

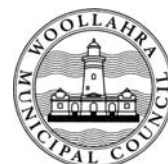
**Woollahra
Municipal
Council**

**Annexure 4
DA Guide**

Contaminated Land Reports

**Guide for preparing
land contamination reports**

21 October 2004



1. Why is an assessment of potential contamination required?

In some situations, the use of land may result in its contamination by chemicals posing a risk to human health or the environment and precluding the later development of that land for particular uses. Uses which have a particular sensitivity to contaminants include uses for residential, education, recreational, child care or hospital activities.

To ensure that land is suitable for the use to which an application relates, contamination reports are required to accompany all development applications.

2. Legislative Framework

In 1998, the then Department of Urban Affairs and Planning introduced *State Environmental Planning Policy No. 55 – Remediation of Land* (SEPP 55) and the accompanying *Managing Land Contamination Planning Guidelines* as a part of the Managing Land Contamination package of reforms. The policy and planning guidelines were established to provide a clear and consistent approach to the management of contaminated land through the planning and development application process.

SEPP 55 applies to all land in the state of New South Wales. The policy requires the planning authority (Council) to consider contamination and remediation in the assessment of development and rezoning applications.

3. What type of contamination investigation is required?

Contamination investigations can be classified into the following reporting stages:

- Initial site evaluation
- Stage 1 Preliminary site investigation
- Stage 2 Detailed site investigation
- Stage 3 Remedial action plan
- Stage 4 Validation and monitoring

Reports may be presented separately or combined in various ways. For example, if a site has had a known contaminating activity such as a service station, the applicant may wish to combine the preliminary and detailed site investigations. However, each report must stand alone and contain sufficient information to be readily understood.

Investigation of potential site contamination is to be undertaken by a suitably qualified environmental consultant.

The reporting requirements of each investigation stage are presented in the following sections. This information has been sourced from the *Guidelines for Consultants Reporting on Contaminated Sites* (1997) prepared by the NSW Environment Protection Authority (EPA). For further information on the investigation stages please refer to the guidelines.

3.1 Initial site evaluation

What is an initial site evaluation?

An initial site evaluation is an assessment of readily available historical information regarding the site and adjoining properties.

The initial site evaluation should provide details of the:

- present use of the site
- date that the present use commenced
- previous uses of the site (if known)
- present and previous uses of the adjoining land (if known)
- whether the present or previous uses of the site and adjoining lands were potentially contaminating (ie: listed in Schedule 1 of this guide)
- whether there has been any testing or assessment of the site for land contamination.

The applicant must include the source of the information in the initial site evaluation. For example, information may be sourced from Council's property files, local history library and oral history.

The purpose of an initial site evaluation is to identify past and present uses of the site and adjoining land, assess the likelihood of contamination, establish whether a risk is present and identify whether further investigation is required.

Note: The initial site evaluation report may be included as part of the statement of environmental effects.

When is an initial site evaluation report required?

An initial site evaluation report is required for all development applications **except** for those applications requiring a preliminary site investigation (Stage 1) listed below.

3.2 Stage 1 Preliminary site investigation report

What is a preliminary site investigation?

The purpose of a preliminary site investigation is to identify any past or present potentially contaminating activities that have been undertaken on the site and adjoining land, provide a preliminary assessment of potential contamination and, if required, provide the basis for a detailed site investigation.

The preliminary site investigation report should:

- identify all past and present potentially contaminating activities
- identify potential contamination types
- discuss the site condition
- provide a preliminary assessment of site contamination
- assess the need for further investigations.

Schedule 2 of this guide lists potential sources of site history information.

Where contaminating activities are suspected to have had an impact on the land, sampling and analysis will be required to confirm and support any conclusions reached from the preliminary investigation.

When is a preliminary site investigation report required?

A preliminary site investigation is required:

1. for all land within an investigation area;
2. for all development applications for a change of use to residential, educational, recreational, child care purposes or hospital where a potentially contaminating activity identified in Schedule 1 is known to have been located on the site or adjoining land in the past; or
3. when the initial site evaluation indicates that potentially contaminating activities have been undertaken on the site and adjoining land; or
4. when the initial site evaluation is inconclusive and Schedule 1 activities were permissible under historical zonings.

3.3 Stage 2 Detailed site investigation report**What is a detailed site investigation?**

The detailed site investigation defines the nature, extent and degree of any contamination; assesses the potential risk to human health and the environment posed by the contaminants; and is to obtain sufficient information to develop the remedial action plan (if required).

The detailed site investigation is to provide comprehensive information on:

- issues raised in the preliminary investigation,
- the type, extent and level of contamination and assess:
 - contaminant dispersal in air, surface water, groundwater, soil and dust,
 - the potential effects of contaminants on public health, the environment and building structures,
 - off-site impacts on soil, sediment and biota (where applicable), and
 - the adequacy and completeness of all information available to be used in making decisions on remediation.

When is a detailed site investigation report required?

A detailed site investigation report is required when a preliminary site investigation finds the site and/or adjoining land may be contaminated or where a Schedule 1 activity is known to have been undertaken on the site and adjoining land in the past.

3.4 Stage 3 Remedial action plan report**What is a remedial action plan?**

A remedial action plan (RAP) establishes the remediation objectives and details the strategy for remediating the site to make it suitable for the proposed use. The RAP is to demonstrate how the applicant proposes to reduce the risks of contamination to acceptable levels and achieve the clean-up objectives for the site.

The RAP is to:

- set remediation goals that ensure the remediated site will be suitable for the proposed use and will pose no unacceptable risk to human health or to the environment,
- document in detail all procedures and plans to be implemented to reduce risks to acceptable levels for the proposed site use,

- establish the environmental safeguards required to complete the remediation in an environmentally acceptable manner,
- identify and include proof of the necessary approvals and licences required by regulatory authorities.

When is a remedial action plan report required?

A remedial action plan report is required when a site has been identified as being contaminated during the detailed site investigation and requires remediation to make the site suitable for the proposed use.

Note: Development consent is required for all remediation works in Woollahra. If a site is known to be contaminated, a combined development application for the proposed development and remediation may be lodged. Alternatively, if it is identified that the site is not suitable for the proposed use during the investigation process, a development application for remediation may be lodged with a remedial action plan. The original development application will be put on hold until the development application for remediation has been completed and site validation has occurred.

3.5 Stage 4 Validation and monitoring

This level of investigation can be broken into two reporting requirements: site validation and, where required, ongoing site monitoring.

What is a validation report?

A validation report details the validation results of the remedial action undertaken on the site. Validation is required to confirm statistically that the remediated site complies with the clean-up criteria set for the site as stated in the RAP. Confirmation that all EPA and other regulatory authorities' licence conditions and approvals have been met are to be included in the validation report, ie, documentary evidence confirming that the off-site disposal is done in accordance with the RAP.

Where targets have not been achieved, reasons must be stated and additional site work proposed to achieve the objectives stated in the RAP.

When is a validation report required?

A validation report is required for all sites where remedial action, detailed in a RAP, has been undertaken. The site must be validated to ensure that the objectives stated in the RAP have been achieved and that the site is suitable for the proposed use.

What is a site monitoring report?

A site monitoring report details the proposed monitoring strategy, parameters to be monitored, monitoring locations, frequency of monitoring and reporting requirements.

When is a site monitoring report required?

A site monitoring report is required where a full clean-up is not feasible, or on-site containment of contamination is proposed, and an ongoing monitoring program is required.

4. Site audit

What is a site audit?

A site audit is an independent review of any or all stages of the site investigation process, conducted in accordance with the *Contaminated Land Management Act 1997* (CLM Act). A site audit may review a preliminary site investigation, a detailed site investigation, a remedial action plan, or a validation and monitoring report.

A site audit will lead to the provision of a certification called a site audit statement, stating for what use the land is suitable. Only site auditors accredited by the EPA can issue a site audit statement. Site auditors are accredited by EPA under the CLM Act. On receipt of a site audit statement, the s149 certificate applying to the land will be updated.

Site auditors can assist the planning authority by commenting on or verifying information provided by the applicant in relation to site assessment, remediation or validation, such as whether they have adhered to relevant standards, procedures and guidelines. Engaging a site auditor can also provide greater certainty about the information on which the planning authority is basing its decision, particularly where sensitive uses are proposed on land that may be contaminated and a statement about the suitability of the site is required.

When is a site audit required?

Council can request a site audit at any stage in the contamination investigation process. As a general rule, Council will request a site audit when the RAP proposes to cap contaminated material on site.

As a general principle a site audit is only necessary when Council:

- believes on reasonable grounds that the information provided by the applicant is incorrect or incomplete;
- wishes to verify that the information provided by the applicant adheres to appropriate standards, procedures and guidelines;
- does not have the internal resources to conduct its own technical review.

5.0 Investigation of potential contamination and other legislation

5.1 SEPP 55 and deferred commencements

Generally, deferred commencements will **not** be considered in the management of contamination. Where land contamination is identified as a potential issue, a full assessment will be required before consent is granted.

5.2 SEPP 4 - Development Without Consent and Miscellaneous Complying Development

SEPP 55 prevails over SEPP 4 except for development referred to in clauses 11, 11A, 11C and 11 E of SEPP 4.

5.3 SEPP 60 - Exempt and Complying Development

SEPP 55 prevails over the provisions of SEPP 60.

Development that requires any remediation is not considered to be 'complying development'. A construction certificate will not be issued without a validation report, which has first gained the approval of Council.

Schedule 1 – Some activities that may cause contamination

- Agricultural / horticultural activities
- Airports
- Asbestos production and disposal
- Chemical manufacture and formulation
- Defence works
- Drum re-conditioning works
- Dry cleaning establishments
- Electrical manufacturing (transformers)
- Electroplating and heat treatment premises
- Engine works
- Explosive industry
- Gas works
- Iron and steel works
- Landfill sites
- Metal treatment
- Mining and extractive industries
- Oil production and storage
- Paint formulation and manufacture
- Pesticide manufacture and formulation
- Power stations
- Railway yards
- Scarp yards
- Service stations
- Sheep and cattle dips
- Smelting and refining
- Tanning and associated trades
- Waste and storage treatment
- Wood preservation

Schedule 2 - Potential sources of site history information

Some potential sources of information about past and current activities that may indicate land contamination are listed below.

- **Environment Protection Authority**
 - Scheduled premises under the various Acts currently or previously administered by the EPA
 - Section 35 Notices
 - Unhealthy Building Land Notices
 - Sites which are likely to be contaminated and not regulated by the EPA
- **Sydney Water Corporation**
- **WorkCover Authority**
- **Pacific Power**
- **Noxious Trades Act Register**
- **Local History Library**

Local History search of a particular site and adjoining sites for information which may indicate previous activities as defined in Schedule 1 could involve the following.

- Sand's Sydney and New South Wales Directory 1858 to 1932/3
- Local history publications
- Past and present telephone books
- Long term residents
- Current and past site workers
- Aerial photographs
- Council records / development and building applications - a check of sites for existing or past uses and allowable uses as defined in Schedule 1
- Council property files; for information indicating a site having existing, or past, activities as defined in Schedule 1 or sites known, or suspected, to contain contaminated waste landfill. (for any correspondence, previous investigations and land use restrictions concerning contamination issues; whether the site is regulated via licence or other mechanisms)
- Current and past zonings applying to the land (contamination is more likely to have occurred on a site currently, or was previously, zoned for industrial, agricultural or defence purposes).

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