further information on the definition of an environmental consultant. The EPA considers a site contamination consultant and an environmental consultant to have a similar meaning.

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. The consultant's role is to design, prepare and carry out the assessment and/or remediation work in accordance with the scope of works.

When to use a site contamination consultant

A site contamination consultant can be engaged to assess or remediate site contamination.

¹ Last updated August 2012

Assessment is usually undertaken where site contamination exists or where there is a reasonable suspicion of site contamination due to a known potentially contaminating activity (current or previous) occurring on the land².

In South Australia, the core principle of the assessment and remediation of site contamination is risk-based decision making. That is sufficient assessment must be undertaken to assess the risk to human health or environment and if necessary, sufficient remediation must be undertaken to mitigate the risk.

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 the assessment and remediation of site contamination refer to the EPA publication 'Guideline for the assessment and remediation of site contamination'.³

Qualifications and experience

It is important that consultants have and are able to demonstrate a broad range of appropriate competencies, knowledge and experience relevant to the work to be undertaken as summarised in [Appendix 1](#):

- qualifications and experience relevant to the characterisation and assessment of site contamination as described in Schedule B of the ASC NEPM
- technical competencies relevant to the work to be undertaken as described in Schedule B9 of the ASC NEPM;
- comprehensive knowledge of the Act and associated South Australian legislation, policies and guidelines;
- comprehensive knowledge of the ASC NEPM;
- knowledge of relevant scientific guidance and literature for the assessment and remediation of site contamination for human health and the environment; and
- comprehensive knowledge of the site contamination audit system used in South Australia, where relevant.

Consultants are also expected to be able to demonstrate an ongoing commitment to training and professional development and relevant memberships and/or certification with professional societies.

In some instances, it may be necessary to engage persons with knowledge and expertise in specialist areas. It is expected that consultants recognise where supporting professional advice may be required by specialists or experts, on a site-specific basis.

For example, the ASC NEPM describes that the assessment of asbestos contamination in soil is to be undertaken by a 'competent person' which is defined in Schedule B1 of the ASC NPM as 'a person who has acquired through training, qualification or experience, the knowledge and skills to identify, investigate and assess asbestos in the context of an environmental site assessment. This include identifying the potential for asbestos contamination from site history information'⁴.

In particular, the assessment of vapour intrusion should be undertaken by appropriate qualified and experienced professionals. The EPA expects that persons carrying out screening and detailed investigations of vapour assessment can demonstrate relevant extensive experience in the fields of soil gas sampling design and methodology.

² Refer to [Planning Advisory Notice 20](#) for a list of potentially contaminating activities and land uses. The definition of a prescribed potentially contaminating activity is also described in regulation 50 of the *Environment Protection Regulations 2009*

³ Relevant guidelines for the assessment and remediation of site contamination are available on the EPA website www.epa.sa.gov.au

⁴ Section 4.3 in Schedule B1, Investigation levels for soil and groundwater, of the ASC NEPM

Opinions on the existence of site contamination

Section 103ZA of the Act requires that a site contamination auditor or site contamination consultant must, in any written report, clearly 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 relevant guidelines issued by the EPA.⁵

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'⁶ where site contamination is suspected or known to exist at a site and the potential for land to be used for a sensitive use is being investigated, for example commercial or industrial land proposed to be redeveloped for residential use. In these instances, the EPA expects the use of an independent site contamination 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 use⁷.

False or misleading information and reports

Section 103ZB of the Act prescribes 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 site contamination 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 Act. For further information, refer to the EPA publication [Guideline for the assessment and remediation of site contamination](#).

Selecting 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 parties consider all of the following factors to assist them in finding an appropriately experienced consultant:

- contact a company that employs a Site Contamination Auditor accredited by the EPA. To identify these companies, refer to the auditor register available on the EPA website at [auditor register](#)
- or
- contact [Australian Contaminated Land Consultants Association](#) (ACLCA) for a list of current members on 08 8353 8151
- 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) that will be working on your project and that you confirm with trusted referees how that person performed on other similar projects and how that person added value to their project(s).

⁵ Relevant guidelines for the assessment and remediation of site contamination are available on the EPA website www.epa.sa.gov.au

⁶ Sensitive use is defined in section 3(1) of the 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

⁷ For information in relation to site contamination auditors, refer to the EPA publication [Site contamination auditors](#)

[Appendix 2](#) of this document provides recommended steps that may be of assistance when selecting a consultant.

In some circumstances, the consultant may subcontract selected elements of the assessment and/or remediation work that is not within their area of expertise, to other consultants or specialists. If this should occur, it is recommended that the consultant be asked to clarify who the subcontractors are, their position, who will be supervising them, and exactly what portion of the assessment and/or remediation of site contamination they will complete.

It is also important to highlight that when comparing costs from several consultants, to recognise any value adding tasks in the proposal which may be beneficial to the project in the long term; hence, the cheapest quote may not always be the best.

Outcomes of engagement of a site contamination consultant

The outcome of the engagement of a consultant is the completion of the scope of work, or an agreed amended scope of work, and the issue of one or more reports to the client. The report should be able to withstand scientific and public scrutiny.

It is noted that in some specific instances, the scope of a consultant's assessment and/or remediation work may be limited by agreement with the client. 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.

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 information from the EPA itself regarding your possible obligations and, where appropriate, that you seek your own legal advice.

Further information

Legislation

Legislation may be viewed on the Internet at: www.legislation.sa.gov.au

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
Email: servicesacustomerservice@sa.gov.au

For general information please contact:

Environment Protection Authority
GPO Box 2607
Adelaide SA 5001

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

The Environment Protection Authority 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 Site contamination consultant competencies

A consultant responsible for the assessment and remediation of site contamination and the preparation of reports should be able to demonstrate a level of qualifications and experience relevant to the work being undertaken. Schedule 9 – 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.

The competencies identified in Schedule B9 of the ASC NEPM are provided below:

- assessment of contaminant exposure pathways
- 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
- risk communication
- air quality (volatile emissions and dust) assessment relating to contamination
- assessment of impacts on groundwater from contaminated sites
- contaminant fate and transport
- environmental chemistry, sampling and toxicology
- geology and soil science
- 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
- statutory and environmental planning.

Appendix 2 Step-by-step process for selecting a site contamination consultant

The following steps provide assistance when selecting a consultant:

- 1 Compile a short-list 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 extent 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 1](#)).
- 6 Ensure that the staff working on your project have worked on the projects described in (3).
- 7 Seek detailed estimates of costs and confirm that the scope of the works is clearly defined and will fulfil 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 *Environment Protection Act, 1993* 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.