

Frequently Asked Questions



Site Contamination Assessment in the planning system

Q – What is the legislative and policy framework for the assessment of site contamination in the planning system?

A – As a statutory instrument under the *Planning, Development and Infrastructure Act 2016*, State Planning Policies are the overarching umbrella policies that pinpoint current and future planning issues and set the directions for the planning system. [State Planning Policy 16](#) requires the planning system to “assess and manage risks posed by known or potential site contamination to enable the safe development and use of land”.

The [Planning, Development and Infrastructure \(General\) Regulations 2017](#) in conjunction with [Practice Direction 14 – Site Contamination Assessment 2021](#) specify the procedures that apply to the assessment of potential site contamination when land use is proposed to change to a more sensitive use.

Schedule 9 of the *Planning, Development and Infrastructure (General) Regulations 2017* and Part 9.1 of the Planning and Design Code describe the circumstances that must apply before a development application is referred to the EPA.

The [Planning and Design Code](#) includes general development policies to ensure land is suitable for use in circumstances where it is, or may have been, subject to site contamination.

Understanding Site Contamination

Q – What is site contamination?

A – As defined by section 5B of the [Environment Protection Act 1993](#), site contamination exists at a site if:

- (a) chemical substances are present on or below the surface of the site in concentrations above the background concentrations (if any); and
- (b) the chemical substances have, at least in part, come to be present there as a result of an activity at the site or elsewhere; and
- (c) the presence of the chemical substances in those concentrations has resulted in—
 - (i) actual or potential harm to the health or safety of human beings that is not trivial, taking into account current or proposed land uses; or

- (ii) actual or potential harm to water that is not trivial; or
- (iii) other actual or potential environmental harm that is not trivial, taking into account current or proposed land uses.

Site contamination can result from a change in the use of land even if the person changing the use of land did not pollute the land.

Q – When can site contamination become a problem?

A – Site contamination is not always a problem. In order for site contamination to become a problem for people, there needs to be:

1. a source (e.g. contaminated soil)
2. a pathway (e.g. access to soil), and
3. a receptor (e.g. a person consuming home-grown produce).

Whether there is a risk to human health also depends on:

- the types of chemicals found
- the concentrations of the chemicals
- where they are found
- how a person is exposed.

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.

The good news is that site contamination can usually be managed. Because every situation is different, tailored solutions to protect current and future occupants of a site are required. These are developed based on factors including the nature of contamination, land use, groundwater movement, building types and geological conditions.

Pre-lodgement

Q – What is the Land Use Sensitivity Hierarchy and why is it important?

A – The Land Use Sensitivity Hierarchy contained in Table 1 of Practice Direction 14 is used to determine whether a proposed change of land use represents a change in land use to a 'more sensitive use' for the purposes of the Planning Development and Infrastructure (General) Regulations and the Planning and Design Code. Items 1 and 2 in Table 1 represent 'sensitive uses' to assist determine whether a land division application is proposed for a sensitive use.

Item 1 in the Land Use Sensitivity Hierarchy table represents the most sensitive land uses and item 7 represents the least sensitive land uses. The decreasing scale of sensitivity from Item 1 to Item 7 takes into account the sensitivity of people that will use the land and the potential for people to be exposed to chemicals resulting from site contamination.

The Land Use Sensitivity Hierarchy should be consulted while preparing a development application for lodgement as site contamination reports will be required to be prepared for applications involving a change of land use to a more sensitive use.

Site contamination investigations are not required at the planning consent stage if the land use is proposed to be changed to:

- a less sensitive use e.g. open space to a community centre
- an equally sensitive land use e.g. primary school to domestic residential
- an increased density within the same land use sensitivity category (e.g. low density residential (single dwelling) with soil access to medium density (multi-unit development) with soil access).

When mixed-use or multi-use land uses exist and/or are proposed, Practice Direction 14 requires the most sensitive existing and proposed land use to be used when determining if a proposal constitutes a change to a more sensitive land use.

Q – What is the distinction between Residential class 1 and Residential class 2 in the Land Use Sensitivity Hierarchy?

A – The Land Use Sensitivity Hierarchy distinguishes land uses having regard to:

- the sensitivity of the people that will use the land following the change of land use
- the potential for those people to be exposed to chemicals associated with site contamination.

Residential class 1 is a 'more sensitive land use' than Residential class 2 and is characterised by dwellings that have direct access to ground soil. A common example may be a detached dwelling on an allotment with a front and/or back yard with access to soil. The ground level front or back yard is used by children to play in and in-ground gardens may grow vegetables for consumption.

Residential class 2 is also a 'sensitive land use' however, according to the hierarchy, is slightly less sensitive than Residential class 1. Residential class 2 is characterised by limited or no access to ground soils, such as residential apartments above commercial or retail premises in a mixed use zone. Another common example would be an aged care facility where elderly residents have limited and/or infrequent direct contact with soils.

Q – What is the distinction between Educational premises class 1 and Educational premises class 2 in the Land Use Sensitivity Hierarchy?

A – Educational premises class 1 is a 'more sensitive land use' than Educational premises class 2. In this case, the distinction has regard to the sensitivity of the people using the land. Young children of pre-school or primary school age are more likely to interact with ground soils and are more susceptible to any chemicals remaining in the soil. In contrast, secondary or tertiary age students are less likely to directly interact with ground soils.

Educational premises class 2 is not a 'sensitive use'.

Q – What is the distinction between Commercial class 1 and Commercial class 2 in the Land Use Sensitivity Hierarchy?

A – Commercial class 1 is a ‘more sensitive land use’ than Commercial class 2, however neither is a ‘sensitive use’.

Commercial class 1 land uses are characterised by having a lower potential for exposing people to chemicals from site contamination. Typical examples include commercial land uses that do not use chemicals, such as shops, offices and consulting rooms.

Commercial class 2 land uses typically store or use chemicals in the course of operating a business. Typical examples include petrol stations or dry cleaners.

Q – What site contamination information needs to be submitted with a development application?

A – Site contamination investigations are only required to accompany a development application if the land use is proposed to be changed to a more sensitive use, or land division is proposed for the purpose of a sensitive use.

In these circumstances, a development application must be accompanied by:

- a preliminary site investigation (PSI) report prepared by a site contamination consultant
- a site contamination declaration form (Schedule 2 of Practice Direction 14)
- any site contamination audit report (SCAR) that has been prepared for the site
- a copy of the certificate of title.

If the PSI report does not identify any potentially contaminating activities, further site contamination assessment is not required.

An applicant may elect to lodge a SCAR in lieu of a PSI if the SCAR was prepared in relation to the land within the previous 5 years and it states that:

- site contamination does not exist or no longer exists
 - the land is suitable for the proposed use without the need for further remediation, or
 - remediation is required and the DA contains a clear undertaking that the remediation works will be undertaken as part of the development
 - no other class 1 or class 2 activity has taken place on the land since the SCAR was prepared.
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Q – What is a preliminary site investigation report?

A – A preliminary site investigation (PSI) is undertaken as the first stage of determining whether land where development is proposed is subject to site contamination.

A PSI usually includes a desktop study to collect basic site information and identify the site characteristics (site location, land use, site layout, building construction, geological and hydrogeological setting, historical land uses and activities at the site), a site inspection and interviews with current and past owners, operators and occupiers of the site and preparation of a report. Investigations should be undertaken as far back in time as is necessary to determine whether potentially contaminating activities have or are being undertaken at the site.

A PSI report should be sufficient to identify:

- potential sources of contamination and determine potential contaminants of concern
- areas of potential contamination
- potential human and ecological receptors
- potentially affected media (soil, water, vapour).

A PSI should be conducted in accordance with the *National Environment Protection (Assessment of Site Contamination) Measure 1999* and the guidelines issued from time to time by the EPA.

Q – What is a detailed site investigation report and when is it required?

A – A detailed site investigation (DSI) report is required when the results of the preliminary site investigation indicate that contamination is present or is likely to be present and the information available is insufficient to determine site suitability and/or whether remediation strategies are required to make the site suitable for its intended use.

The detailed investigation stage should identify the nature of the contamination and delineate its lateral and vertical extent to a sufficient degree that an appropriate level of risk assessment may be undertaken and, if necessary, provide the basis for the development of an appropriate remediation or management strategy.

A DSI should be conducted in accordance with the *National Environment Protection (Assessment of Site Contamination) Measure 1999* and the guidelines issued from time to time by the EPA.

If a referral to the EPA is required, the relevant authority cannot request a DSI.

Q – What is a potentially contaminating activity?

A – Potentially contaminating activities (PCAs) represent activities undertaken in the course of operating a business that may have used chemicals in such a way that site contamination exists or may exist.

PCAs include activities such as landfill sites, service stations, railway operations, and agricultural activities.

Schedule 1 of Practice Direction 14 groups PCAs according to their risk. Class 1 PCAs are high risk, Class 2 PCAs are medium risk and Class 3 PCAs are low risk.

The PCA risk classes were broadly derived from the *National Environment Protection (Assessment of Site Contamination) Measure 1999* in consultation with EPA specialist advisers and site contamination professionals.

Q – What is the site contamination declaration form and why is it important?

A – The site contamination declaration form is contained in Schedule 2 of Practice Direction 14. It assists the relevant authority to undertake the assessment of site contamination risks associated with any proposed change of land use to a more sensitive use and determine if an EPA referral is required.

The site contamination declaration form is prepared by a site contamination consultant. It documents the site contamination investigations undertaken and declares if site contamination exists or may exist or if site contamination is unlikely to exist. It also identifies if site contamination exists or may exist as a result of a class 1 activity (including a class 1 activity within 60 metres of the subject site), class 2 activity, class 3 activity or a notification of site contamination of underground water (including a notification within 60 metres of the subject site).

Q – What resources are available to assist completion of the site contamination declaration form?

A – When completing the site contamination declaration form, the site contamination consultant must determine if a notification of site contamination of underground water affects the subject site or adjacent land (i.e. within 60 metres of the subject site), and if the site is located with a groundwater prohibition area.

The [South Australian Property and Planning Atlas](#) (SAPPA) is a South Australian government map-based application used to view land administration boundaries and obtain information about land.

The SAAPA enables the user to search for an address, suburb, council or postcode and bring up information for that location.

The following site contamination data is included in the SAPPA:

- notifications to the EPA about site contamination that affects or threatens groundwater or an aquifer (pursuant to s83A of the *Environment Protection Act 1993*)
- groundwater prohibition areas in which the taking of water is prohibited where that water is threatened or affected by site contamination (pursuant to s103S of the *Environment Protection Act 1993*).

To locate information about site contamination of underground water, select Layers (from the top tool bar), select Planning and Building (from the left hand column), and then 'planning reference' and then click on the check box for Section 83A Notification.

To locate information about Groundwater prohibition areas, select Layers (from the top tool bar), select Planning and Building (from the left hand column), then 'planning reference' and then click on the check box for Groundwater Prohibition Area.

Be aware that site contamination data in the SAPPa will be periodically updated as new information becomes available.

EPA referral

Q – When must a DA be referred to the EPA?

A – Schedule 9, items 9A and 9AB of the *Planning, Development and Infrastructure (General) Regulations 2017* describe the types of development (including land division) that must be referred to the EPA. Further details are provided in Part 9 of the Planning and Design Code. Information contained in the Site contamination declaration form relating to potentially contaminating activities (and associated activity class), section 83A notification, location of groundwater prohibition areas and section 103P of the *Environment Protection Act 1993* notations on the certificate of title will assist the relevant authority to determine whether an EPA referral is required.

A site contamination declaration form must be submitted for all DAs proposing a change of land use to a more sensitive use or for land division that proposes allotments for a sensitive use.

Q – What does the EPA consider when referred a DA?

A – The purpose of a referral to the EPA is to ensure an appropriate and proportionate assessment of potential site contamination by providing direction to the relevant authority on whether they must consider the advice of either a site contamination consultant or site contamination auditor regarding site suitability. The EPA may direct the imposition of conditions of planning consent if warranted.

The EPA will:

- review site contamination reports and the site contamination declaration form submitted with the DA
- consider the potentially contaminating activities identified, including the complexity, scale and magnitude if former site operations and activities
- consider the realistic human health exposure pathways (for example incidental ingestion of surface soil, inhalation of dust, consumption of home-grown produce) to known chemical substances that would arise from the change of land use
- have regard to any potential remediation required to mitigate exposure risk from human health exposure pathways.

The EPA may request further information when the nature and extent of site contamination is not clearly documented and/or where insufficient information has been provided to inform a decision about the need for remediation.

Q – How will a relevant authority assess site contamination if no referral to the EPA is triggered?

A – A referral to the EPA is only required in the circumstances prescribed by the Regulations and the Planning and Design Code.

If a DA is not required to be referred to the EPA, then assessment of the proposal will be undertaken by the relevant authority. The relevant authority can rely on the Statement of site suitability form prepared by a site contamination consultant to form the opinion that the site is suitable for its intended use.

The Statement of site suitability form will indicate if site suitability is dependent on remediation being undertaken.

The EPA is available to provide informal assistance if Council requires further advice.

General information

Q – What is the difference between a site contamination auditor and a site contamination consultant?

A – A site contamination auditor means a person accredited under Division 4 of Part 10A of the *Environment Protection Act 1993* as a site contamination auditor.

Only a site contamination auditor is accredited to complete a site contamination audit report and a site contamination audit statement.

Further information can be found at:

www.epa.sa.gov.au/environmental_info/site_contamination/auditor_accreditation

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

The EPA recognises certification bodies and schemes that certify site contamination practitioners as suitably qualified and experienced professionals. Further information can be found at:

www.epa.sa.gov.au/environmental_info/site_contamination/assessment_and_remediation/certification-of-practitioners

Q – I've encountered unanticipated site contamination. What do I do?

A – During demolition or preliminary earthworks, contamination may be discovered that was not identified through the development assessment process. Should any unanticipated site contamination be encountered during the course of development, then the provisions of the *Environment Protection Act 1993* apply. When potential contamination is identified the developer (or owner or occupier) of the site should contact a qualified site contamination consultant and ensure compliance with their obligations under the *Environment Protection Act 1993*.

If contamination that affects or threatens groundwater is discovered, it is a legal requirement under section 83A of the *Environment Protection Act 1993* to notify the EPA. Notifying the EPA also enables residents, industry and government to protect current and future generations from contamination caused by historical industrial practices and ensures responsible parties take action to clean-up contamination.

The identification of unexpected contamination should trigger the recommended processes for assessment outlined in Schedule A of the [National Environment Protection \(Assessment of Site Contamination\) Measure \(ASC NEPM\)](#). This trigger and ASC NEPM assessment process and relevant EPA guidelines should ensure that there is adequate protection of human health and the environment wherever site contamination has occurred.

This is important because site contamination is linked to land use (section 5B, *Environment Protection Act 1993*). Bringing about a change in land use can cause site contamination even though the person who brought about the change of use may not be the original polluter.

Q – What is Remediation?

A – Remediation is the treatment, containment, removal or management of chemical substances so that they no longer represent actual or potential harm to human health or the environment.

Remediation may involve activities on or off site, and often requires treatment or disposal of impacted materials. Several methods may be used concurrently, especially where remediation of contaminated groundwater is required.

Should a potentially contaminating activity be identified at a site that is proposed to be changed to a more sensitive use, it may be necessary for remediation to be undertaken. The need for such remediation may be identified through a detailed site investigation, which may provide the basis for a remediation strategy.

The EPA's [Guidelines for the assessment and remediation of site contamination \(2019\)](#) describes the legislative and policy approach to risk-based assessment and remediation of site contamination. The guideline provides information to ensure that assessment and remediation of site contamination is conducted to an appropriate standard.

Remediation of site contamination, when required, should be undertaken prior to a statement of site suitability being issued. Remediation, such as ongoing site management, may also remain necessary following the issue of a site suitability statement – these requirements may be detailed in a Site Management Plan.

Benefits of Site Contamination Assessment

Q – How has the planning system been improved?

A – The government has made changes to make development assessment processes easier, clearer and simpler for applicants of new development while ensuring that processes for addressing site contamination through the planning system are targeted, effective and protect the health and safety of the community.

The new site contamination assessment processes are designed to:

- adopt a risk hierarchy for assessments based on the sensitivity of the proposed use and previous uses of the land
- support the progressive assessment of site conditions where contamination is a factor, reducing the need for audits where they are unnecessary to determine site suitability
- align investigations and remediation with national benchmarks and ensure investigations and remediation are proportionate to the level of site contamination risk
- mandate an EPA referral for proposals of a higher-risk class to provide greater clarity and process certainty for developers.

Q – Why are these changes good for the community?

A – The state government places the highest priority on the health and safety of South Australian communities.

It is critically important that assessment processes for the management of site contamination in our planning system delivers the best outcomes for communities.

The new processes have been designed to maximise certainty-of-process and outcomes for all parties whilst ensuring community health remains protected.

Q – Why are these changes good for Councils?

A – In recent years there has been a lack of process guidance and questions of responsibility and uncertainty around issues of legal liability. This has resulted in inconsistencies about how rules and requirements have been applied to the assessment of site contamination across the 68 councils in South Australia.

The new processes have been designed in consultation with representatives from across the development sector in South Australia, and including the Local Government Association, to ensure process requirements are fair, consistent and cost effective.

Clear triggers for site contamination investigations are identified in Practice Direction 14. A guided, desk-top analysis assists relevant authorities to make determinations and allows for cost savings by reducing the need for legal advice and peer reviews.

Q – Why are these changes good for industry and small business?

A – South Australian industry and business groups have been collaborative partners with the state government in the scoping of first principles, early drafting and scenario testing of the new processes.

It is anticipated that the implementation of the new processes will bring about the following benefits:

- a clear process that can be built into financial models and project timeframes, resulting in value and efficiency benefits

- a risk-based decision-making process
- identifying the types of investigations and reporting for which a site contamination consultant may be engaged
- requiring an audit report in higher-risk scenarios only
- clarifying the scope of works required and preventing unnecessary investigations
- defining the circumstances in which planning authorities refer applications to the EPA.

Conducting ongoing industry collaboration remains a priority, and is reflective of the South Australian Government's commitment to promoting urban renewal, reducing red tape and streamlining regulatory processes. Government will continue to work with industry as the new processes are implemented to ensure new processes deliver anticipated benefits and improved outcomes for all South Australians.

Further Information

For technical enquiries relating to site contamination referral and the application of Practice Direction 14 please contact the EPA at (08) 8204 9075 or email epa.planning@sa.gov.sa.