

## Site contamination –selecting a site contamination consultant

Updated December 2007

*EPA 665/07: This information sheet provides guidance in selecting a site contamination consultant for the assessment 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 site contamination assessments should investigate both human health and environmental issues, and therefore are required to possess a wide range of skills and knowledge.

### Who is a site contamination consultant?

A site contamination consultant assesses the existence or nature or extent of site contamination. A site contamination consultancy can be a company that employs a range of professional and technical staff or an individual person. Engagement of a site contamination consultant should be in accordance with the Terms and Conditions of that company or, in some cases, as mutually agreed to complete an agreed scope of works.

### When to use a site contamination consultant

A site contamination consultant is engaged to assess site contamination for a variety of reasons. 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 current or previous potentially contaminating activity occurring on the land.

For the development or continuation of an existing 'non-sensitive' (eg commercial/industrial) land use, assessment by an experienced site contamination consultant should generally be acceptable.

The South Australian Environment Protection Authority (EPA) does not consider a report issued by a site contamination consultant to be acceptable to determine the suitability of

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land for a 'sensitive use'<sup>1</sup> where site contamination is suspected or known to exist at a site. In these instances, the EPA expects the use of an independent Environmental Auditor (Contaminated Land), appointed by the Victorian EPA, to independently review the work undertaken by the site contamination consultant and provide an expert opinion on the suitability of the site for its intended use.

For further information in regards to Environmental Auditors (Contaminated Land), refer to the *EPA Information Sheet Site contamination—using an environmental auditor*.

## Finding a site contamination consultant

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

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

- contact a company that employs an Environmental Auditor (Contaminated Land) appointed by the Victorian EPA. To identify these companies, refer to the list of Environmental Auditors (Contaminated Land) available at <[www.epa.vic.gov.au/envaudit/auditors.asp](http://www.epa.vic.gov.au/envaudit/auditors.asp)>, or
- contact the South Australian branch of the Australian Contaminated Land Consultants Association (ACLCA) for a list of current members on telephone (08) 8243 2505, mobile 0409 144 122 or visit their website at <[www.aclca-sa.org.au](http://www.aclca-sa.org.au)>, or
- seek advice from a trusted person who has previously engaged a site contamination consultant who successfully demonstrated acceptable standards of competency and completed similar projects successfully.

## Selecting a site contamination consultant

The following steps provide assistance when selecting a site contamination 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 site contamination 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) above.
- 7 Seek detailed estimates of costs and confirm that the scope of the works is clearly defined and will fulfill your requirements.

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<sup>1</sup> A 'sensitive use', in relation to site contamination, means a residence, a child-care centre, a pre-school or a primary school.

- 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 specified in the original contract.
- 10 Clarify who is to seek any approvals that may be necessary under the *Environment Protection Act 1993* (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.

In some assessments of site contamination, the consultant may subcontract selected elements of the work that is not within their area of expertise to other consultants. If this should occur, clarify who the subcontractors are, their position, who will be supervising them and exactly what portion of the project they will complete.

When comparing costs from several consultants, it is important to recognise any value-adding tasks in the proposal which may be beneficial to the project in the long term and hence, the cheapest quote may not always be the best.

## Qualifications and experience

It is important that the site contamination consultant selected has adequate experience and knowledge including:

- competencies relevant to the work to be undertaken as summarised in Appendix 1
- demonstrated experience in site contamination assessment and management in accordance with the *National Environment Protection (Assessment of Site Contamination) Measure 1999* or NEPM
- comprehensive knowledge of the EP Act and associated legislation, policies and guidelines
- knowledge of relevant scientific literature for assessment of the impacts of site contamination on human health and the environment
- comprehensive knowledge of the audit system used in South Australia, where relevant.

## If remediation is required

Under the EP Act, remediation is defined as the treatment, containment, removal or management of chemical substances on or below the surface of the site so that there is no longer actual or potential risk to human health or the environment taking into account the current or intended use of the site, or actual or potential harm to waters that is not trivial.

If remediation is required after assessment, the same process of selecting a consultant or contractor to undertake remediation should be adopted as described above.

## Outcomes of engaging a site contamination consultant

The outcome of the engagement of a site contamination consultant is the completion of the scope of work, or an agreed amended scope of work, and submitting report(s) to the client. Report(s) should be able to sustain scientific and public scrutiny.

Site contamination consultants are required to specify the land use(s) taken into account in forming an opinion as to the existence of site contamination in any written reports produced (Section 103ZA of the EP Act).

It is noted that in some specific instances, the scope of a site contamination consultant's assessment 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 standards and guidelines.

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## Further reading

National Environment Protection Council 1999, *National Environment Protection (Assessment of Site Contamination) Measure*, NEPC, Adelaide, viewed 21 November 2007, <[www.ephc.gov.au/pdf/cs/cs\\_measure.pdf](http://www.ephc.gov.au/pdf/cs/cs_measure.pdf)>.

Planning SA 2001, *Advisory Notice 20, Site Contamination*, Planning SA, Adelaide, viewed 21 November 2007, <[dataserver.planning.sa.gov.au/publications/715p.pdf](http://dataserver.planning.sa.gov.au/publications/715p.pdf)>.

South Australian Environment Protection Authority 2006, *EPA Guidelines: Environmental management of onsite remediation*, EPA, Adelaide, viewed 21 November 2007, <[www.epa.sa.gov.au/pdfs/guide\\_remediation.pdf](http://www.epa.sa.gov.au/pdfs/guide_remediation.pdf)>.

—2007, *EPA Information Sheet: Site contamination—using an environmental auditor*, EPA, Adelaide, viewed 21 November 2007, <[www.epa.sa.gov.au/pdfs/guide\\_sc\\_auditor.pdf](http://www.epa.sa.gov.au/pdfs/guide_sc_auditor.pdf)>.

## CURRENCY OF THESE GUIDELINES

These guidelines offer advice to assist with compliance with the general environmental duty and specific environmental policies. They are subject to amendment and persons relying on the information should check with the EPA to ensure that it is current at any given time.

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## FURTHER INFORMATION

### *Legislation*

Legislation may be viewed on the internet at: <[www.legislation.sa.gov.au](http://www.legislation.sa.gov.au)>

Copies of legislation are available for purchase from:

Service SA Government	Telephone:	13 23 24
Legislation Outlet	Fax:	(08) 8204 1909
101 Grenfell Street	Internet:	< <a href="http://shop.service.sa.gov.au">shop.service.sa.gov.au</a> >
Adelaide SA 5000	Email:	< <a href="mailto:servicesa@saugov.sa.gov.au">servicesa@saugov.sa.gov.au</a> >

### *For general information please contact:*

Environment Protection	Telephone:	(08) 8204 2004
Authority	Facsimile:	(08) 8124 4670
Site Contamination Branch	Freecall (country):	1800 623 445
GPO Box 2607	Internet:	< <a href="http://www.epa.sa.gov.au">www.epa.sa.gov.au</a> >
Adelaide SA 5001	Email:	< <a href="mailto:epainfo@epa.sa.gov.au">epainfo@epa.sa.gov.au</a> >

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## Appendix 1 Consultant competencies

Schedule 10 of the *National Environment Protection (Site Contamination) Measure 1999* provides details of key competencies for environmental professionals.

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

- collection of historical information
- environmental sampling design and methodology for soils, surface waters and groundwaters
- quality control and quality assurance procedures
- environmental chemistry and interpretation of analytical data
- assessment of impacts of site contamination on soils, surface waters and groundwaters
- soil science
- hydrogeology
- human toxicology and risk assessment
- ecological toxicology and risk assessment
- contaminant fate and transport
- groundwater modelling
- qualitative and quantitative risk assessment
- risk communication and community consultation in relation to site contamination
- remediation and remedial technologies
- health and safety issues associated with fieldwork during the assessment and remediation of site contamination.

In some instances, site contamination consultants may be required to have knowledge in specialist areas. The qualifications and experience of site contamination consultants where specialist knowledge is required should be determined as appropriate on a site-specific basis.