



City of Ryde

# **Contaminated Land Policy**

**Effective as of 19 August 2008**

## TABLE OF CONTENTS

<b>1.</b>	<b>INTRODUCTION</b>	<b>4</b>
<b>2.</b>	<b>COUNCIL'S DECISION MAKING PROCESS</b>	<b>4</b>
2.1	Initial Evaluation	
2.2	Council Procedures for Rezoning Applications Site Rezoning General Rezoning	
2.3	Council Procedures for Development Applications When Does Council Require a Preliminary Site Contamination Investigation (Stage 1)? When Does Council Require a Detailed Site Contamination Investigation (Stage 2)? When Does Council require a Remedial Action Plan (RAP)? When Does Council require a Validation and Monitoring Report	
<b>3.</b>	<b>COUNCIL'S REQUIREMENTS FOR REMEDIATION</b>	<b>12</b>
3.1	Category 1 Remediation Work	
3.2	Category 2 Remediation Work	
<b>4</b>	<b>SITE MANAGEMENT - CATEGORY 2 REMEDIATION</b>	<b>16</b>
4.1	Site Management Provisions Legislation and Guidelines Remediation Proposal Site Validation Discovery of Additional Information during Remediation Hours of Operation Soil and Water Management Noise Vibration Air Quality Transport Hazardous Materials Disposal of Contaminated Soil Containment/ Capping of Contaminated Material Importation of Fill Groundwater Occupational Health and Safety Removal of Underground Storage Tanks	
<b>5</b>	<b>INDEPENDENT SITE AUDITING</b>	<b>20</b>
5.1	NSW Site Auditor Scheme	
5.2	Site Audits	
5.3	Site Audit Statements	

5.4	When Does Council Require a Site Audit?	
5.5	What Should a Site Audit Cover?	
<b>6</b>	<b>COUNCIL RECORDS AND COMMUNITY INFORMATION</b>	<b>23</b>
6.1	Management of Council Information	
6.2	Section 149 Planning Certificates	
6.3	Typical Questions & Answers regarding the General Clause	
6.4	Access to Council Information	
<b>7</b>	<b>SIGNIFICANT RISK OF HARM FROM CONTAMINATED LAND</b>	<b>25</b>
7.1	What is significant risk of harm?	
7.2	Duty to Report	

## **APPENDICES**

APPENDIX 1 Table 1 Some Activities that may Cause Contamination

APPENDIX 2 Abbreviations

APPENDIX 3 Glossary

## **FIGURES**

Figure 1 Council's procedure for considering land contamination issues for rezoning applications

Figure 2 Council's procedure for considering land contamination issues for development applications

Figure 3 Council's procedure for considering site remediation proposals

## **TABLES**

Table 1 Table 1 Some Activities that may Cause Contamination

# 1. INTRODUCTION

This policy also sets out a framework for the management of contaminated land within the City of Ryde. The policy outlines how land contamination issues are incorporated into and addressed by Council's planning and environmental decision making processes. This policy has been made under the *Managing Land Contamination: Planning Guidelines* (contaminated land planning guidelines) and *State Environmental Planning Policy No. 55* (SEPP 55) and applies to all land in the Ryde Local Government Area.

In accordance with the planning guidelines, this policy provides the framework for the integration of land contamination management into the planning and development control process, and aims to:

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

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

## 2. COUNCIL'S DECISION MAKING PROCESS

In determining all rezoning and development applications, Council must consider the possibility of land contamination and the implications it has for 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 rezoning or development assessment process 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. This information may include the current zoning and permissible land uses, records from previous rezonings, development and building applications, property files and information provided by the proponent.

Council may also carry out a site inspection of the land as part of the evaluation process.

## 2.2 Council Procedures for Rezoning Applications

SEPP 55 requires Council to consider contamination issues when rezoning land (including when Council is the proponent of the rezoning). Council will not include land in a zone that would permit a change of use from the existing land 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. (e.g. satisfied by provisions in a LEP or DCP that contamination issues will be addressed at development application stage)

In accordance with clause 6(4) of SEPP 55 Council will require a preliminary site investigation report to be submitted with 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 contaminated land planning guidelines is reproduced in Appendix 1 of this policy

In addition to the requirements outlined in clause 6(4) of SEPP 55, Council will also require a preliminary site investigation report 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.

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

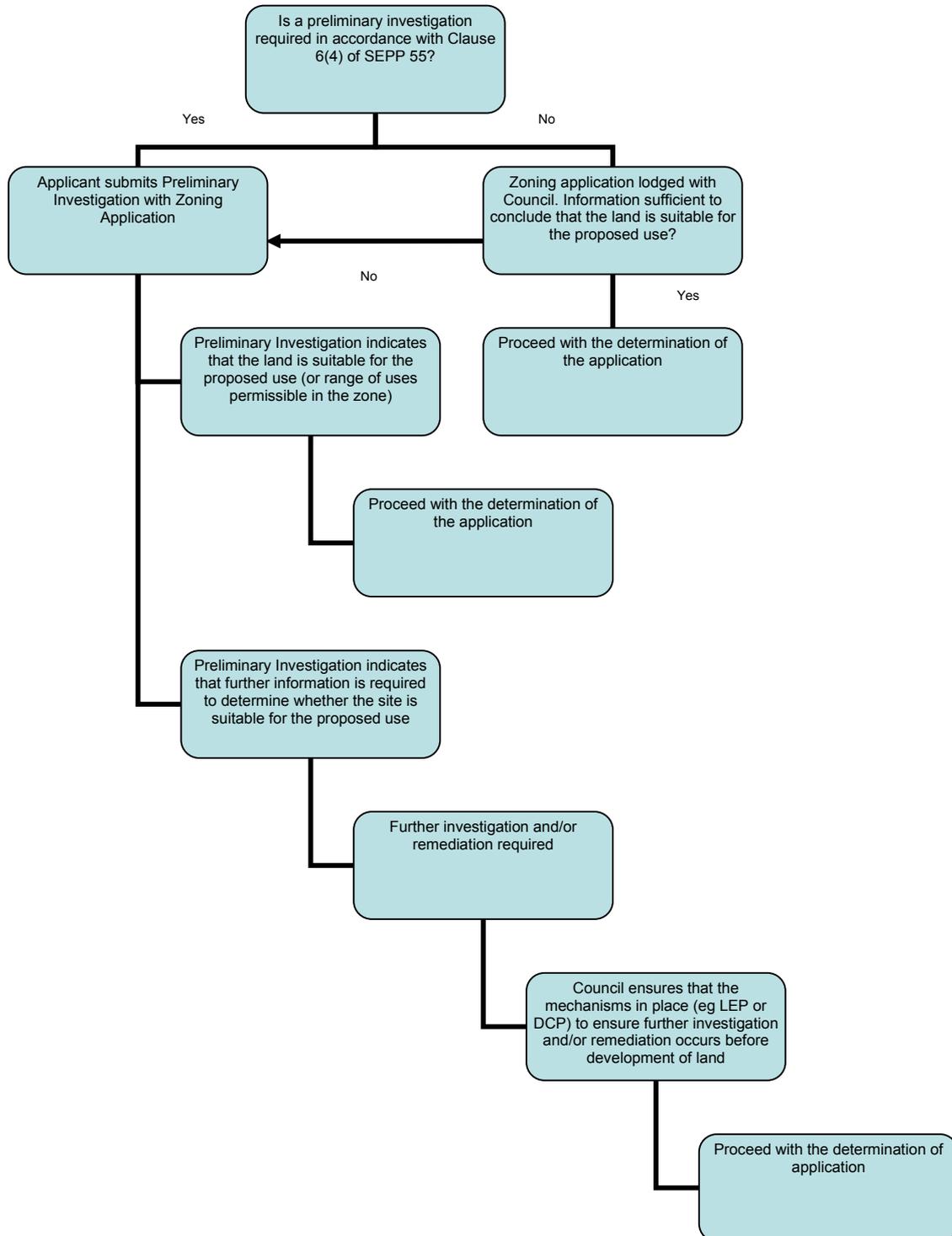
### **2.2.1 Site Rezoning**

When Council receives a site rezoning application for a specific development, Council may require a detailed investigation including a detailed site investigation report to be undertaken prior to Council determining the rezoning application.

### **2.2.2 General Rezoning**

Where it is proposed to rezone a large area of land that covers more than one property, 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 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 are assessed prior to the redevelopment of the land.

**Figure 1: Council’s Procedure for considering land contamination issues for zoning and rezoning proposals**



## 2.3 Council Procedures for Development Applications

When assessing development applications, section 79C(1) of the *Environmental Planning and Assessment Act 1979* requires Council to consider the suitability of the site for the proposed development.

In accordance with clause 7(1) 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, and*
- (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 development applications.

Council's procedure for considering land contamination issues for development applications is shown in Figure 2.

### 2.3.1 When Does Council Require a Preliminary Site Investigation?

The objectives of a preliminary site 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 applications. In accordance with clause 7(4) of SEPP 55, Council will require a preliminary site investigation report to be submitted with a 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:*

*(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 contaminated land planning guidelines is reproduced in Appendix 1 of this policy

In addition to the requirements outlined in clause 7(4) of SEPP 55, Council may also require a preliminary site investigation report 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's records have demonstrated that the site is associated with pollution incidents or the illegal dumping of wastes.
- The site is adjoining land that has been used for a purpose listed in Table 1 to the contaminated land planning guidelines and it is likely that this may have contaminated the subject premises.

The preliminary site investigation must be carried out in accordance with the relevant Department of Environment and Climate Change (DECC) guidelines. The proponent is responsible for engaging a suitability qualified consultant to undertake the investigation and for all associated costs, including any site audit requested by Council.

If Council is satisfied that the preliminary site contamination investigation justifiably concludes that the site is suitable for the proposed use, then Council will not require any further investigations to be conducted.

### **2.3.2 When Does Council Require a Detailed Site Investigation Report?**

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 site investigation to be undertaken if the preliminary investigation indicates that the land is contaminated, or the land was previously used for a potentially contaminating activity and a land use change is proposed that has the potential to increase the risk of exposure to contamination. In some cases, the preliminary and detailed investigations may be combined (eg. where it is known that the land is contaminated or that the land has been used for a potentially contaminating activity).

The detailed site investigation must be carried out in accordance with the relevant DECC guidelines. Once again, the proponent is responsible for engaging a suitability qualified consultant to undertake the investigation and for all associated costs, including any site audit requested by Council.

The detailed site investigation report 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.

If the investigation finds that remediation is required to make the land suitable for the proposed use, Council's response will depend on whether the remediation work constitutes category 1 or category 2 remediation work.

If the remediation proposed is category 1 remediation work (i.e. remediation work that requires development consent), Council may:

- Require the applicant to amend the development application (if already submitted), to include a remediation proposal; or
- Require a new and separate development application for the remediation to be submitted, before the development application is considered for the final use of the site.

If the proposed remediation is category 2 remediation work (i.e. remediation work that does not require consent), Council may:

- Impose conditions on the development consent for the use, requiring the site to be remediated and validated either before other work commences or before occupation of the site; or
- Issue a deferred commencement consent for the use of the site, and require the site to be remediated and validated before other work commences.

If the investigation finds that the land is unsuitable for the proposed use and may not be appropriately remediated, or the proponent does not wish to remediate:

- the proposal may be modified to a use that is suitable for the land without remediation, provided a new development application is not required, or
- the application may be withdrawn, or
- the application should be refused.

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

Documentation describing remedial actions required should be prepared for all remediation proposals. A formal remedial action plan (RAP) must be submitted for all category 1 remediation work (i.e. remediation work that requires development consent).

The objectives of a 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 must be prepared in accordance with the relevant DECC guidelines and document the remedial works to be undertaken at the site. The RAP should also contain an environmental management plan and occupational health and safety plan for the remedial works.

The proponent is responsible for engaging a suitability qualified consultant to prepare the RAP and for all associated costs, including any site audit requested by Council

### **2.3.4 When Does Council require a Validation and Monitoring Report?**

The purpose of validation is to confirm whether the clean-up objectives for the site have been achieved and whether any further remediation work or restrictions on land use are required. Ideally, validation should be conducted by the same consultant that conducted the site investigation and remediation process.

Validation must be carried out in accordance with the relevant State Government guidelines and confirm statistically that the remediated site complies with the clean-up criteria set for the site,

Council will require a validation report to be submitted after remediation works have been completed, and prior to building work commencing. In the case of small scale development sites involving straight forward issues, this will normally be achieved by imposing a consent condition requiring the submission of a validation report prior to the issue of a construction certificate.

Alternatively, Council may issue a deferred commencement consent for the proposed use, requiring the site to be remediated and validated prior to other work commencing.

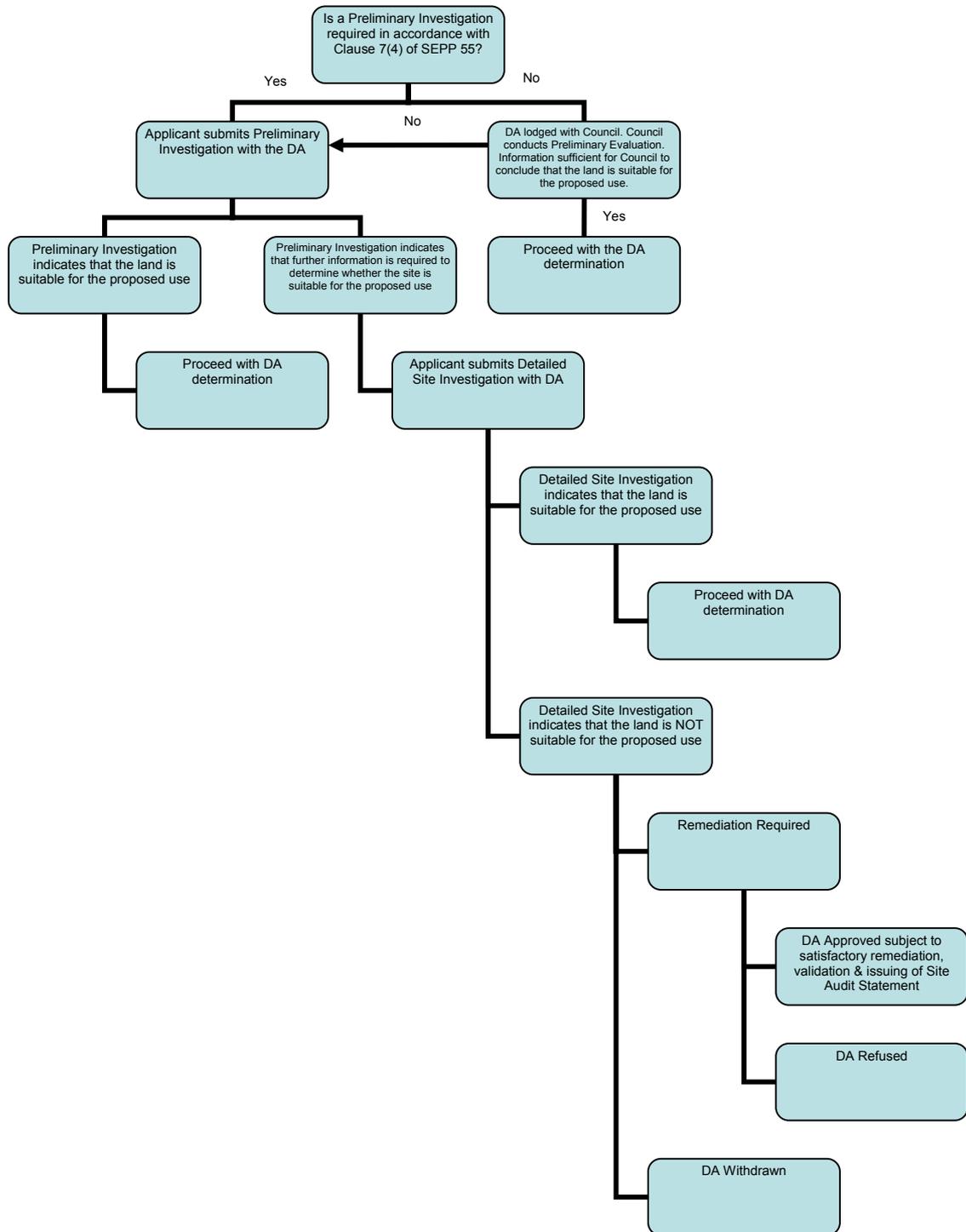
Where full clean-up is not feasible, or on-site containment of contamination is proposed, the need for ongoing monitoring will need to be assessed by the proponent's consultant and Council. An environmental management plan will also need to be prepared for the site to ensure that if the contaminated soil is disturbed, it will be handled in an appropriate manner to avoid any potential risk to human health or the environment.

If a monitoring program is needed, Council will require a monitoring plan to be prepared for the site. This plan should detail the proposed monitoring strategy, parameters to be monitored, monitoring locations, frequency of monitoring and reporting requirements.

To ensure that future owners are aware of any contamination remaining on the site, and any environmental management plan or monitoring requirements relating to the contamination, Council may also require a covenant to be registered on the title of the land.

The proponent is responsible for engaging a suitability qualified consultant to carry out the validation and for all associated costs, including any site audit requested by Council

**Figure 2: Council’s Procedure for considering land contamination issues for Development Applications**



### **3. CONTROL OF REMEDIATION WORK**

Development consent is required to carry out category 1 remediation work.

No consent is required to carry out category 2 remediation work. However, the work must still be carried out in accordance with the requirements of SEPP 55.

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

#### **3.1 Category 1 Remediation Work**

Clause 9 of SEPP 55 defines category 1 remediation work as remediation work that is:

- designated development
- proposed on land identified as critical habitat
- likely to have a significant effect on a critical habitat or a threatened species, population or ecological community
- development for which another SEPP or regional environmental plan requires development consent
- proposed in an area or zone identified in a planning instrument as being an area of environmental significance such as a heritage conservation area, floodway or nature reserve (see SEPP 55 for a full listing)
- proposed to be carried out in a manner that does not comply with a council's policy on contaminated land.

All category 1 remediation work must be carried out in accordance with:

- the contaminated land planning guidelines;
- the guidelines published under the *Contaminated Land Management Act 1997*; and
- a RAP prepared in accordance with the contaminated land planning guidelines and approved by the consent authority.

In accordance with clause 12 of SEPP 55, Council must not refuse development consent for category 1 remediation work unless it is satisfied that the proposed remediation work will pose a more significant risk of harm to human health or the environment than if the land were not remediated in that manner.

If the proposed remediation method is considered unsatisfactory, Council will negotiate with the proponent to try and resolve the matter. If agreement cannot be reached, the Department of Planning may be asked to mediate.

### **3.2 Category 2 Remediation Work**

Category 2 remediation work is all remediation work that is not defined as category 1 remediation work.

In accordance with clause 16 of SEPP 55, written notice must be given to Council at least 30 days before the commencement of category 2 remediation work.

In addition to the above notice, the following information must be submitted to Council before remediation work commences:

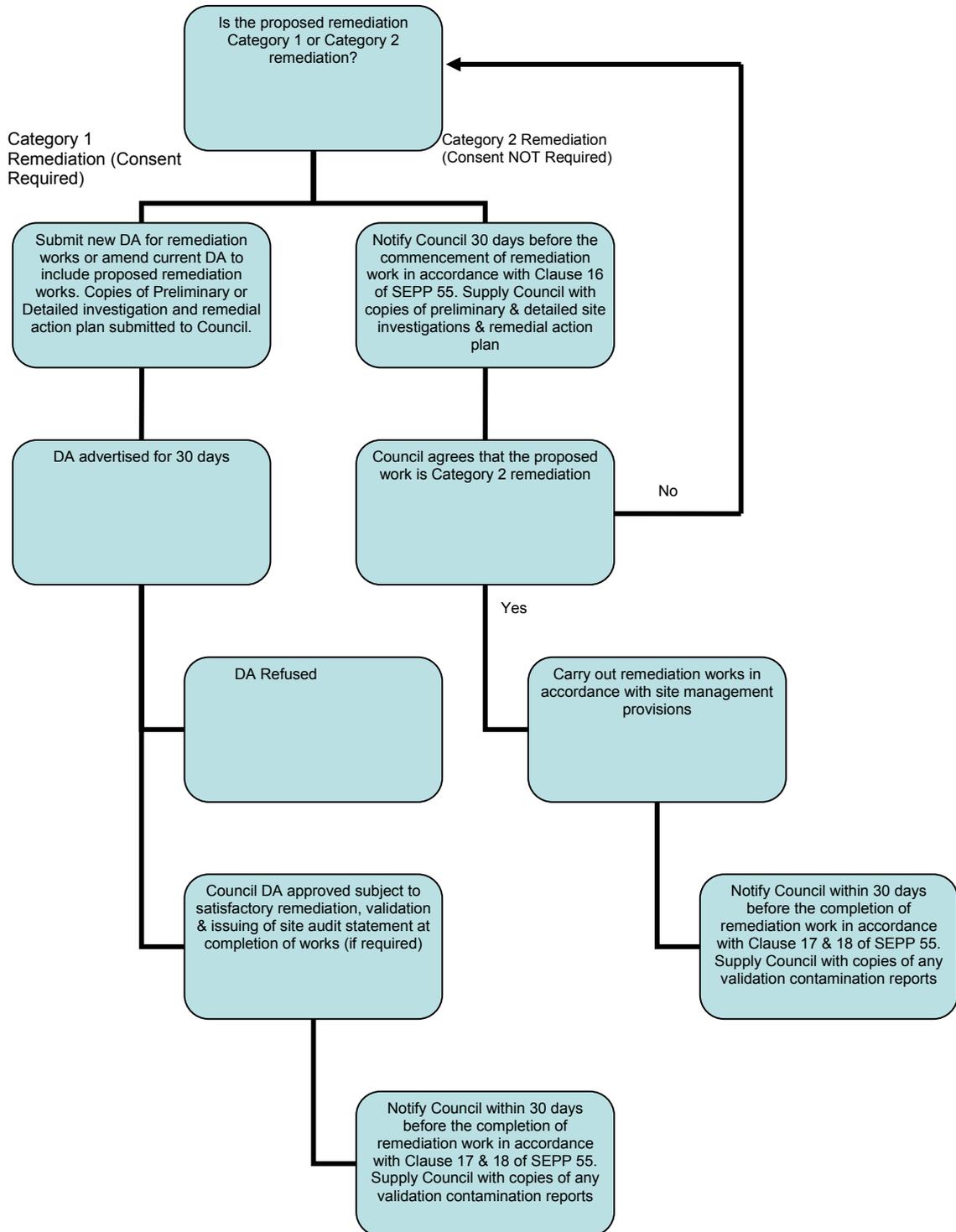
- copies of any investigation reports and remedial action plan (RAP) for the site.
- the name, address and telephone number of the remediation contractor and site manager (if different from the remediation contractor).

The remediation work must be carried out in accordance with the site management provisions set out in Chapter 4 of this policy. The site must also be validated by a suitably qualified environmental consultant on completion of the work to confirm that the clean-up criteria have been met.

Following validation of the site, notice of completion must be submitted to Council in accordance with clauses 17 and 18 of SEPP 55 within 30 days of completion of the work.

A copy of the validation report must also be submitted to Council with the notice of completion.

**Figure 3: Council Procedure for Considering Site Remediation Proposals**



## 4. SITE MANAGEMENT REQUIREMENTS

All category 2 remediation work must be carried out in accordance with the following site management requirements. These requirements apply to the whole of the City of Ryde and have been formulated to ensure that category 2 remediation work does not adversely impact on the environment and public amenity.

Category 2 remediation work that does not comply with these requirements will be classified as category 1 remediation work and will require development consent.

Development applications lodged for category 1 remediation work should identify any departures from these requirements and 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 set out in this policy does not imply that all relevant environmental legislation and regulations have been complied with. Non-compliance with relevant environmental legislation and regulations, such as the *Protection of the Environment Operations Act 1997*, may incur penalties of up to \$5,000,000 in the case of a corporation, or \$1,000,000 and 7 years imprisonment in the case of an individual

### 4.1 Remediation Work

All remediation work must be carried out in accordance with:

- the contaminated land planning guidelines; and
- the guidelines published under the *Contaminated Land Management Act 1997*.

### 4.2 Hours of Operation

All remediation work must be carried out between the following hours:

Monday - Friday	7am - 6pm
Saturday	8am - 1pm

No work is permitted on Sundays or Public Holidays

### **4.3 Site Signage**

A sign displaying the contact details of the remediation contractor and site manager (if different from the remediation contractor) must be displayed on the site adjacent to the site access, including a contact telephone number that is available 24 hours a day, 7 days a week. The sign must be clearly legible from the street and be displayed for the duration of the remediation works.

### **4.4 Notification of Adjacent Owners and Occupiers**

The occupiers of all adjacent premises must be notified of the proposed remediation works at least two (2) days before the works commence.

### **4.5 Site Security**

The site must be securely fenced and any other necessary precautions taken, to prevent unauthorised entry to the site for the duration of the remediation works.

### **4.6 Toilet Facilities**

Toilet facilities must be provided for workers in accordance with the publication titled *Code of Practice: Amenities for Construction Work* (WorkCover, 1996).

[Note: Toilets for workers must be connected to the sewerage system where practicable. Alternatively, Council approval is required under Section 68 of the Local Government Act 1993 to install an accredited sewage management facility (e.g. portable chemical closet) on the site.]

### **4.7 Soil and Water Management**

All remediation work must be carried out in accordance with a soil and water management plan. Council's requirements for the preparation of soil and water management plans are set out in Part 8.1 of Council's *Development Control Plan 2006*.

A copy of the soil and water management plan must be kept on-site and be made available to Council officers on request.

A summary of Council's requirements for soil and water management are set out below:

#### **4.7.1 Sediment and Erosion Controls**

Appropriate sediment and erosion controls must be installed before remediation works are commenced and be maintained in a functional condition until site stabilisation works have been completed. The runoff and erosion controls must include:

- (a) diversion of upslope runoff around disturbed areas in such a manner that the diverted water will not cause erosion and is diverted to a legal discharge point; and
- (b) sediment control fences or other measures at the downslope perimeter of disturbed areas to prevent sediment from escaping from the site.

#### **4.7.2 Stockpiles**

No stockpiles of soil or other materials are to be placed on footpaths or nature strips without the prior written approval of Council.

All stockpiles of soil or other materials must be placed away from drainage lines, gutters, stormwater pits or inlets, trees or native vegetation and be provided with appropriate erosion, sediment and leachate management controls.

All stockpiles of soil or other materials likely to generate dust or odours must be covered (where practical).

All stockpiles of contaminated soil must be stored in a secure area. (See section 4.7.7)

#### **4.7.3 Site Access**

Vehicular access to the site must be restricted to a stabilised access point.

#### **4.7.4 Protection of Public Roads**

Appropriate measures must be taken to prevent the spreading of mud, soil or sediment by vehicles leaving the site. These measures could include the installation of shaker grids or wash-down bays to minimise the transportation of sediment.

Any wastewater from washing the wheels and underbodies of vehicles must be collected and disposed of in a manner that does not pollute waters.

Any mud, soil or sediment tracked or spilled on the roadway must be swept or shovelled up immediately. Hosing of the roadway is not permitted.

#### **4.7.5 Disposal of Water from Excavations**

All excavation pump-out water must also be analysed for suspended solids, pH and any contaminants of concern identified during the contamination assessment phase, and comply with relevant DECC and ANZECC water quality criteria prior to discharge to the stormwater system.

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

#### **4.7.6 Site Stabilisation and Revegetation**

All exposed areas shall be progressively stabilised and revegetated or resealed on the completion of remediation works.

#### **4.7.7 Bunding**

All land farming areas of hydrocarbonated contaminated soils must be bunded to contain surface water runoff and to prevent the leaching of contaminants into the underlying soils. This will typically require placement on a sealed surface or on durable plastic.

All contaminated water from bunded areas must be discharged to sewer with the prior approval of Sydney Water, or be disposed of off-site by a liquid waste transporter at an appropriately licensed liquid waste treatment or processing facility.

### **4.8 Protection of Trees**

Trees on the site must not be removed, lopped or otherwise trimmed without the prior approval of Council.

Trees to be retained on the site must be protected from damage to their foliage and root systems. Suitable measures may include erecting fences or barriers to keep earthmoving equipment and heavy vehicles well clear of trees.

### **4.9 Noise**

Noise must be minimised as far as practicable, by the selection of appropriate methods and equipment, and by the use of silencing devices where practicable.

Noise from remediation work must comply with the guidelines for construction site noise specified in the *Environmental Noise Control Manual* (EPA, 1994), which states as follows:

- For construction periods of 4 weeks or less the L10 level measured over a period of not less than 15 minutes when the construction site is in operation must not exceed the background noise level by more than 20dB(A).
- For construction periods greater than 4 weeks but less than 26 weeks the L10 level measured over a period of not less than 15 minutes when the construction site is in operation must not exceed the background noise level by more than 10dB(A).
- For construction periods greater than 26 weeks the L10 level measured over a period of not less than 15 minutes when the construction site is in operation must not exceed the background noise level by more than 5dB(A).

Noise monitoring must be carried out by a suitably qualified acoustical consultant if complaints are received, or if directed by Council, and any noise control measures recommended by the acoustical consultant must be implemented throughout the remediation work.

## **4.10 Vibration**

The use of plant or machinery must not cause vibrations to be felt on any other premises.

## **4.11 Air Quality**

### **4.11.1 Dust Control**

Dust emissions must be confined within the site boundaries. The following dust control measures may be employed to comply with this requirement:

- erection of dust screens around the perimeter of the site;
- use of water sprays across the site to suppress dust;
- keeping excavation surfaces moist;
- covering of all stockpiles of soil and other materials likely to generate dust (where practical); and
- securely covering all loads entering or exiting the site.

### **4.11.2 Asbestos**

Works involving the potential disturbance of asbestos containing materials must be carried out in strict accordance with NSW WorkCover requirements.

### **4.11.3 Odour Control**

Remediation work must not result in the emission of odours that can be detected at any boundary of the site by an Authorised Council Officer. The following measures 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 mitigating agents on hydrocarbon impacted areas or materials; and
- maintaining equipment and machinery to minimise exhaust emissions.

If odours are detected, the site is to be inspected by a suitably qualified environmental consultant and any recommended control measures are to be implemented throughout the remediation process.

### **4.11.4 Burning of Materials**

No materials are to be burned on site.

## **4.12 Transport**

All haulage routes for trucks transporting soil, materials, equipment or machinery to and from the site must 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.

All transport operators and drivers transporting soil, materials, equipment or machinery to and from the site must:

- use the designated haulage routes and site access points;
- make all deliveries and pick-ups between the hours specified in Section 4.1 - *Hours of Operation*;
- securely cover all loads to prevent any dust or odour emissions during transportation;
- not track soil, mud or sediment onto the road.

## **4.13 Hazardous Wastes**

Hazardous wastes arising from the remediation work must be removed, stored and disposed of in accordance with the requirements of the DECC and WorkCover Authority, including the following legislation and guidelines:

- *Occupational Health and Safety Act 2000*
- *Occupational Health and Safety Regulation 2001*
- *Protection of the Environment Operations Act 1997*
- *Protection of the Environment Operations (Waste) Regulation 2005*
- *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes* (EPA, 1999)
- *Environmentally Hazardous Chemicals Act 1997.*

Documentary evidence verifying that all wastes have been classified and disposed of appropriately must be included in the validation report for the site.

#### **4.14 Disposal of Contaminated Soil**

Contaminated soil must be disposed of in accordance with the requirements of the *Protection of the Environment Operations Act 1997* and Regulations and any relevant DECC guidelines such as the publication titled *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* (EPA, 1999).

NOTE: 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.

#### **4.15 Containment/Capping of Contaminated Material**

On-site contamination or capping of contaminated soil is not permitted if the concentrations of contaminants are statistically above the soil investigation levels specified in the publication titled 'Contaminated Sites: Guidelines for the NSW Site Auditor Scheme' (EPA, 1998) for the range of land-uses permitted on the site.

#### **4.16 Importation of Fill**

Fill material must be validated (at its source if practicable), prior to being imported onto the site. The validation must indicate that the material is free of contaminants or that the concentration levels are appropriate for the intended use of the site. Fill imported on to the site should also be compatible with the existing soil characteristic for site drainage purposes.

Fill material may be validated by one or both of the following methods:

- The 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.
- The fill should be sampled and analysed in accordance with the relevant DECC Guidelines, to ensure that the material is not contaminated.

Documentary evidence verifying that any fill material has been appropriately validated must be included in the validation report for the site.

## **4.17 Groundwater**

A licence must be obtained from the Department of Water and Energy for approval to extract groundwater. Prior to discharge to the stormwater system, site groundwater must be analysed for any contaminants of concern and comply with relevant DECC and ANZECC water quality criteria.

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

## **4.18 Occupational Health & Safety**

It is the responsibility of employers and controllers of premises where remediation work is carried out to ensure compliance with all occupational health and safety requirements, including the *Occupational Health and Safety Act 2000* and *Occupational Health and Safety Regulation 2001*.

## **4.19 Removal of Underground Storage Tanks**

The removal of underground storage tanks (UST) must be undertaken in accordance with the requirements of the WorkCover Authority and the relevant Australian Standards

Following the removal of underground fuel storage tanks, the tank pits must be remediated and validated in accordance with the publication titled Contaminated Sites: *Guidelines for Assessing Service Station Sites* (EPA, 1994)

## **4.20 Excavation and Backfilling Work**

All excavation and backfilling work must be carried out by competent persons in accordance with WorkCover requirements, including the publication titled *Code of Practice: Excavation* (WorkCover, 2000).

If it is necessary to excavate adjacent to an adjoining building or structure, and the excavation work may damage or impair the stability of the building or structure, the person proposing to carry out the work must:

- Take all necessary precautions to protect the building or structure from damage, including any shoring or underpinning where appropriate; and
- Provide details of the proposed work to the adjoining owner at least seven (7) days before the works commence.

## **4.21 Building and Demolition Work**

Development consent may be required from Council for any associated building or demolition work.

## 5. INDEPENDENT SITE AUDITING

### 5.1 What is a Site Audit?

A site audit is an independent review of a contaminated land consultant's work by a site auditor accredited under the *Contaminated Land Management Act 1997*.

A site audit will lead to the issue of a certificate called a *site audit statement*, stating what land use is suitable for the site. The site auditor must also prepare a *summary site audit report* setting out the basis for the auditor's findings and any conclusions contained in the site audit statement.

Site auditors are environmental professionals with demonstrated expertise and broad experience in the assessment and remediation of contaminated sites and have a good understanding of relevant NSW legislation and guidelines.

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

An up-to-date list of accredited auditors can be obtained from the DECC website at [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

### 5.2 When is a Site Audit Required?

In accordance with the contaminated land planning guidelines, Council will require a site audit to be carried out 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 conduct 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 investigation reports and other documentation submitted. Council may also specify any issues to be included within the scope of the site audit.

If Council decides that it needs a site audit to make its decision, the proponent is responsible for engaging a site auditor to perform the site audit and for all associated costs.

A copy of the site audit statement must be given to the DECC and Council at the same time as it is issued to the person who commissioned the site audit.

### **5.3 Conditions in Site Audit Statements**

Site audit statements may be issued with conditions where appropriate. However, before including a condition on a site audit statement, the site auditor must discuss the condition with Council and obtain agreement before issuing the site audit statement with that condition.

If the site audit statement is received prior to development of the site (eg. as part of the planning process), Council will include the site audit conditions as conditions of consent.

## **6. RECORDING AND USE OF 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 section 59 of the *Contaminated Land Management Act 1997* to include specified information on planning certificates issued under section 149(2) of the *Environmental Planning and Assessment Act 1979*.

### **6.1 Council Records**

Council's records regarding land contamination are dynamic and will change over time as land is investigated, remediated and validated.

To assist Council to carry out its planning functions, information concerning land contamination will be added to Council's property information system when the information becomes available. Copies of relevant documents will also be stored on Council's electronic records management system.

The information collected will include:

- information concerning land use history
- complaints about land contamination or potentially contaminating activities
- notifications of remediation work
- investigation reports
- validation reports
- site audit statements
- development applications
- zoning requests
- declarations and orders under the *Contaminated Land Management Act 1997*.

### **6.2 Section 149 Planning Certificates**

Under section 149 of the *Environmental Planning and Assessment Act 1979*, a person may request from Council a planning certificate containing advice on matters about land that are prescribed in the Regulations.

Such matters relating to land contamination that must be included on section 149(2) planning certificates are:

- whether Council has adopted a policy to restrict the use of land due to the risk of land contamination.
- whether the land is in an investigation area or remediation site
- whether the land is subject to an investigation order or remediation order
- whether a site audit statement for the land is held by Council.

Section 149(2) certificates issued by Council will contain information on the above prescribed matters.

In addition, all section 149(2) certificates issued by Council will contain a clause relating to land contamination. The clause would read as follows:

*Council has adopted by resolution a policy concerning the management of contaminated land. This policy applies to all land in the City of Ryde and will restrict development of the land if the circumstances set out in the policy prevail. Copies of the policy are available on Council's Website at [www.ryde.nsw.gov.au](http://www.ryde.nsw.gov.au).*

Section 149(2) planning certificates will not include specific information about actual or potential contamination (such as the type, extent and level of contamination) on a parcel of land.

### **6.3 Obtaining Copies of Site Audit Statements**

Copies of site audit statements may be requested by writing to:

The General Manager  
City of Ryde  
Locked Bag 2069  
NORTH RYDE NSW 1670

## 7.0 SIGNIFICANT RISK OF HARM FROM CONTAMINATED LAND

The *Contaminated Land Management Act 1997* enables the DECC to respond to contamination that is causing a significant risk of harm to human health or the environment, and sets out criteria for determining whether such a risk exists.

The Act also requires owners of land and person who have contaminated land to notify the DECC when they become aware that contamination presents a significant risk of harm.

### 7.1 What is Significant Risk of Harm?

Guidelines for determining whether a site poses a significant risk of harm are set out in the *Guidelines on Significant Risk of Harm from Contaminated Land and the Duty to Report* (EPA, 1999).

Matters requiring consideration when determining whether a site poses a significant risk of harm include:

- whether the contamination of the land has already caused harm (eg. in the form of toxic affects on plants or animals)
- whether the the substances are toxic, persistent or bioaccumulative, or are present in large quantities or high concentrations or occur in combinations
- whether there are exposure pathways available to the substances (eg. the routes whereby the substances may proceed from the source of contamination to human beings or other aspects of the environment)
- whether the uses to which the land and adjoining land are currently being put are such as to increase the risk of harm (eg. use for child care or dwellings)
- whether the approved use of the land and any adjoining land are such as to increase the risk of harm
- whether the substances have migrated or are likely to migrate from the land (whether because of the nature of the substances or the nature of the land)
- any guidelines on contamination or remediation made or approved by the Environment Protection Authority.

### 7.2 Duty to Report

Section 60 of the *Contaminated Land Management Act 1997* imposes a duty on owners of land and person who have contaminated land to notify the DECC when they become aware that contamination presents a significant risk of harm.

According to the guidelines, a person would be considered to become aware:

- when that person receives a site audit statement or consultant's report stating that a site is posing a significant risk of harm
- when that person receives an analysis report indicating that the concentration of contaminants is well in excess of what is appropriate for the current or approved land use for the site
- where there is evidence that contamination is having a toxic effect (eg. obvious plant death in an area of affected soil).

Further information on reporting a significant risk of harm may be obtained from the DECC's Environment Line on Tel. 131 555.

NOTE: Failure to notify the DECC of a significant risk of harm is an offence and offenders are liable to a maximum penalty of 1,250 penalty units (currently \$137,500) in the case of a corporation, or 600 penalty units (currently \$66,000) in the case of an individual.

## 8.0 PREVENTING CONTAMINATION

Land may be contaminated as a result of accidental spills or leaks, or the improper storage, handling or disposal of chemicals and other hazardous substances.

To prevent future land contamination and the need for remediation, Council will:

- Require development applications for potentially polluting activities to include information on the type and volume of chemicals to be used or stored on the premises, the measures proposed to prevent the escape of those substances, and emergency response procedures for accidental leaks or spills.
- When assessing development applications for potentially polluting activities, ensure that the proposed control measures are adequate and impose appropriate consent conditions to ensure that the control measures are implemented.
- Carry out compliance inspections of industrial premises to ensure compliance with consent conditions and environment protection legislation.
- Respond to reports of pollution incidents and take appropriate action to control, mitigate or prevent any potential harm to the environment or public health.
- Advise development applicants of the requirements for appropriate/assessment documentation for all fill materials to be brought onto a site to confirm suitability or otherwise of the fill material for re-use on that site.

## APPENDIX 1

**TABLE 1: SOME ACTIVITIES THAT MAY CAUSE CONTAMINATION**

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: It is not sufficient to rely solely on the above list to determine whether a site is likely to be contaminated or not. This list is a guide only. A conclusive status can only be determined after a review of the site history and, if necessary, sampling and analysis.