

ENVIRONMENTAL  
HEALTH  
POLICY

## CONTAMINATED LAND POLICY

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## 1. Introduction

This policy forms the basis for the management of land contamination within the City of Canada Bay Council. The policy is based on the contaminated land planning guidelines *Managing Land Contamination: Planning Guidelines* (August 1998) which has been published pursuant to s145C of the Environmental Planning and Assessment Act 1979. Council's policy has been prepared so that it is substantially consistent with the *Managing Land Contamination: Planning Guidelines*. The policy facilitates the transparent and consistent implementation of a contaminated land management framework within City of Canada Bay Council. It applies to all land in City of Canada Bay Council.

In accordance with the *Managing Land Contamination: Planning Guidelines*, this policy provides the framework for the integration of land contamination management into the planning and development process, and aims to:

- ensure that changes of land use will not increase the risk to health or the environment;
- avoid inappropriate restrictions on land use;
- provide information to support decision making; and
- to inform and liaise with the community.

The Environment Protection Authority's intervention in relation to contaminated land is triggered when land contamination poses a significant risk of harm to human health or the environment (Part 1, S.5 Contaminated Land Management Act 1997). Generally, sites not posing a significant risk of harm will be dealt with by City of Canada Bay Council under the provisions of the Environmental Planning and Assessment Act 1979, in accordance with *Managing Land Contamination: Planning Guidelines* and SEPP 55.

Councils who act substantially in accordance with these guidelines when carrying out specified planning functions are taken to have acted in good faith and receive statutory protection under s. 145B of the Environmental Planning and Assessment Act 1979.

## 2. Council's Decision making process

In determining all rezoning, subdivision and development applications, Council must 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 development assessment process and rezoning process to determine whether contamination may be an issue (as required by clauses 6 and 7 of SEPP 55), 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 as part of the general assessment of the application.

### 2.2 Council Procedures for Zoning and Rezoning Applications

SEPP 55 requires Council to consider contamination issues in zoning and 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;
- 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 if it resolves to prepare a Local Environmental Plan 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;
- d. 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
- e. 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).

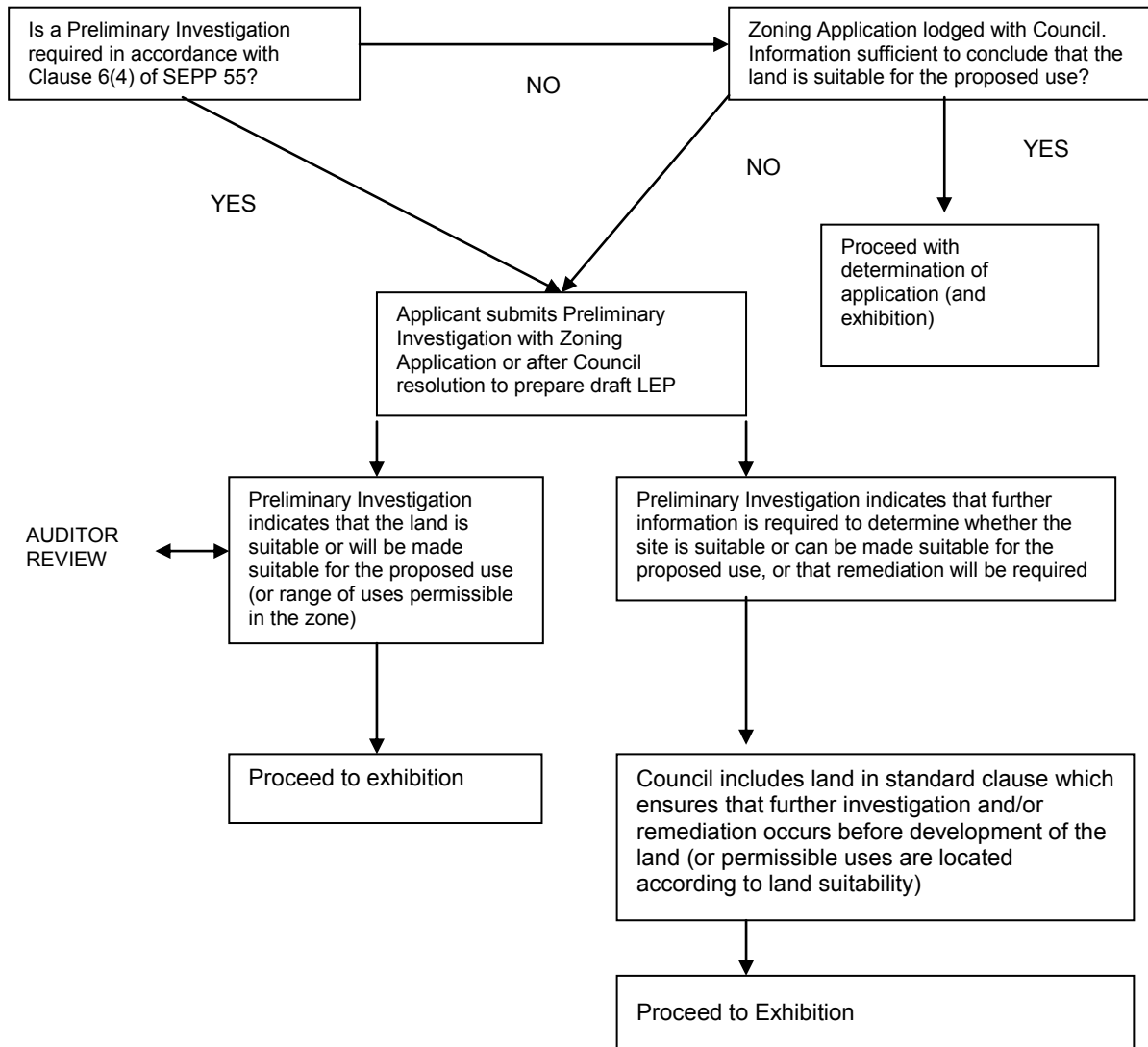
[Note: Table 1 in the Managing Land Contamination: Planning Guidelines 1998, which is reproduced in Appendix 1]

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.

The preliminary report is to be submitted before the draft LEP proceeds to public exhibition.

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

**Figure 1: Council procedure for considering Land Contamination issues for zoning and rezoning applications**



### 2.2.1 Spot Re-zonings

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 before the draft LEP proceeds to public exhibition.

### 2.2.2 General Re-zonings

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.

If the Council is satisfied that the land will require remediation to be made suitable for uses permitted under the proposed zone the draft LEP may include a provision to include the land in a standard clause in the City of Canada Bay Planning Scheme which ensures remediation occurs before it is used for a purpose permissible under the new zoning.

This inclusion is consistent with clause 6(1) (c) of SEPP 55.

### 2.3 Council Procedures for Subdivision and Development Applications

Section 79C (1) of the Environmental Planning and Assessment Act 1979 requires Council to consider 'the suitability of the site for the development' when assessing development applications. The risk from contamination to health and the environment is included in this assessment.

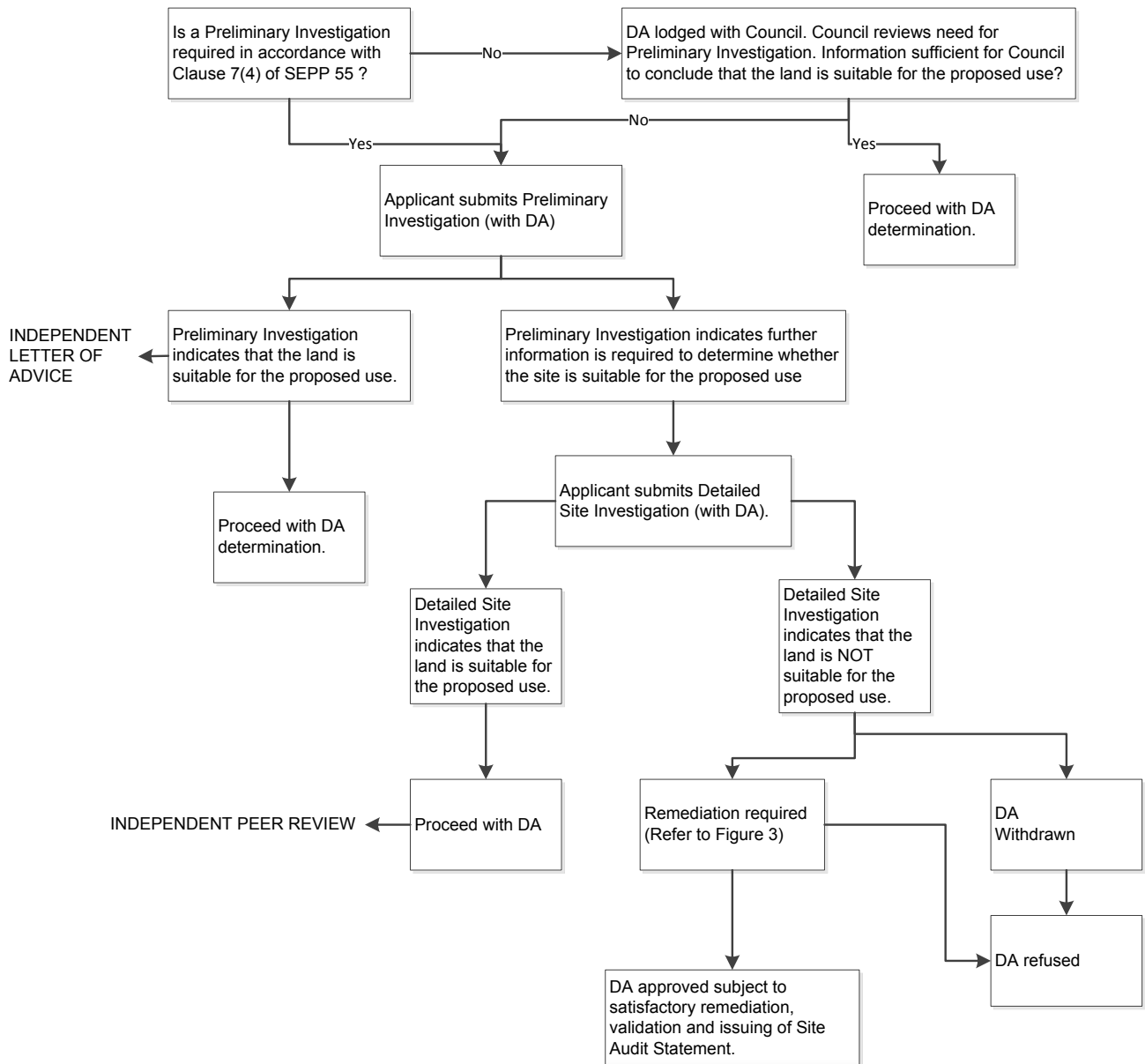
In accordance with clause 7 of SEPP 55, Council will not consent to the carrying out of any development on land unless:

- a. it has considered whether the land is contaminated;
- b. if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out; and
- c. if the land requires remediation to be made suitable for any purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

The following subsections outline when Council will require information relating to site contamination issues to be submitted with subdivision and development applications. Council's procedure for considering land contamination issues for subdivision and development applications is shown in Figure 2.



**Figure 2: Council procedure for considering Land Contaminations issues for Subdivisions and Development Applications**



### 2.3.1 When does Council require a Preliminary Environmental Site Investigation (Stage 1)?

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.

SEPP 55 requires Council to consider contamination issues in determining development and subdivision applications. In accordance with clause 7(4) of SEPP 55, Council will require a preliminary investigation to be submitted with a subdivision or development application 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;
- d. 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
- e. 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 which is reproduced in Appendix 1]

In addition to the requirements outlined in clause 7(4) of SEPP 55, Council may also require a preliminary investigation to be submitted when:

- Council has reasonable grounds to believe the land is contaminated because of the land's history, condition, or other information known to Council;
- The site has been investigated and/or remediated but there is insufficient information available about the nature and extent of contamination and/or remediation, or the circumstances have changed;
- There are restrictions on, or conditions attached to, the use of the site by a regulatory or planning authority that are, or may be, related to contamination, but there is insufficient information available about the nature and extent of contamination;
- Council records have demonstrated that the site is associated with pollution incidents or illegal dumping of wastes; and
- The site is adjoining land that has been associated with activities that may cause contamination listed in Appendix 1 and it is likely that this may have contaminated the subject premises.

The Preliminary Environmental Site 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 Environmental Site Investigation.

If Council is satisfied that the Preliminary Environmental Site Investigation justifiably concludes that the site is suitable for the proposed use, then Council will not require any further investigations to be conducted.

Where the PESI concludes that the site is suitable for the proposed use and does not require remediation, you may be asked to submit a peer review by an appropriately qualified and experienced environmental consultant certified under the 'Certified Environmental Practitioner' (CEnvP) Scheme or equivalent. This peer review shall indicate that the site is suitable for the proposed use. The proponent is responsible for all costs in engaging the appropriate consultants.

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).

### 2.3.2 When Does Council Require a Detailed Environmental Site Investigation (Stage 2)?

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).

Council will require a Detailed Environmental Site Investigation 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 use of the land. 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 Environmental Site 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 Environmental Site Investigation.

The Detailed Environmental Site 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 for the proposed use. If remediation is required, the report should also list the feasible remediation options available to remediate the site.

Where the DESI concludes that the site is suitable for the proposed use and does not require remediation, you may be asked to submit a peer review by an appropriately qualified and experienced environmental consultant certified under the 'Certified Environmental Practitioner' (CEnvP) Scheme or equivalent. This peer review shall indicate that the site is suitable for the proposed use. The proponent is responsible for all costs in engaging the appropriate consultants.

Where the DESI concludes that the site is not suitable for the proposed use and requires remediation (see 2.3.5) Council may require an Interim Letter of Advice or a Site Audit Statement. The proponent is responsible for all costs in engaging the appropriate consultants.

Note: A site audit statement does not mean that a site is clean but merely that the site is suitable for a particular use.

### 2.3.3 When Does Council Require a Remedial Action Plan (RAP)?

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 be prepared in accordance with the relevant NSW EPA guidelines and 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.

A Construction Environmental Management Plan is required with a RAP to assist the identification and management of environmental risks associated with construction work. Any potential environmental impacts identified by the risk assessment must be addressed within a Construction Environmental Management Plan (CEMP). The CEMP identifies the management measures that will be used to prevent or minimise the environmental risks associated with the construction works

The submission of a RAP is mandatory (in accordance with the Managing Land Contamination: Planning Guidelines) if the remediation for which it is prepared is a category 1 remediation work and as such requires development consent (See chapter 3). Council will also require submission of a RAP if the remediation could be undertaken as a category 2 remediation work but the proponent seeks development consent. The RAP should be submitted with the development application for the remediation.

Council will also require a RAP to be submitted with a notice required under clause 16 of SEPP 55 where remediation works are proposed to be undertaken as a Category 2 remediation work (that is, without a development consent). This will assist Council in being satisfied that the work complies with its requirements (see Chapter 3).

It follows from the above that Council will require the submission of a RAP if the detailed investigation concludes that the land is not suitable for the proposed use in its present state.

Council will require submission of a RAP before determining the subdivision or development application, to be satisfied that the site can be made suitable for the proposed use to comply with clause 7(1)(c) of SEPP 55.

### 2.3.4 When Does Council Require a Validation and Monitoring Report?

The objective of a validation and monitoring report is to demonstrate that the objectives stated in the RAP have been achieved and any conditions of development consent have been complied with.

Ideally, validation should be conducted by the same consultant that conducted the site investigation and remediation process. Validation must confirm statistically that the remediated site complies with the clean-up criteria set for the site.

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. A Site Audit Statement will be required to be submitted with the report (see 2.3.5).

This will normally be achieved by Council placing a condition on any consent granted requiring the submission of a validation and monitoring report and Site Audit Statement prior to the issuing of a construction certificate.

### 2.3.5 When Does Council Require a Site Audit?

Under the Managing Land Contamination: Planning Guidelines, Council may request a site audit to be undertaken at any or all stages in the site investigation process. The Managing Land Contamination: Planning Guidelines suggest that, 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' (p19).

City of Canada Bay Council does not have the internal resources to conduct its own technical review of documents relating to site contamination and remediation. Under this Policy, Council therefore requires the submission of a Site Audit Statement with any technical report which claims that a site is suitable for a proposed use.

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.

Where the remediation will be the subject of a development application, the proponent should consult with Council on the engagement of the NSW EPA accredited auditor as the auditor will essentially provide expert advice to Council during the assessment of the application, the remediation process and the validation.

Chapter 5 provides more details on what a site audit is and what it should cover.

### 2.3.6 When will Council accept an Environmental Management Plan (EMP)?

In situations where full clean-up is not feasible or on-site containment of contamination is proposed, an Environmental Management Plan for the ongoing remediation or monitoring of the site is required by Council, in line with s28 and s29 of the Contaminated Land Management Act 1997. Advice from the EPA is required in this situation. EMP's can also be used to address residual contamination on a site that does not pose a risk to human health or the environment provided that management measures outlined in the EMP are maintained (e.g. asbestos beneath a capping system).

The Environmental Management Plan (EMP) must be prepared in accordance with Guidelines made under Section 105 of the Contaminated Land Management Act 1997, the Guidelines for the NSW Site Auditor Scheme (2<sup>nd</sup> Edition) and the National Environment Protection (Assessment of Site Contamination) Measure 1999 and the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (ANZECC 2000) and must include:

- a. Any ongoing management or monitoring measures required.
- b. The parameters to be monitored,
- c. Situations or conditions that activate particular management measures as set out in the Environmental Management Plan.
- d. Proposed time frame for completion of ongoing remediation, management or monitoring works.
- e. Outline who is responsible for implementation of the EMP
- f. Outline process and responsibilities for updates and reviews as new information becomes available

The EMP shall be submitted for review by a NSW EPA accredited site auditor at the completion of remediation works and the issue of a construction certificate.

This will normally be achieved by Council placing a condition on any consent granted requiring the submission of an EMP prior to the issuing of a construction certificate. Council will also place a condition stating that the EMP must be complied with at the site.

Note that Council will always prefer full remediation of a site to an EMP, and that an EMP is necessary once all avenues of remediation have been exhausted.

### 2.3.7 When will a Covenant be required?

For land that has been the subject of an EPA management order or an approved voluntary management proposal and in accordance with Section 29 of the Contaminated Land Management Act 1997, the 'EPA may, under section 88E of the Conveyancing Act 1919, impose restrictions on the use of, or impose public positive covenants on, any land to which this section applies for the purpose of the ongoing management of the land and may release or vary any such restriction or covenant'.

Appropriate public notification of any restrictions (Covenant or any EMP) applying to land is required as per section 3.4.6 of NSW DEC (2006).

The applicant must register a covenant on the title of the land under the provisions of the Conveyancing Act 1919, to indicate that contaminated fill has been contained onsite. A copy of the title submitted to the Council Officer and the Principal Certifying Authority prior to the issue of an Occupation Certificate, giving notice of the former land use and contamination of the site and the existence of any remaining encapsulated contaminated material which are subject to ongoing environmental management.

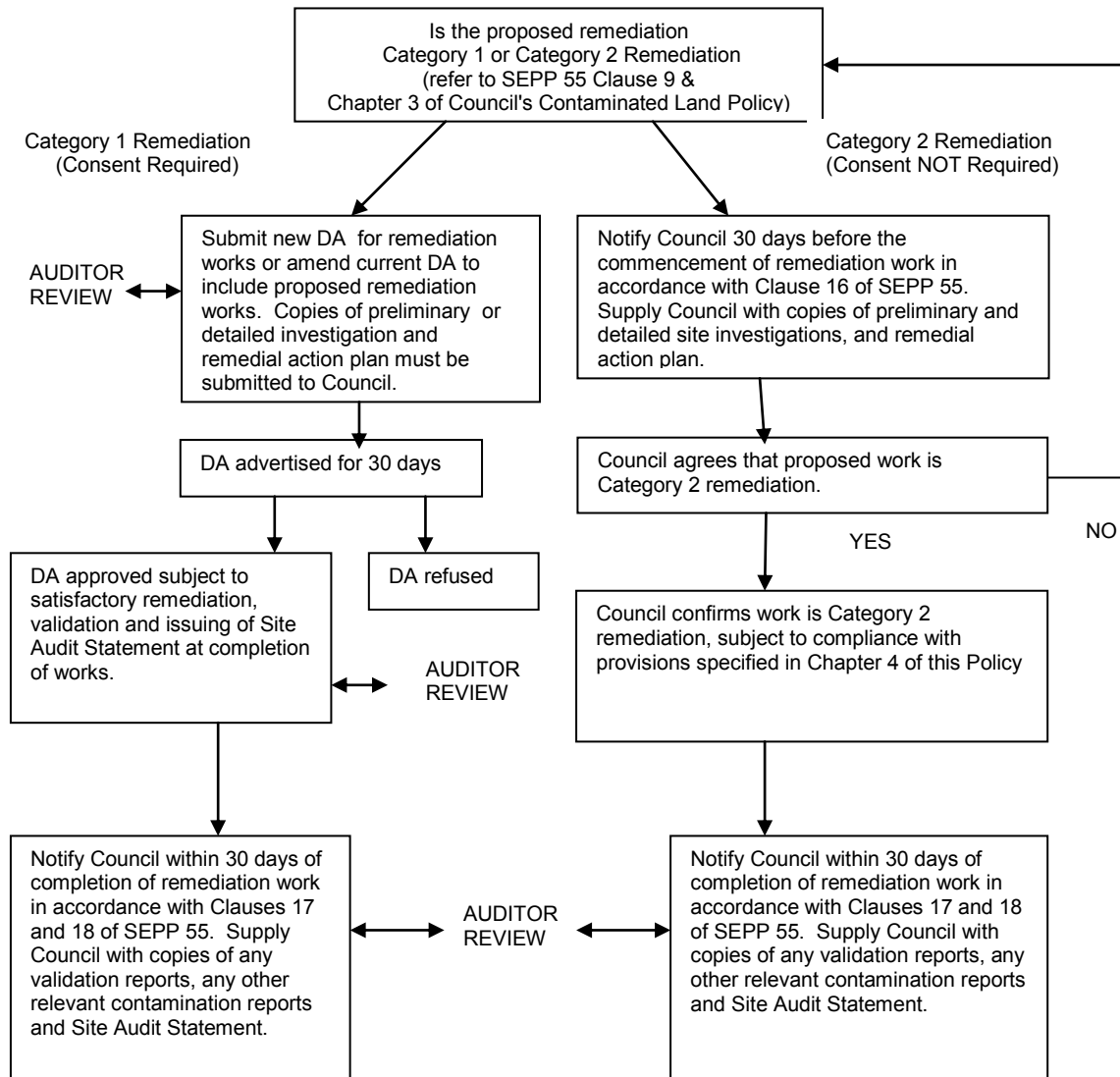
The covenant shall be binding upon the registered proprietors of the subject land and successors on the title.

This covenant shall include, but not necessarily be limited to, the following;

- i) Information regarding the delineation of the contaminated soil containment cell and the survey drawings as required by the development consent.

- ii) If relevant, reference to the Environmental Management Plan as reviewed by the NSW EPA, as required by the development consent.

**Figure 3: Council procedure for considering Site Remediation Proposals**



### 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 and category 2 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 Chapter 4 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 is advertised development unless the remediation work is designated development or State significant 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.

Council will then forward a copy of this Policy and advise that the work is to be carried out in accordance with the site management provisions in chapter 4 of this policy, and that a breach of those provisions will render the work illegal because it will then become a category 1 work for which development consent is required.

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).

Although consent is not required for Category 2 remediation work, 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. Hence it is recommended that comprehensive records are maintained during the remediation and validation works for all sites for review by the Site Auditor.

Council may charge a fee to cover costs associated with the administration of Category 2 documentation, review to ensure the development is a Category 2 remediation and to notify adjoining owners (See 6.5).

## 4. Site Management – Construction Environmental Management Plan

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 Canada Bay Local Government Area (LGA). 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.

A CEMP for Remediation must include, but not be limited to, the following:

### 4.1 Site Information

The following information should be provided to Council:

4.1.1 Project Contact Information.

4.1.2 Site Security Details.

4.1.3 Timing and Sequencing Information

4.1.4 A risk management plan outlining incident management contingencies including an unexpected finds protocol.

4.1.5 Hours of operations; all remediation work shall be conducted within the following hours:

Monday - Saturday: 7am - 5pm

No work is permitted on Sundays or Public Holidays

### 4.2 Soil and Water Management

Soil and Water Management for Urban Development, March 2004 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.
- All stockpiles of soil or other materials likely to generate dust or odours shall be covered.
- 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.

#### 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 LA 90 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.

### 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.

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 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 Asbestos Management, Waste Management and Hazardous Materials

4.8.1 The nature of asbestos contamination of land can vary significantly and there can be a number of different mechanisms available to address this contamination depending upon its source and extent. To address this, Council requires an Asbestos Management Plan to be submitted in accordance with Council's Asbestos Policy.

4.8.2 A tailored Waste Management Plan for the remediation of the site is to be submitted to Council.

4.8.3 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:

- New South Wales Occupational Health and Safety Act 1983;
- 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;
- Occupational Health and Safety (Hazardous Substances) Regulation 1996;

- Occupational Health and Safety (Asbestos Removal Work);
- Contaminated Land Management Act and Regulations; and
- 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 Materials Advice Unit on (02) 9325 5728. 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 land uses 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 F 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

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

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.

## 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](http://www.epa.nsw.gov.au).

### 5.2 Site Audits

Part 1, Section 4(1) of the Contaminated Land Management Act, 1997 defines a site audit as a review:

- (a) that relates to management (whether under this Act or otherwise) 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 any management of actual or possible contamination of the land,
  - (iii) whether the land is suitable for any specified use or range of uses,
  - (iv) what management remains necessary before the land is suitable for any specified use or range of uses,
  - (v) the suitability and appropriateness of a plan of management, long-term management plan or a voluntary management proposal.

The NSW EPA have 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). (See Appendix 3) When an accredited auditor for contaminated land is requested to conduct a site audit, they must also prepare a site audit statement.

Section 47 of the Contaminated Land Management Act, 1997 states that - a reference to a site audit carried out for the purposes of a statutory requirement is a reference to a site audit carried out in order to secure compliance with:

- a. a requirement under this Act, or
- b. a requirement imposed by State Environmental Planning Policy No 55 Remediation of Land or by any other environmental planning instrument made under the Environmental Planning and Assessment Act 1979 or by any development consent given under that Act, or
- c. any other requirement imposed by or under an Act, unless it is carried out only in order to secure compliance with a legal obligation arising from an agreement or arising in such circumstances as the regulations may prescribe.

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 given to the EPA and the planning authority (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 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 a site audit is required in accordance with this Policy, the Site Auditor should liaise with Council to find out whether there are any specific or additional issues to be included within the scope of the site audit. 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 statutory responsibilities under the Environmental Planning and Assessment Act 1979 and s. 59 of the Contaminated Land Management Act 1997 to include certain prescribed information in certificates issued for the purposes of s.149(2) of the Environmental Planning and Assessment Act 1979. In addition, under s149(5) of the Environmental Planning and Assessment Act 1979 Council may include in a planning certificate advice on other matters affecting the subject land (including matters regarding contamination) of which Council may be aware. Council's policy in respect of the provision of information in s149(2) and s149(5) certificates is discussed in further detail in section 6.2 of this policy.

Council's overall objectives in recording and managing information about contamination are as follows:

- to record information in a manner appropriate to current legislation and to assist Council in carrying out its planning functions in the context of land use history;
- to ensure a fair and equitable means of informing stakeholders (especially potential purchasers or occupiers) of the presence of or potential for contamination on specific parcels of land;
- to provide relevant information which facilitates the control of land use, to minimise the risk to health and the environment;
- to encourage an approach which does not unnecessarily place restrictions on land or otherwise unnecessarily affect its value; and
- to acknowledge any limitations on the reliability, currency or accuracy of information.

The process of information collection about land contamination is ongoing. Information concerning contaminated land will be added to Council's property information system when development and subdivision applications are processed and when relevant information is provided to Council via other sources (for instance, by the EPA or site auditors under the Contaminated Land Management Act 1997).

### 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. Council does not maintain a register of contaminated sites. This is because a register falsely implies that information held by Council at and beyond the time of registration is complete and comprehensive and that land may be clearly classified as either 'contaminated' or 'not contaminated'. In addition, knowledge about contamination and standards for remediation may change over time to accommodate changing community values. It is therefore necessary to maintain a flexible information system to accommodate the fluid nature of land contamination management.

Records in relation to site contamination issues are stored on Council's document management system. This ensures that relevant information about contamination affecting a parcel of land is easily accessible. Council uses a computerised geographic information system to assist with management of information concerning contaminated land.

### 6.2 Section 149 Certificates

Under s.149(1) of the Environmental Planning and Assessment Act 1979, any person may apply to Council for a planning certificate containing advice on matters about land within Council's area.

Section 149(2) provides that the Council must issue a planning certificate specifying such matters relating to the subject land as may be prescribed. Section 149(5) provides that the Council may include in the planning certificate advice on other relevant matters affecting the subject land.

### 6.3 Section 149(2) - Prescribed Matters

The prescribed matters which Council is required to specify in a planning certificate include certain information relating to contamination.

Item 7 of Schedule 4 of the Environmental Planning and Assessment Regulation 1990 (the Regulation) prescribes that a planning certificate must specify whether the land is affected by a policy adopted by Council, or adopted by any other public authority and notified to Council for the express purpose of its adoption by that authority being referred to in planning certificates, that restricts the development of the land because of any risk other than flooding

In accordance with this provision, all s. 149(2) 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 that applies to all land within the City of Canada Bay. Please note that this statement refers to whether or not Council has a policy regarding contamination and is not a statement on whether the property is affected by contamination or potential contamination.”*

In addition, item 10 of Schedule 4 of the Regulation and section 59(2) of the Contaminated Land Management Act, 1997 provide that the following matters regarding contamination are prescribed matters which must also be specified in s. 149 certificates:

- a) that the land to which the certificate relates is significantly contaminated land if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,
- b) that the land to which the certificate relates is subject to a management order if it is subject to such an order at the date when the certificate is issued,
- c) that the land to which the certificate relates is the subject of an approved voluntary management proposal if it is the subject of such an approved proposal at the date when the certificate is issued,
- d) that the land to which the certificate relates is subject to an ongoing maintenance order if it is subject to such an order at the date when the certificate is issued,
- e) that 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.

In accordance with these provisions, section 149(2) certificates issued by Council will contain information on the prescribed matters listed above, where applicable.

#### 6.4 Section 149(5) - Additional Matters

Where Council is aware of any further information relating to contamination, Council may include this advice which may relate to the following matters in its planning certificates under s149(5):

- any activities listed in Table 1 of Managing Land Contamination: Planning Guidelines that Council records show have occurred or are occurring on the land (Table 1 is reproduced in Appendix 1 of this policy);
- a reference to any contamination investigations undertaken on the land or the results and key conclusions of such investigations (i.e. Preliminary Investigation, Detailed Investigation, Remedial Action Plans, Validation and Monitoring Reports);
- any notifications of remediation (including prior notification of category 2 remediation works and notification of completion of category 1 and category 2 remediation works);
- a reference to any validation report held by Council in respect of the land; and
- any notices or public positive covenants requiring the maintenance of remediation (for instance, in accordance with a remediation management plan).

#### 6.5 Limitations on information in section 149 certificates

Where appropriate, Council will specify in a planning certificate any limitations on the information regarding contamination contained in that certificate. Limitations may arise as a result of the purpose for which information was collected by Council or provided to Council or the reliability of the source of the information.

Planning certificates issued by Council will not specify detailed and comprehensive information about site contamination or potential site contamination. 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.

## 6.6 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 will provide information regarding contamination to enquirers in accordance with s149 of the Environmental Planning and Assessment Act 1979, as specified in section 6.2 above. Council will also disclose information in accordance with its obligations under the Freedom of Information Act 1989.

Council's policy on contaminated land allows enquirers to access information on individual parcels of land, as follows:

Type of Information	How to obtain information
Information on reports held by Council in relation to site contamination issues	Written request to Council in accordance with Council's schedule of fees. (Photocopying charges) 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 whether the land is affected by any policy adopted by Council that restricts development of the land because of contamination risks.	Application for s149 (2) certificate.
Information on whether: any declarations or orders have been made by the EPA in respect of the land under the CLM Act; the land is subject to a voluntary investigation or remediation proposal which has been agreed to by the EPA under CLM Act; or the land is subject to a Site Audit Statement under the CLM Act.	Application for s149 (2) certificate.
Information on whether: (a) any activities listed in Table 1 of Managing Land Contamination: Planning Guidelines that Council records show have occurred or are occurring on the land (Table 1 is reproduced in Appendix 1 of this policy); (b) any contamination investigations that have been undertaken on the land (i.e. Preliminary Investigation, Detailed Investigation, Remedial Action Plans, Validation and Monitoring Reports); (c) any notifications of remediation (including prior notification of category 2 remediation works and notification of completion of category 1 and category 2 remediation works); (d) any site audit statements held by Council in respect of the land; and any notices or public positive covenants requiring the maintenance of remediation (for instance, in accordance with a remediation management plan).	Application for s149 (5) certificate.
Copies of any Site Audit Statements	Written request to Council. The written request shall specify what information is requested, who is requesting the information and what is the intended use of the information.

Any other information held by Council (other than stated above) in relation to site contamination issues i.e. Site Audit Statements (SAS), Environmental Management Plans (EMP's) & Validation Reports	Written request to Council accordance with Council's schedule of fees. (Photocopying charges) The written request shall specify what information is requested, who is requesting the information and what is the intended use of the information.
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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 and when the information requested is intended to be published without prior permission of Council, the current site owner and author of the contamination reports. There may also be grounds upon which Council may refuse to give access to information under the Freedom of Information Act 1989.

## 6.7 Community Liaison for Category 1 Work

### 6.7.1 Background

City of Canada Bay Council has obtained extensive experience in dealing with the issue of community consultation during the AGL Gasworks remediation project in Mortlake. This provides the basis for the following recommendations:

The formation of a community Liaison Committee is recommended to be undertaken for category 1 remediation sites where Council believes the formation of such a Committee is justified given the scale, location or timing of the proposed works, to provide the basis for community consultation throughout the approval and implementation stages of this type of project.

### 6.7.2 Stakeholders

Such a committee should consist of the following representatives:

- Community representatives
- Site owners or representatives
- Relevant contractors and/or consultants
- Councillor/s
- Council staff involved in the project
- State Government representatives eg. EPA, NSW Department of Health
- Any other interested stakeholder

### 6.7.3 Purpose

The objective of this type of consultation program would include:

- Provide the community with up-to-date information on the project;
- Enable residents to raise questions and concerns and other suggestions;
- Make the owner and its project manager/consultants available to respond to questions;
- Co-ordinate with the local authority and the NSW EPA in matters of public concern such as noise, traffic, air quality and environmental protection;
- Liaise regularly with community representatives to facilitate the flow of information and respond to any questions or matters of concern; and
- Provide a complaint-response mechanism in order that any genuine complaint concerning the work can be effectively and efficiently addressed.

### 6.7.4 Meetings

Meetings of all relevant stake holders should be held on a regular basis depending on the duration of the project. Monthly meetings are recommended for long term projects to ensure continual liaison and follow up of relevant issues.

### 6.7.5 General

At key milestones during the project, local residents should be notified by letterbox drop of the status of the project, the planned activities for the next period, the occurrence of any unusual activities, and keep residents informed on progress in general.

These letterbox drops should be supplemented by public presentations at local meetings, where representatives of the project team are available for answering any queries on the project.

The site project team should be the first point of contact for community matters with further professional assistance to be provided by remediation consultants as may be required. The Project Management Team should also advise any residents likely to be affected by particular site related activities.

## 6.8 Notification of Neighbours for Category 2 Work

Council will advise the owners of adjoining properties when it receives the notice required by clause 16 of SEPP55 if it is satisfied the proposed work is category 2 remediation. The advice will state that the work does not require Council consent but must be carried out in accordance with the Site Management Provisions in chapter 4, which will be attached.

## 7. 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

## 8. 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