

Site contamination

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1099/16: This information sheet provides general information on site contamination.

Role of the Environment Protection Authority

Like all industrialised cities, Adelaide and South Australian (SA) regional centres are confronted with managing historical contamination. Since 2009, landowners and others have been legally required to notify the Environment Protection Authority (EPA) when they become aware of contamination that affects or threatens groundwater near their site. The EPA receives notifications which build on its knowledge and understanding of site contamination in the State. It is the role of the EPA to determine and manage the risk to the public and the environment, and to regulate the assessment and remediation of site contamination.

When there is a risk to public health

The determination of whether site contamination exists depends on a range of factors, including whether or not the current or proposed land-use is considered sensitive, such as homes or schools. For site contamination to be of concern, all three following elements must exist:

- 1 a source, eg contaminated groundwater
- 2 a receptor, eg people
- 3 a pathway, eg use of bore water.

Chemicals behave differently, so while some chemicals may require many years of exposure before posing a health risk, others may present a more immediate risk. In some cases the way to minimise and manage risk is to remove one of the three elements. For example, if the pathway is removed then the risk to the community is reduced or removed.

An example would be managing contaminated groundwater by ensuring there are no water bores in operation within the contaminated area accessing that water source. Sometimes sites can be cleaned up (remediated) by removing the source such as contaminated soil, or by removing the pathway such as putting physical barriers between the contamination and people.

Polluter pays

In July 2009, legislation was introduced in SA which allows the EPA to require past polluters to assess and remediate contaminated sites rather than to pass this cost on to the rest of the community. Sometimes the person or company who caused the site contamination may no longer exist, or may no longer own or occupy the site. If there is evidence of a potential or actual health risk, the EPA is likely to undertake the necessary assessment. It sets priorities for such work, based not only on the contamination present but also on the surrounding land-use (for example, whether it is residential land).

This means the person who caused the site contamination is responsible for assessing the nature and extent of chemicals present, which may include obtaining and analysing samples, reporting the findings and if necessary, having that work verified by an independent site contamination auditor¹.

The polluter or site developer may then be required to manage, contain or clean up the site.



Drilling groundwater sampling well



Soil samples collected from drilling

Further information

For further information on site contamination please contact:

Site Contamination Branch
Environment Protection Authority
GPO Box 2607
Adelaide SA 5001

Telephone: (08) 8204 2004
Freecall: 1800 729 175
Website: www.epa.sa.gov.au
Email: EPASiteContam@sa.gov.au

For health related information on site contamination please contact:

Scientific Services Branch,
Public Health Services, SA Health
11 Hindmarsh Square
Adelaide SA 5000
Telephone: (08) 8226 7100
Website: www.sahealth.sa.gov.au
Email: public.health@health.sa.gov.au

¹ A site contamination auditor is a site contamination specialist who is accredited by the EPA. The auditor reviews the work of a consultant and gives an independent, professional and written opinion on the risks that remain at a site from site contamination. The legislation provides severe penalties for false or misleading audit reports or conflict of interest.