



POLICY FOR THE MANAGEMENT OF DEVELOPMENT ON CONTAMINATED LAND

Including Development Control Plan
No. 23 - Development on
Contaminated Land (in appendix 3)

Adopted by Council on September 2005
In force from May 2006

AMENDMENTS

Amendment No.	Description	Adopted by Council	Date Effective
1	Amendments aimed at clarifying the processes associated with developing potentially contaminated sites. Four sites have been identified on a map that have been used in the past for landfill.	2 September 2003	10 September 2003

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SECTION 1: GENERAL

1.1 Introduction

Council has developed this Policy in relation to the identification, control and management of contaminated land. The main aims of the Policy are to ensure that when land is developed, the potential of contamination affecting human health and the environment are properly addressed. This Policy applies to development on land that is or may be contaminated (see also page 14 DCP Procedure Statement).

Attached to the Policy in Appendix 3 is Strathfield Development Control Plan No. 23 - Development on Contaminated Land. DCP No. 23 applies to Development Applications on contaminated land and which will be taken into consideration under Section 79C of EP&A Act 1979 in assessing the application.

1.2 Name of this Policy

The Policy was adopted by Council on 20 March 2001 and came into operation by public notification on 4 April 2001.

This Policy may be cited as "Strathfield Municipal Council – Policy for the Management of Development on Contaminated Land".

1.3 Objectives

The objectives of this Policy are to:

1. Implement a cautionary approach by identifying and dealing with contamination issues at an early stage in the planning process in order to prevent harm and avoid unnecessary restrictions on land use.
2. Provide information to support decision making and inform the community of procedures relating to the control and management of contaminated land.
3. Ensure Council does not incur any liability in exercising its planning functions in relation to contaminated land by adhering to policies substantially in accordance with relevant state planning guidelines.

1.4 Purpose of the Policy

This Policy forms the basis for the control and management of contaminated land within the Strathfield local government area. The Policy has been prepared in accordance with State Environmental Planning Policy No.55 – Remediation of Land (SEPP55) and the *Managing Land Contamination: Planning Guidelines* prepared by the Department Urban Affairs and Planning (DUAP) and the Environment Protection Authority (EPA)

In accordance with the *Managing Land Contamination: Planning Guidelines*, this Policy provides the framework for the integration of land contamination management controls and polices into the local planning and development process.

1.5 Application

This Policy applies to all land within the Strathfield Local Government Area. The Policy supplements SEPP55 which specifies when development consent is or is not required for remediation works. SEPP55 also specifies that development consent is required where remediation work is carried out or is to be carried out in a manner that does not comply with a policy made by Council under the *Contaminated Land Planning Guidelines*. This document represents Council's Policy under the *Contaminated Land Planning Guidelines*. In the event of an inconsistency between this Policy and SEPP55 the latter will prevail.

This policy will also be strictly applied to any lands within the Strathfield Local Government Area that may be impacted by groundwater contamination from known landfill sites.

The Environment Protection Authority's intervention in relation to contaminated land is triggered when land contamination poses a significant risk of harm to public health or the environment (s. 7 *Contaminated Land Management Act 1997*). Generally, sites not posing a significant risk of harm will be dealt with by Strathfield Council under the provisions of the *Environmental Planning and Assessment Act 1979*, in accordance with *Managing Land Contamination: Planning Guidelines* and SEPP 55.

1.6 Use of this Policy

This policy may be used by:

1. Owners and prospective purchasers of property investigating whether land may be contaminated and persons intending to carry out development on land;
2. Persons intending to carry out remediation of land;
3. Persons carrying out remediation works; and
4. Independent auditors, contaminated land specialists and Council planning officers.

The document is divided into 6 sections, which apply to the different users of the Policy. A referral table is provided below as a quick reference to direct you to the relevant sections of the Policy for your purposes. Section 1 dealing with general requirements is not included in the following table.

User	Relevant sections of the Policy
<p>Owner or prospective purchaser investigating whether land may be contaminated and persons intending to carry out development on land.</p>	<p>Section 6: Council Records and Community Information</p> <p>This section details what records Council maintains, its legal obligations in relation to land contamination and how to access this information.</p> <p>Section 2: Council’s Decision Making Process (Rezoning, Subdivision and Development Applications)</p> <p>This section outlines how contamination issues will be considered in any rezoning, subdivision or development process.</p>
<p>Persons who are intending to carry out remediation.</p>	<p>Section 3: Council’s Requirements for Remediation</p> <p>This section specifies what type of approval is required for proposed remediation works.</p>
<p>Persons carrying out remediation of land.</p>	<p>Section 4: Site Management – Remedial Action Plans (Remediation Development Controls)</p> <p>This section provides development controls for the carrying out of remediation works.</p>
<p>Independent auditors, contaminated land specialists and Council planning officers.</p>	<p>Section 5: Independent Auditing</p> <p>This section details under what circumstances Council may require an independent site audit and what information a site audit is to contain.</p>

1.7 Abbreviations and Definitions

Abbreviations

ANZECC	Australian and New Zealand Environment and Conservation Council
BTEX	Benzene/Toluene/Ethylbenzene/Xylene
DA	development application
d(BA)	Decibels – A weighted
DCP	development control plan
DLWC	Department of Land and Water Conservation
EPA	NSW Environment Protection Authority
HCB	Hexachlorobenzene
IMROC	Inner Metropolitan Regional Organisation of Councils
LA	sound pressure level – ‘A’ weighting
LEP	local environmental plan
LGA	local government area
NEHF	National Environmental Health Forum
RAP	remedial action plan
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Poly chlorinated biphenol
SEPP 55	State Environmental Planning Policy No. 55 – Remediation of Land
TPH	total petroleum hydrocarbons

Definitions

category 1 remediation work is defined in clause 9 of SEPP55 – Remediation of Land.

category 2 remediation work is defined in clause 9 of SEPP55 – Remediation of Land.

Contaminate and **contamination** are defined in section 5 of the Contaminated Land Management Act 1997.

contaminated land planning guidelines means guidelines under section 145C of the Environmental Planning and Assessment Act, 1979.

EPA means the NSW Environment Protection Authority constituted by the Protection of the Environment Administration Act 1991.

DCP means Development Control Plan.

investigation area means land declared to be an investigation area by a declaration in force under Division 2 of Part 3 of the Contaminated Land Management Act 1997.

LEP means Local Environmental Plan.

preliminary investigation, in relation to land, means a preliminary investigation referred to in the contaminated land planning guidelines.

remediation means:

- (a) removing, dispersing, destroying, reducing, mitigating or containing the contamination of any land, or
- (b) eliminating or reducing any hazard arising from the contamination of any land (including by preventing the entry of persons or animals on the land).

Note: This definition of remediation corresponds to parts of the definition of remediation in the Contaminated Land Management Act 1997.

remediation order means a remediation order made by the Environment Protection Authority and in force under Part 3 of the Contaminated Land Management Act 1997.

remediation site means:

- (a) land declared to be a remediation site by a declaration in force under Division 3 of Part 3 of the Contaminated Land Management Act 1997, or
- (b) premises:
 - (i) in respect of which there is in force a notice under section 35 of the Environmentally Hazardous Chemicals Act 1985 requiring prescribed remedial action to be taken, or
 - (ii) that are the subject of prescribed remedial action (whether being undertaken by the Environment Protection Authority or by another public authority at the direction of that Authority) under section 36 of that Act.

site audit is defined in Section 5.2 of this Policy.

1.8 Further Information

Where to Obtain Further Information

- ❑ Council's Senior Environmental Health Officer, phone 9746-0431.
- ❑ Technical details of land investigation procedures are available in the Environment Protection Authority's (EPA) *Guidelines for Consultants Reporting on contaminated Sites 1997*.
- ❑ EPA's website at www.epa.nsw.gov.au for a list of EPA accredited Site Auditors.

Disclaimer

Strathfield Council has adopted this policy and prepared this document in good faith exercising all due care and attention, but no representation or warranty, express or implied, is made as to the relevance, accuracy or completeness or fitness for purpose of this document in respect of any particular user's circumstances. Users of this document should satisfy themselves concerning its application to, and where necessary.

SECTION 2. COUNCIL'S DECISION MAKING PROCESS

In determining all rezoning, and development applications including subdivisions, Council will consider the possibility of land contamination and the implications it has on any proposed or permissible future uses of the land. A precautionary approach will be adopted to ensure that any land contamination issues are identified and dealt with early in the planning process.

2.1 Initial Evaluation

Council will conduct an initial evaluation as part of the assessment process of all development proposals to determine whether contamination is an issue, and whether sufficient information is available for Council to carry out its planning functions in good faith. The initial evaluation will be based on readily available factual information provided by the applicant and information available to Council such as previous investigations about contamination on the land, previous zoning and uses of the subject land, and restrictions relating to possible contamination such as notices issued by the EPA. Council may also conduct a site inspection of the subject land.

2.2 Council Procedures for Rezoning Applications

SEPP 55 requires Council to consider contamination issues in rezoning proposals (including when Council is the proponent of the rezoning). Council will not include land in a zone that would permit a change of use of the land from the existing use unless:

- Council has considered whether the land is contaminated; and
- if the land is contaminated, Council is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for all the purposes for which land in the zone concerned is permitted to be used; and
- if the land requires remediation to be made suitable for any purpose for which land in that zone is permitted to be used, Council is satisfied that the land will be so remediated before the land is used for that purpose. (eg. satisfied by provisions in LEP or DCP that contamination issues will be addressed at DA stage)

In accordance with Clause 6(4) of SEPP 55 Council will require a preliminary investigation to be submitted with zoning and rezoning applications where the land concerned is:

“(a) land that is within an investigation area;

“(b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out;*

(c) to the extent to which it is proposed to carry out development on it for residential, educational, recreational or child care purposes, or for the purposes of a hospital-land:

(i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out; and*

(ii) on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge (or incomplete knowledge).”

[NOTE: Table 1* in the *Managing Land Contamination Planning Guidelines* 1998, Department of Urban Affairs and Planning & NSW Environment Protection Authority which is reproduced in Appendix 1.]

In addition to the requirements outlined in clause 6(4) of SEPP 55, Council will also require a preliminary investigation to be submitted if Council has reasonable grounds to believe the land may be contaminated because of the land's history, condition, or other information known to Council.

In the case of lands that may be impacted by groundwater contamination from known landfill sites, Council will always require a detailed site investigation report and where necessary a Remedial Action Plan.

The objectives of a preliminary investigation are to identify any past or present potentially contaminating activities and to provide a preliminary assessment of site contamination. The preliminary investigation typically contains a detailed appraisal of the site history and a report based on visual site inspection and assessment. Where information on site contamination is limited, some soil sampling may be warranted.

The preliminary site contamination investigation shall be carried out in accordance with the requirements of the relevant NSW EPA Guidelines. The proponent is responsible for engaging a suitably qualified consultant to undertake the preliminary site contamination investigation. In addition, the proponent is responsible for all costs borne in engaging the consultant and site auditor, if requested by Council (see Chapter 5 – Independent Auditing).

A list of information sources that may be useful in understanding the history of the site is included in Appendix 2. Applicants may also request Council to perform a search of its records to determine previous approved developments at the site (see Chapter 6 – Council Records and Community Information).

If Council is satisfied that the preliminary site contamination investigation justifiably concludes that the site is suitable for the proposed zoning, then Council will not require any further investigations to be conducted. *Note:* This does not mean that a site is clean but merely that the site is suitable for a particular end use.

Council's procedure for considering land contamination issues for rezoning applications is shown in Figure 1.

2.2.1 Spot Rezoning (single allotment or adjoining allotments in same ownership)

When Council receives a spot rezoning application where a specific development or land use associated with the proposal is known, Council may also require a detailed investigation to be undertaken prior to Council determining the rezoning application.

The objectives of a detailed site investigation are to:

- define the extent and degree of contamination;
- assess the potential risk posed by contaminants to human health and the environment; and
- obtain sufficient information for the development of a Remedial Action Plan (if necessary). This will include the condition of the groundwater aquifer, and the impact of any contaminated groundwaters likely to be encountered during any part of the development.

Council will require a detailed site contamination investigation (DSI) to be undertaken when the results of the preliminary investigation demonstrate the potential for, or existence of contamination which may not be suitable for the proposed zoning of the land. Council will also require a DSI for any land that may be impacted by contamination from any known landfill site. In some cases Stage 1 and Stage 2 investigations may be combined where the land is known to contain or have contained a potentially contaminating activity.

The detailed site contamination investigation shall be carried out in accordance with the requirements of the relevant NSW EPA Guidelines. The proponent is responsible for engaging a suitably qualified consultant to undertake the detailed site contamination investigation. In addition, the proponent is responsible for all costs borne in engaging the consultant and site auditor (see Chapter 5 – Independent Auditing).

The detailed site contamination investigation should include a statement which describes whether the site is suitable for the proposed use, or if remediation is necessary to make the site suitable. If remediation is required, the report should also list the feasible remediation options available to remediate the site.

A Remedial Action Plan (RAP) may be required at this stage

The objectives of a remedial action plan (RAP) are to:

- set remediation objectives;
- determine the most appropriate remedial strategy;
- identify necessary approvals that need to be obtained from regulatory authorities.

The RAP should document the remedial works to be undertaken at the site and also contain an environmental management plan and occupational health and safety plan for the remedial works.

Council will require the submission of a RAP if the detailed investigation concludes that the land is not suitable for the proposed zoning in its present state. Prior to determining any future development application, Council must be satisfied that remedial measures have been, or will be undertaken in accordance with the submitted RAP, to make the site suitable for the proposed use.

Following completion of remedial work, Council will require a validation and monitoring report to be submitted after remediation works have been completed, and prior to the commencement of building construction works. This will normally be achieved by Council placing a condition on any development consent granted. Further details are provided in DCP No. 23 which is included in Appendix 3.

2.2.2 General Rezoning (multiple allotments large areas and the like)

When Council receives a rezoning application that covers more than one property, or Council itself proposes generalised rezoning, it may be difficult for Council to be satisfied that every part of the land is suitable for the permissible use(s) at the rezoning stage. In these circumstances Council will consider the findings of a preliminary investigation or a detailed site investigation, as the case may be, and may include provisions in a LEP or DCP to ensure that the potential for contamination and the suitability of the land for any proposed use is further addressed prior to the redevelopment of the land.

2.3 Council Procedures for Subdivision and Development Applications

For requirements and procedures for dealing with Development Applications on contaminated land, please refer to Appendix 3: Strathfield DCP No. 23.

Figure 2 sets out the procedures Council will follow when dealing with Development Applications.

FIGURE 1: Council's procedure for considering land contamination issues for zoning or rezoning applications.

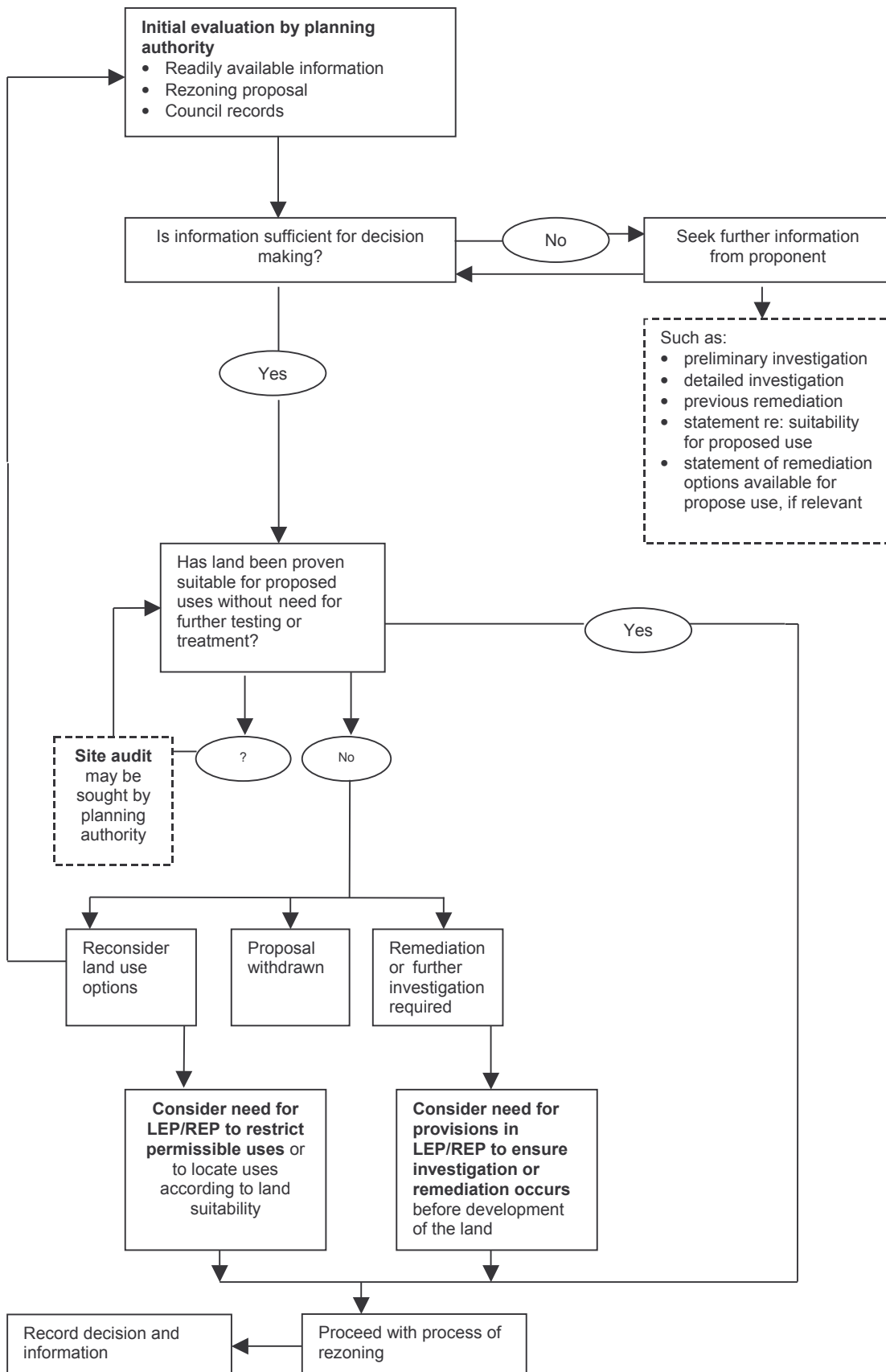
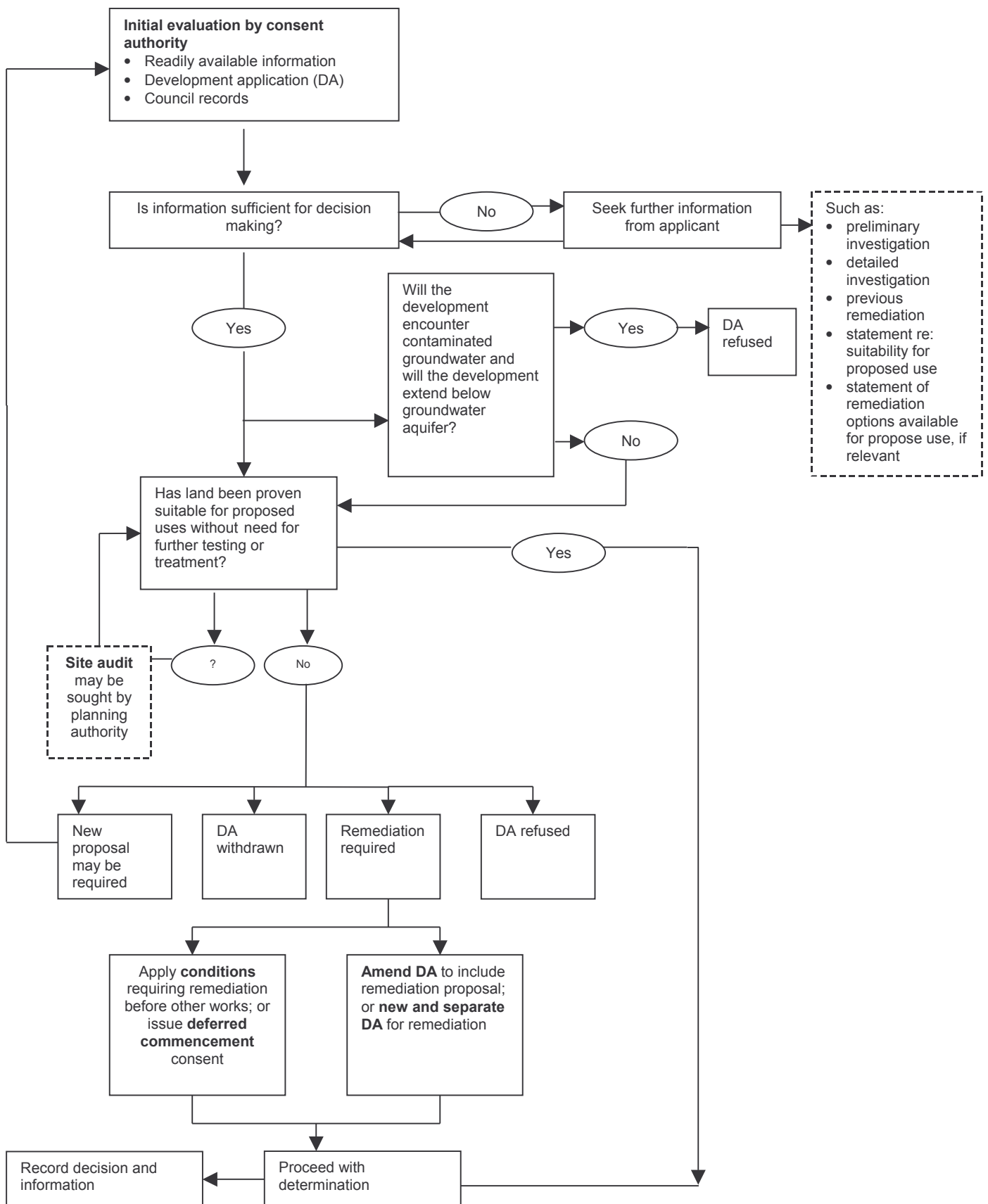


FIGURE 2: Council’s procedure for considering land contamination issues for subdivision and development applications.



SECTION 3: COUNCIL'S REQUIREMENTS FOR REMEDIATION

SEPP 55 specifies when consent is required, and when it is not required, for remediation work. This section deals with category 1 (requires development consent) and category 2 (does not require development consent) remediation work as defined in SEPP 55, and outlines the site management provisions for category 2 remediation work. In accordance with clause 9(f) of SEPP 55, remediation work that is not carried out in accordance with the site management provision contained in Section 4 of this Policy is category 1 remediation work which requires Council consent.

It is noted that where it has been found that the land should be remediated before development occurs, such remediation could fall within category 2 and in itself not require Council's consent. However, a self initiated remediation must still achieve the appropriate standard and comply with minimum site management provisions.

Council's procedure for considering site remediation proposals is shown in Figure 3.

3.1 Category 1 Remediation Work

Category 1 remediation work, as defined in clause 9 of SEPP 55, is work that requires consent. Category 1 remediation work which may also be designated development or State Significant Development is advertised development. All category 1 remediation work must be advertised for 30 days pursuant to s. 29A of the Environmental Planning and Assessment Act.

If remedial works constitute category 1 remediation work, the applicant may either amend their current application to include a remediation proposal (if applicable) or lodge a new and separate development application for the remediation works.

3.2 Category 2 Remediation Work

Category 2 remediation work is all remediation work that is not category 1 remediation work. In accordance with clause 16 of SEPP 55, prior notice of category 2 remediation work to Council is required at least 30 days before commencement of works. It is the owners responsibility to notify any Category 2 remediation work to Council.

3.3 Notification Requirements

3.3.1 Prior Notice

The notification for category 2 remediation works shall:

- provide the name, address and telephone number of the person who has the duty of ensuring that the notice is given;
- provide details of the remediation work (including a RAP, where appropriate, and a Soil & Water Management Plan);
- explain why the work is category 2 remediation work by reference to SEPP55 and this Policy;
- specify the land on which the work is to be carried out and provide a map of the location of the land; and
- provide estimates of the dates for the commencement and completion of the work.

In addition to the information that must be submitted to Council in clause 16(2) of SEPP 55, Council will require the following information to be submitted at least 14 days prior to the commencement of category 2 remediation works:

- copies of any Preliminary Investigation, Detailed Investigation and Remedial Action Plan for the subject site.
- contact details for the remediation contractor and party responsible for ensuring compliance of remediation work with all relevant regulatory requirements (if different to remediation contractor).

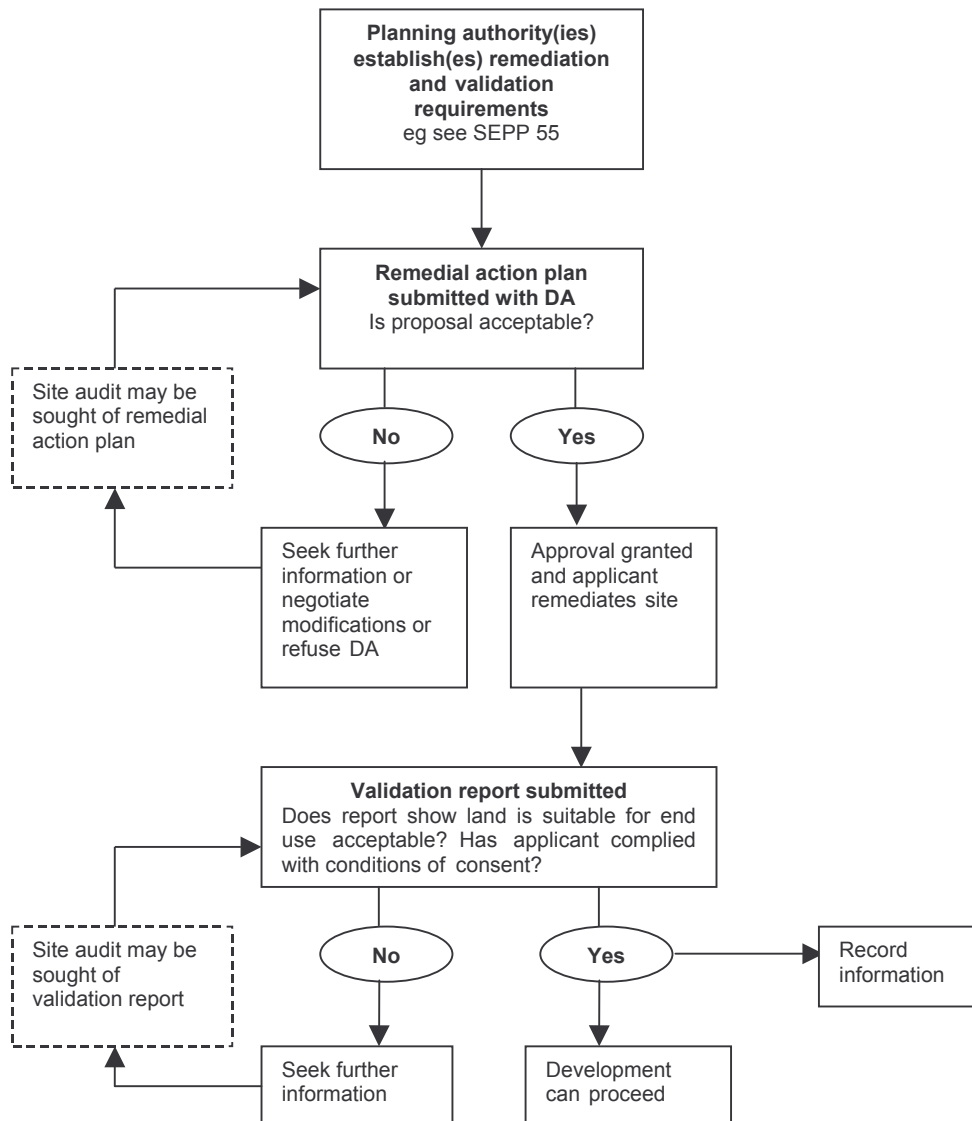
3.3.2 Notice of Completion

Notice of the completion of remediation work must be given to Council within 30 days after the completion of the work. The notification shall:

- be in writing and be signed by the person who carried out the work;
- provide the person's name, address the business telephone number;
- provide details of the person's qualifications to carry out the work;
- specify the land on which the work was undertaken and provide a map of the land and the location of the work;
- state the date when the work was completed;
- specify the existing or proposed use of the land, and the substances, that contaminated it in such a way as to present a risk of harm to human health or some other aspect of the environment;
- specify the use(s) of the land immediately before the work started;
- describe the method of remediation used in the work and the guidelines that were complied with in the work;
- specify the standard of remediation achieved;
- state what actions must be maintained in relation to the land after the completion of the remediation work if the standard of remediation achieved is to be maintained.

Council will need to be satisfied that the site is suitable for the proposed use when considering any subsequent development applications for the subject site. Accordingly, it is recommended that comprehensive records are maintained during the remediation works including any RAP's or validation reports.

FIGURE 3: Council's procedure for considering site remediation proposals.



SECTION 4: SITE MANAGEMENT - REMEDIAL ACTION PLANS

Council has identified a number of site management provisions for the conduct of category 2 remediation. These provisions have been formulated to ensure that category 2 remediation work does not adversely impact on the environment or public amenity.

All category 2 remediation works shall be conducted in accordance with the site management provisions listed below. The site management provisions apply to all of the Strathfield Council area. Category 2 remediation work that does not comply with the site management provisions outlined in this section will be classified as category 1 remediation work and will require consent.

Development applications lodged for category 1 remediation works should identify any areas of non-compliance with the site management provisions listed below and identify any alternative site management measures to be implemented.

Note: *It is the responsibility of those remediating a site to ensure compliance with all relevant environmental legislation and regulations. Compliance with the site management provisions outlined below does not imply that all relevant environmental legislation and regulations have been complied with. Non-compliance with relevant environmental legislation and regulations may incur on-the-spot fines of up to \$1500 for minor offences, or fines up to \$1 Million and 7 years imprisonment for more serious offences.*

4.1 Hours of Operation

All remediation work shall be conducted within the following hours:

- (a) restricted to 7am and 5pm (Eastern Standard Time) and 7am to 7pm (Daylight Saving Time).
- (b) restricted to Mondays to Saturdays (inclusive).
- (c) prohibited on Sundays and public holidays.

4.2 Soil and Water Management

The NSW Department of Housing Blue Book “*Managing Urban Stormwater - Soil and Conservation*” August 1998 outlines the general requirements for the preparation of a soil and water management plan. All remediation works shall be conducted in accordance with a soil and water management plan. A copy of the plan shall be kept on-site and made available to Council Officers on request. All erosion and sediment measures must be maintained in a functional condition throughout the remediation works.

A summary of the soil and water management measures for category 2 remediation work in relation to stockpiles, site access, excavation pump-out, landscaping/ rehabilitation and bunding are discussed below:

4.2.1 Stockpiles

- ❑ No stockpiles of soil or other materials shall be placed on footpaths or nature strips unless prior Council approval has been obtained.
- ❑ All stockpiles of soil or other materials shall be placed away from drainage lines, gutters or stormwater pits or inlets and be provided with adequate sediment control measures to prevent water pollution.
- ❑ All stockpiles of soil or other materials likely to generate dust or odours shall be covered and kept moist.
- ❑ All stockpiles of contaminated soil shall be stored in a secure area and be covered if remaining more than 24 hours.

4.2.2 Site Access

Vehicle access to the site shall be stabilised to prevent the tracking of sediment onto the roads and footpath. Soil, earth, mud or similar materials must be removed from the roadway by sweeping, shovelling, or a means other than washing, on a daily basis or as required. Soil washings from wheels shall be collected and disposed of in a manner that does not pollute waters.

4.2.3 Excavation Pump-out

All excavation pump-out water must also be analysed for suspended solid concentrations, pH and any contaminants of concern identified during the preliminary or detailed site investigation, prior to discharge to the stormwater system. The analytical results must comply with relevant EPA and ANZECC standards for water quality.

Other options for the disposal of excavation pump-out water include disposal to sewer with prior approval from Sydney Water, or off-site disposal by a liquid waste transporter for treatment/disposal to an appropriate waste treatment/processing facility.

4.2.4 Landscaping/Rehabilitation

All exposed areas shall be progressively stabilised and revegetated on the completion of remediation works. For any Category 1 remediation work, this may require a landscape restoration plan with the required development application.

4.2.5 Bunding

All landfarming areas for hydrocarbon contaminated soils shall be bunded to contain surface water runoff from the landfarm areas and to prevent the leaching of hydrocarbons into the subsurface. All surface water discharges from the bunded areas to Council's stormwater system shall not contain detectable levels of TPH or BTEX.

4.3 Noise

Category 2 remediation work shall comply with the Environment Protection Authority Environmental Noise Manual for the control of construction site noise which specifies that:

- ❑ For a cumulative period of exposure to construction activity noise of up to four weeks, the LA10 (15 minutes) emitted by the works to specific residences should not exceed the LA90 background level by more than 20 dBA.
- ❑ For a cumulative construction noise exposure period of between four to 26 weeks, the emitted LA10 noise level should not exceed the LA90 level by more than 10 dBA.
- ❑ For a cumulative construction noise exposure period greater than 26 weeks, the emitted LA10 noise level should not exceed the LA90 level by more than 5 dBA.

All equipment and machinery shall be operated in an efficient manner to minimise the emission of noise. Use of silencers and mufflers for certain machinery and equipment to achieve this may be required by Council.

4.4 Vibration

The use of any plant and/or machinery shall not cause vibrations to be felt or capable of being measured at any adjoining or nearby premises.

4.5 Air Quality

4.5.1 Dust Control

Dust emissions shall be confined within the site boundary. The following dust control procedures may be employed to comply with this requirement:

- ❑ erection of dust screens around the perimeter of the site;
- ❑ securely covering all loads entering or exiting the site;
- ❑ use of water sprays across the site to suppress dust;
- ❑ covering of all stockpiles of contaminated soil remaining more than 24 hours; and
- ❑ keeping excavation surfaces moist.

4.5.2 Odour Control

No odours shall be detected at any boundary of the site during remediation works by an authorised Council Officer relying solely on sense of smell. The following procedures may be employed to comply with this requirement:

- ❑ use of appropriate covering techniques such as the use of plastic sheeting to cover excavation faces or stockpiles;
- ❑ use of fine mist sprays;
- ❑ use of a hydrocarbon mitigating agent on the impacted areas/materials; and
- ❑ adequate maintenance of equipment and machinery to minimise exhaust emissions.

Volatile or semi-volatile compounds that could generate odours include monocyclic aromatic hydrocarbons (styrene, benzene, toluene, xylene, ethyl benzene, butyl benzene), polycyclic aromatic hydrocarbons (PAHs), hydrogen sulphide, hydrogen cyanide, pesticides, PCBs, and herbicides.

Records of volatile emissions and odours shall be logged, kept on-site and made available to Council Officers on request. Discharges from soil vapour extraction systems shall be regularly monitored in order to determine the mass of hydrocarbons that are being discharged to the atmosphere. Contingency measures for the collection and treatment of hydrocarbon offgas shall be put in place prior to the commissioning of the soil vapour extraction systems. All discharge vents from soil vapour extraction systems shall be located a minimum of 50 metres from any residential property boundary, road or recreational area. No material shall be burnt on-site.

4.6 Groundwater

A licence shall be obtained from the Department of Land and Water Conservation for approval to extract groundwater under the provisions of *Part V of the Water Act, 1912*.

Where land may be impacted by contaminated groundwaters from known landfill sites, the proponent will need to investigate the groundwater table and the likelihood of aquifer contamination.

Groundwater shall be analysed for pH and any contaminants of concern identified during the preliminary or detailed site investigation, prior to discharge to the stormwater system. The analytical results must comply with relevant EPA and ANZECC standards for water quality.

Other options for the disposal of groundwater include disposal to sewer with prior approval from Sydney Water, or off-site disposal by a private liquid waste transporter for treatment/disposal to an appropriate waste treatment/processing facility.

4.7 Transport

All haulage routes for trucks transporting soil, materials, equipment or machinery to and from the site shall be selected to meet the following objectives:

- comply with all road traffic rules;
- minimise noise, vibration and odour to adjacent premises; and
- utilise State Roads and minimise use of local roads.

Category 2 remediation work shall ensure that all site vehicles:

- conduct deliveries of soil, materials, equipment or machinery during the hours of remediation work identified in Section 4.1;
- securely cover all loads to prevent any dust or odour emissions during transportation;
- exit the site in a forward direction; and
- do not track soil, mud or sediment onto the road.

4.8 Hazardous Materials

Hazardous and/or intractable wastes arising from the remediation work shall be removed and disposed of in accordance with the requirements of the NSW EPA and WorkCover Authority, together with the relevant regulations, namely:

- (a) *New South Wales Occupational Health and Safety Act 1983;*
- (b) *Regulation 84A-J "Construction Work Involving Asbestos Or Asbestos Cement" 1983, as amended 1984, 1986, 1990 and 1996 of the New South Wales Construction Safety Act 1912;*
- (c) *Occupational Health and Safety (Hazardous Substances) Regulation 1996;*
- (d) *Occupational Health and Safety (Asbestos Removal Work);*
- (e) *Contaminated Land Management Act and Regulations; and*
- (f) *Environmentally Hazardous Chemicals Act and Regulations.*

Under the *Protection of the Environment Operations Act 1997* the transportation of Schedule 1 Hazardous Waste is a scheduled activity and must be carried out by a transporter licensed by the NSW Environment Protection Authority.

4.9 Disposal of Contaminated Soil

The disposal of contaminated soil shall have regard to the provision of both the Protection of the Environment Operations Act and Regulations and any relevant EPA guidelines such as the NSW EPA publication Environmental Guidelines: Assessment, Classification and Management of Non-Liquid Wastes (1997).

Any queries associated with the off-site disposal of “waste” from a contaminated site should be referred to the EPA’s Hazardous Material Advice Unit 59-61 Goulburn Street, Sydney 2000 on (02) 9325 5784. If contaminated soil or other waste is transported to a site unlawfully, the owner of the waste and the transporter are both guilty of an offence.

4.10 Containment/Capping of Contaminated Soil

No contaminated soil shall be encapsulated or capped on the site that contains concentrations of contaminants that are above the soil investigation levels for urban development sites in NSW for the range of landuses permissible on the subject site. For example, a site zoned commercial/industrial shall not encapsulate or cap soil containing concentrations of contaminants above the ‘commercial or industrial NEHF health-based investigation levels’. The soil investigation levels for urban redevelopment in NSW are contained in the EPA’s *Guidelines for the NSW Site Auditor Scheme*.

4.11 Importation of Fill

All fill imported on to the site shall be validated to ensure the imported fill is suitable for the proposed land use from a contamination perspective. Fill imported on to the site shall also be compatible with the existing soil characteristic for site drainage purposes.

Council may require details of appropriate validation of imported fill material to be submitted with any application for future development of the site. Hence all fill imported onto the site should be validated by either one or both of the following methods during remediation works:

- ❑ Imported fill should be accompanied by documentation from the supplier which certifies that the material is not contaminated based upon analyses of the material or the known past history of the site where the material is obtained; and/or
- ❑ Sampling and analysis of the fill material should be conducted in accordance with the EPA Sampling Design Guidelines (1995) to ensure that the material is not contaminated.

4.12 Site Signage and Contact Numbers (see Clause 78H EP& A Regulations)

A sign displaying the contact details of the remediation contractor (and site facilitator if different to remediation contractor) shall be displayed on the site adjacent to the site access. This sign shall be displayed throughout the duration of the remediation works.

4.13 Site Security (see Clause 78G of EP&A Regulations)

The site shall be secured to ensure against unauthorised access by means of an appropriate fence.

4.14 Occupational Health & Safety

It is the employer's responsibility to ensure that all site remediation works shall comply with all Occupational Health and Safety and Construction Safety Regulations of the NSW WorkCover Authority. Safety monitoring for hydrocarbon emissions should be undertaken in accordance with Worksafe Time Weighted Averages Guidelines, 1991.

4.15 Removal of Underground Storage Tanks

The removal of underground storage tanks shall be undertaken in accordance with NSW WorkCover requirements which includes writing to the Chief Inspector of Dangerous Goods and complying with any conditions imposed. The tank removal shall be conducted in accordance with the Australian Institute of Petroleum's Code of Practice "The Removal and Disposal of Underground Petroleum Storage Tanks (AIP CP22-1994). In the event of conflict between the Code of Practice and NSW WorkCover requirements, the latter shall prevail.

4.16 Excavations and backfilling

All excavations and backfilling associated with remediation must be executed safely in accordance with appropriate professional standards and guarded/protected to prevent them from being dangerous to life or property.

4.17 Retaining walls and drainage

If soil conditions require it, retaining walls (temporary or permanent) associated with excavation work or other approved methods of preventing movement of soil must be provided and adequate drainage must also be provided.

4.18 Support to neighbouring buildings

- (1) If an excavation associated with site remediation extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made:
 - (a) must preserve and protect the building from damage, and
 - (b) if necessary, must underpin and support the building in an approved manner, and
 - (c) must, at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner.

- (2) The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out for the purposes of this clause, whether carried out on the allotment of land being excavated or on the adjoining allotment of land.
- (3) In this clause, allotment of land includes a public road and any other public place.

SECTION 5: INDEPENDENT AUDITING

5.1 NSW Site Auditor Scheme

The NSW Site Auditor Scheme commenced on 1 June 1998. Site Auditors are experts who can provide an independent review of the work of a primary consultant for all types of contaminated sites. Part 4 of the Contaminated Land Management Act 1997 allows the EPA to accredit suitably qualified and experienced individuals as site auditors.

All Council requests for an independent review or site audit must be performed by a NSW EPA accredited auditor for contaminated land. An up-to-date list of NSW EPA accredited auditors can be obtained on the EPA webpage www.epa.nsw.gov.au

5.2 Site Audits

Section 47(1) of the Contaminated Land Management Act, 1997 defines a site audit as: "an independent review:

(a) that relates to investigation, or remediation, carried out (whether under this Act or otherwise) in respect of the actual or possible contamination of land; and

(b) that is conducted for the purpose of determining any one or more of the following matters:

(i) the nature and extent of any contamination of the land,

(ii) the nature and extent of the investigation or remediation,

(iii) what investigation or remediation remains necessary before the land is suitable for any specified use or range of uses"

The NSW EPA has also prepared *Guidelines for the NSW Site Auditor Scheme* which outline the NSW Site Auditor Scheme, the process of appointing site auditors, and the legal, administrative and technical directions and guidelines for site auditors and the preparation of site audits statements.

5.3 Site Audit Statements

A site audit statement provides a clear statement about what land use is suitable for the site, including any conditions on that suitability (eg to maintain capping). A site audit statement must be prepared on a prescribed form (see *Contaminated Land Management (Site Auditor) Regulations 1998*). When an accredited auditor for contaminated land is requested to conduct a site audit, they must also prepare a site audit statement.

A statutory site audit statement may only be issued by a NSW EPA accredited auditor for contaminated land. A copy of all statutory site audit statements must be forwarded to the EPA and Council at the same time as the site auditor gives the statutory site audit statement to the person who commissioned the site audit.

5.4 When Council Requires a Site Audit

Council may request a site audit to be undertaken at any or all stages in the site investigation process. In accordance with the Managing Land Contamination Planning Guidelines, Council will require a site audit prepared by a NSW EPA accredited auditor for contaminated land if Council:

- *“believes on reasonable grounds that the information provided by the applicant is incorrect or incomplete;*
- *wishes to verify whether the information provided by the proponent has adhered to appropriate standards, procedures and guidelines; or*
- *does not have the internal resources to control its own technical review.”*

The proponent will be informed by Council if a site audit is required after Council has conducted a review of the contamination reports and associated documents submitted to Council. The proponent is responsible for engaging a NSW EPA accredited auditor for contaminated land to perform a site audit. In addition, the proponent is responsible for all costs borne in engaging a NSW EPA accredited auditor for contaminated land.

For sites which have complex issues associated with either the contamination assessment or remediation it is wise to engage a NSW EPA accredited auditor for contaminated land early on in the site assessment process.

5.5 What Should a Site Audit Cover?

The EPA *Guidelines for the NSW Site Auditor Scheme* outline what should be included in a site audit. However, the guidelines state that in some situations local planning authorities (Council) may also need to contribute to defining the scope of the site audit.

When Council requests a site audit, Council will also specify any issues that shall be included within the scope of the site audit. As well as requiring a site audit to address any issues raised in s. 47(1)(b) *Contaminated Land Management Act 1997*, the following are examples of issues that Council may request a NSW EPA accredited auditor for contaminated land to address when conducting a site audit:

- Has the contaminated land consultant complied with all appropriate standards, procedures and relevant NSW EPA guidelines?
- What further investigations or remediation is required before the land is suitable for any specified use or range of uses?
- Whether the auditor considers that the proposed remediation is adequate, and if undertaken, will render the site to be suitable for the proposed use?
- Whether it can be concluded that there is no unacceptable off-site migration of contaminants, particularly via ground water?

- Whether the contamination conditions at the site are suitable for in-ground absorption of stormwater?

Either the proponent or the appointed NSW EPA accredited auditor for contaminated land shall liaise with Council during the preparation of the site audit to ensure that the scope of the site audit addresses the concerns raised by Council.

Before issuing a site audit statement, the site auditor must prepare and finalise a summary site audit report. The EPA *Guidelines for the NSW Site Auditor Scheme* outlines what must be included in a site audit report.

6. COUNCIL RECORDS AND COMMUNITY INFORMATION

Council has an important role in supplying the community with information regarding land use history, land contamination and remediation. Council also has a statutory responsibility under s. 59 of the *Contaminated Land Management Act 1997* to include information provided to Council by either the EPA or accredited auditors on Planning Certificates issued for the purposes of s. 149 *Environmental Planning and Assessment Act 1979*.

The process of information collection about land contamination is ongoing. Information concerning contaminated land will be added to Councils property information system when development and subdivision applications are processed or when information is provided to Council via other sources.

6.1 How Council's Information is Managed

Council's records regarding contamination issues are dynamic and will change over time as land is investigated, remediated and validated. Registers falsely imply comprehensive knowledge of site contamination issues which is unfortunately not possible to have. Standards for remediation may also change over time to accommodate changing community values. For these reasons Council does not hold a register of contaminated sites.

Council's records in relation to site contamination issues are kept on individual property and development files. To assist Council in the management of land contamination issues the following information is recorded for the individual properties:

- Site contamination reports submitted to Council (ie Preliminary Investigation, Detailed Investigation, Remedial Action Plans, Validation and Monitoring Reports).
- Site Audit Statements received by Council.
- EPA declarations and orders issued under the CLM Act (including voluntary investigation & remediation proposals agreed by the EPA).
- prior notification of category 2 remediation works.
- notification of completion of category 1 and category 2 remediation work.

6.2 Planning Certificates

Under s.149 of the Environmental Planning & Assessment Act 1979, a person may request from Council a planning certificate containing advice on matters about land that are prescribed in the Regulation. One such prescribed matter is the existence of a council policy to restrict the use of land.

Section 149(2) certificates issued by Council will not contain specific details of site contamination or potential site contamination for individual properties. Council has adopted this approach for the following reasons:

- Council records may not disclose land uses that may have resulted in land contamination that were established illegally and/or have existing use rights.
- Council's records regarding contamination issues are dynamic and will change over time as land is investigated, remediated and validated.

Section 59(2) of the *Contaminated Land Management Act, 1997* provides that specific notations relating to contaminated land issues must be included on Planning Certificates where:

“(a) the land to which the certificate relates is within an investigation area or remediation site – if it is within such an area or site at the date when the certificate is issued;

(b) the land to which the certificate relates is subject to an investigation or remediation order – if it is subject to such an order at that date;

(c) the land to which the certificate relates is the subject of a voluntary investigation proposal (or voluntary remediation proposal) that is the subject of the EPA's agreement under section 19 (or 26) if it the subject of such a proposal, and the proposal has not been fully carried out, at the date when the certificate is issued;

(d) the land to which the certificate relates is the subject of a site audit statement – if a copy of such a statement has been provided at any time to the local authority issuing the certificate.”

Planning Certificates issued by Council will contain information on the prescribed matters listed above, where applicable. Council will not provide any additional information in relation to site contamination issues under s. 149(5).

As well as containing information on prescribed matters, all Planning Certificates issued by Council will contain the following wording about the existence of a council policy to restrict the use of land:

“Council has adopted by resolution a policy on contaminated land. This policy will restrict development of land:

- (a) which is affected by contamination;*
- (b) which has been used for certain purposes;*
- (c) in respect of which there is not sufficient information about contamination;*
- (d) which is proposed to be used for certain purposes;*
- (e) in other circumstances contained in the policy.”*

6.3 Access to Council Information

There are several parties that may be interested in accessing Council records in relation to land contamination issues including current occupiers of sites, potential purchasers of land, contaminated land consultants and the community.

Council's Policy on contaminated land allows enquirers to access information on individual properties in relation to the following:

Type of Information	How to Obtain Information
Information on reports held by Council in relation to site contamination issues	Written request to the Director, Planning Building & Environmental Services in accordance with Council's schedule of fees. The written request shall specify what information is requested, who is requesting the information and what is the intended use of the information
Information on any restrictions placed on the land.	Planning Certificate.
Information on whether any declarations or orders made or voluntary proposals agreed to under <i>CLM Act</i> have been provided to Council by the EPA or whether Council has received any Site Audit Statements.	Planning Certificate.
Copies of any Site Audit Statements.	Written request to the Director, Planning Building & Environmental Services in accordance with Council's schedule of fees.
Any other information held by Council (other than stated above) in relation to site contamination issues.	Written request to the Director, Planning Building & Environmental Services in accordance with Council's schedule of fees. The written request shall specify what information is requested, who is requesting the information and what is the intended use of the information.

In some circumstances Council may not be able to provide full access to its records held on land contamination issues. These circumstances may include when the information held by Council is subject to legal privilege, involves personal information and or when the information requested is intended to be published without prior permission of Council, the current site owner and author of the contamination reports.

The Privacy and Personal Information Act 1998 (PPIPA) provides for the protection of personal information and the protection of the privacy of individuals. The Act places a

number of obligations on Council with respect to the collection and use of personal information.

In order to comply with the requirements of the Acts and regulations governing the actions of local government this Council will deal with Personal Information using the Information Protection Principles outlined in the Privacy and Personal Information Protection Act 1998 (PPIP Act).

Personal information is defined as “any information or opinion about an individual whose identity is apparent or can reasonably be ascertained from the information or opinion”.

APPENDIX 1 – SCHEDULE OF POTENTIALLY CONTAMINATING ACTIVITIES

Source: Managing Land Contamination Planning Guidelines SEPP 55 - Remediation of Land, 1998, Department of Urban Affairs and Planning & NSW Environment Protection Authority

acid/alkali plant and formulation
agricultural/horticultural activities
airports
asbestos production and disposal
chemicals 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
scrap yards
service stations
sheep and cattle dips
smelting and refining
tanning and associated trades
waste storage and treatment
wood preservation

Note: In the Strathfield Local Government Area, there are 4 known landfill sites that are no longer being used:

1. 22 Mandemar Avenue, Homebush West
2. Bressington / Mason Parks, Underwood Road Homebush
3. Dean Reserve, 146 Dean Street Strathfield South
4. 7-33 Water Street and 6-10 Dunlop Street, Strathfield South

Council has no other readily available information in respect to any of the other activities referred to in the above list of potentially contaminating activities.

**APPENDIX 2 - SOURCES OF SITE HISTORY INFORMATION FOR
PRELIMINARY SITE INVESTIGATIONS (STAGE 1)**

- ❑ Past aerial photographs
- ❑ Council records - town planning, development and building applications, complaints, pollution incident reports
- ❑ Local Historical Publications - list ones relevant to your LGA
- ❑ Current and previous site owners
- ❑ Current and previous site workers
- ❑ Long-term residents
- ❑ Past and Present Telephone Books
- ❑ Noxious Trades Act register of Noxious Trades
- ❑ Sands Sydney and New South Wales Directory 1858-1932/3
- ❑ NSW Environment Protection Authority Section 35 Notices, past and present scheduled premises, unhealthy building land
- ❑ Sydney Water Corporation Trade Waste Agreements
- ❑ WorkCover Authority Dangerous Goods Branch
- ❑ Pacific Power sites containing present and past electrical substations

**APPENDIX 3 – STRATHFIELD DEVELOPMENT CONTROL PLAN NO. 23 –
DEVELOPMENT ON CONTAMINATED LAND**

See Attached DCP