

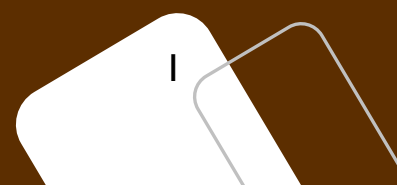
CONTAMINATED LAND GUIDELINES



1.0	Introduction	1
2.0	Necessary Information in the Decision-Making Process	2
2.1	Stages of Investigation	2
2.1.1	Stage 1 - Preliminary Investigation	3
2.1.2	Stage 2 - Detailed Investigation	3
2.1.3	Stage 3 - Site Remedial Action Plan	3
2.1.4	Stage 4 - Validation and Monitoring	3
2.2	Preliminary Investigation Report	4
2.2.1	Rezoning Applications	4
2.2.2	Development/Complying Development Certificate Applications	4
2.3	Subsequent Stages	4
2.4	Independent Review	4
2.5	Site Audit	5
2.6	Site Auditor Scheme	5
3.0	Procedures for Rezoning Applications	6
4.0	Procedures for Development/Complying Development Certificate Applications	7
5.0	Clean-Up Notice Remediation	9
6.0	Specified Clean-Up Notices	9
APPENDIX A - Some Activities That May Cause Contamination		10
APPENDIX B - Site Auditor Scheme		13

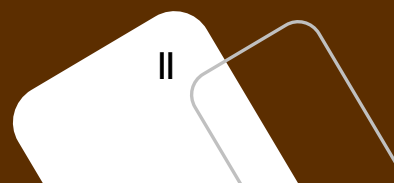
FIGURES AND TABLES

	PAGE
Appendix A Activities that may Cause Contamination	10
Appendix B List of Accredited Site Auditors	12



Amendments to Part Q – Contaminated Land Guidelines
(as of 2 July 2008)

Amendment No.	Location	Description	Adoption Date	Enforcement Date



CONTAMINATED LAND GUIDELINES

1.0 Introduction

Pursuant to the provisions of the *Environmental Planning and Assessment Act 1979* (as amended), Council has a duty of care, when considering Rezoning, Development and Complying Development Certificate Applications, to consider fully the possibility of land contamination and the implications it has for any proposed future use of land.

In recognition of its duty of care, Blacktown City Council will adopt a **precautionary approach** to its consideration of applications involving contaminated or potentially contaminated land. The object of this approach is to enable any land contamination issues to be identified and dealt with at an early stage in the planning process. In order for this to occur, Council has developed a set of procedures to be followed for rezoning proposals, Development Application (DAs) and for Complying Development Certificate Applications (CDCs). These procedures allow for a merit-based consideration of land contamination issues, i.e. in considering the implications of contamination, Council will have regard for the sensitivity of a proposed land use in addition to any technical standards or requirements published by:

- (a) the NSW Environment Protection Authority (EPA) (incorporated into the NSW Department of Environment and Conservation);
- (b) the Australian and New Zealand Environment Conservation Council (ANZECC);
- (c) the National Health and Medical Research Council (NH&MRC);
- (d) the National Environment Protection Council (NEPC); or

any other relevant authority.

The procedural principles which apply to all development proposals in Blacktown are spelt out in section 2.1 of this Part of Blacktown Development Control Plan (DCP) 2006. Specific procedures for rezoning applications and for DAs/CDCs are outlined in sections 3.0 and 4.0 respectively.

The processes of identifying, evaluating and remediating contaminated land are documented in the ANZECC and NH&MRC publication entitled "Guidelines for the Assessment and Management of Contaminated Sites" (January, 1992). Council considers these guidelines to be a **mandatory reference** for consultants assessing contamination levels and undertaking remediation works. Consultants preparing contamination reports should also have a practical working knowledge of the various Environment Protection Authority and NEPC publications on contaminated land including:

- (1) Environment Protection Authority (EPA), 1994, Contaminated Sites: Guidelines for Assessing Service Station Sites.
- (2) EPA, 1995, Contaminated Sites: Sampling Design Guidelines.
- (3) EPA, 1995, Contaminated Sites: Guidelines for the Vertical Mixing of Soil on Former Broad-Acre Agricultural Land.
- (4) EPA, 1997, Guidelines for Consultants Reporting on Contaminated Sites.
- (5) EPA, 1998, Guidelines for the NSW Auditor Scheme.



CONTAMINATED LAND GUIDELINES

- (6) NEPC, 1999, Draft National Environmental Protection Measure - Assessment of Contaminated Sites.

Contaminated land means land in, on or under which any substance is present at a concentration above that naturally present in, on or under the land and that poses, or is likely to pose, an immediate or long term risk to human health or the environment (*Environmental Planning & Assessment Act 1979*, as amended).

Contamination can **result** from a number of past and/or present occurrences, such as:-

- (a) the controlled or uncontrolled disposal of wastes, including sewage;
- (b) accidental leakage;
- (c) leakage during plant operation, storage or transportation of raw materials, finished products or wastes;
- (d) the corrosion of underground tanks;
- (e) the emission of particulate matter into the atmosphere;
- (f) the migration of contaminants into a site from neighbouring land, either as vapour, leachate or movement of liquids through the soil; and
- (g) the use of agricultural chemicals.

The Table at **Appendix A** provides a reference to some activities that may cause contamination. The Table should be consulted as part of the initial enquiry process undertaken prior to the lodgement of an application with Council. The list of activities in the Table is a guide only to potentially contaminating sources. It should not be used as an exhaustive list.

Council views contamination as a subset of general pollution and will seek, in its assessment and determination of all applications, to ensure the continued compatibility of all development by minimising the potential for polluting discharges, fugitive emissions and controlled spillages by appropriate site management techniques. It is incumbent upon all developers to design and manage their sites in a manner consistent with this objective. Council does not favour site remediation which requires ongoing monitoring of capped contamination.

This Part of the DCP is based on the provisions of the State Government's **Planning Guidelines for Managing Land Contamination (1998)** and **State Environmental Planning Policy (SEPP) No. 55 - Remediation of Land** (as amended by Amendment 1). Both of these documents, as well as the **Contaminated Land Management (CLM) Act 1997**, should be consulted in the preparation and assessment of site contamination reports.

2.0 Necessary Information in the Decision Making Process

2.1 Stages of Investigation

There are 4 main stages in the investigation of contaminated or potentially contaminated land. At each stage it is the applicant's responsibility to provide the necessary documentation to Council and to fund the work required to prepare such documents. The stages are as follows:



2.1.1 Stage 1 – Preliminary Investigation

This stage involves the investigation and reporting of the site history and is typically based on readily available information such as historical records of land use, aerial photographs, consultations with previous occupants and relevant authorities and a site inspection.

Where contaminating activities are suspected to have had an impact on the land, some initial sampling and analysis will need to be undertaken, by a suitably qualified environmental consultant and in accordance with Environment Protection Authority guidelines, to confirm and support any conclusions reached from the site history appraisal.

2.1.2 Stage 2 – Detailed Investigation

Should the initial investigations fail to clearly demonstrate that the land is suitable for its proposed use, a more detailed assessment and evaluation is required to be undertaken. This detailed evaluation stage involves formal sampling by a suitably qualified environmental consultant in accordance with the relevant Environment Protection Authority guidelines and standards. Typically, a site specific work plan is developed during this stage, based on previous investigations.

2.1.3 Stage 3 – Site Remedial Action Plan

The Remedial Action Plan should demonstrate how the proponent or their consultant proposes to reduce risks to acceptable levels and achieve the desired clean-up levels. The ultimate goal of site clean-up is to select a socially acceptable and cost effective management strategy which mitigates threats to, and provides protection for, public health, welfare and the environment as well as allowing flexibility in the future use of the land.

2.1.4 Stage 4 – Validation and Monitoring

The purpose of validation is to confirm whether the pre-determined clean-up objectives have been attained and whether any further remediation or restrictions on land use are required. Ideally, validation should be conducted by the same consultant that conducted the rest of the site investigation and remediation process. The relevant Environment Protection Authority guidelines should be followed in this process.

Depending on the extent of contamination and the method of remediation, e.g. containment, there may be a need for continual site monitoring and/or restrictions on the development potential of the land. A proper monitoring program should include a monitoring strategy, the parameters to be monitored, the monitoring locations, the frequency of monitoring and the appropriate reporting requirements. Any restrictions on the land's development potential would normally be imposed by Council at the rezoning or DA/CDC determination stage.

As a general rule, Council prefers remediation strategies that do not rely on site monitoring or land restrictions. Such strategies may include the removal of contaminants and their off-site disposal or their in situ treatment (e.g. bio-remediation).



2.2 Preliminary Investigation Report

A Stage 1 - Preliminary Investigation report (including site history information and documentation of known or potential sources of contamination) is required to be submitted to Council in the following circumstances at the nominated time.

2.2.1 Rezoning Applications

Where land is part of an investigation area under Part 3 of the *Contaminated Land Management Act 1997*, where the land has been used for an activity listed at **Appendix A** or where there are incomplete records regarding the historical use of the land and it is proposed to be rezoned for residential, education, recreational, child care or hospital purposes.

Nominated Time: At the time of lodging the Rezoning Application with Council.

2.2.2 Development/Complying Development Certificate Applications

Where a change of land use is proposed and where the subject, or immediately adjacent, land is suspected of contamination because it has historically been used for an activity listed at **Appendix A**.

Nominated Time: *As part of the documentation included with the relevant application to Council.*

2.3 Subsequent Stages

Subsequent stages in the investigation of contaminated land need not apply where:

- (a) a Preliminary Investigation report clearly and unequivocally demonstrates, in the opinion of Council, that contamination of the subject land, and its surrounds, has not occurred; or
- (b) the subject land has previously been remediated to an appropriate standard, acceptable to Council, for the proposed land use.

2.4 Independent Review

At any time throughout the assessment process Council may request a separate **independent review** of work done or conclusions drawn by an applicant's consultant.

An independent review may be carried out by a third party, such as another consultant who is qualified to deal with the type of land contamination in question and who is independent of both the applicant and the applicant's consultant.

The cost of an independent review would normally be borne by an applicant and not Council. It may be required prior to any Council decision being made or as a counter-check of work done following an initial Council decision.



2.5 Site Audit

A **site audit** is an independent review of any or all of the stages of the site investigation process, conducted in accordance with the *Contaminated Land Management Act 1997*. A site audit can only be undertaken by a site auditor accredited by the NSW Environment Protection Authority under the *Contaminated Land Management Act 1997*.

Although SEPP No. 55 does not require a mandatory site audit for remediation work, Council may require a site audit at any stage of the planning process if it:-

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

In these and other circumstances, Council may require an independent review but not a site audit carried out in accordance with the *Contaminated Land Management Act 1997*. The decision as to whether an independent review or a site audit is necessary and is at the discretion of Council's Director of Planning & Development Services.

2.6 Site Auditor Scheme

A list of consultants accredited by the NSW EPA as site auditors under the CLM Act 1997 is provided at **Appendix B**. Updates of this list can be obtained at EPA's internet address: www.epa.nsw.gov.au/clm/auditors.htm.

The Department of Environment and Conservation (NSW) recently revised the Site Audit Statement format. The revised statement does not replace the Site Audit Report prepared by the Auditor, as the Audit Report remains the primary source of detailed information on the condition of the site. Rather the Statement is intended to provide the following information to Council:

- (a) identify the site which is the subject of the audit and the purpose of the audit; and
- (b) summarise the Auditor's findings according to the purpose of the audit.

Auditors accredited under the CLM Act must complete the Site Audit Statement at the conclusion of an audit and furnish a copy to the party commissioning the audit. If the audit is statutory, as defined in the CLM Act, auditors must also send a copy to the DEC and Council. **The revised form is to be used for all audits completed by accredited site auditors after 21 February 2005.**

A copy of a standard Site Audit Statement can be obtained from the Department of Environment and Conservation website under information relating to contaminated sites and the Auditor Scheme:
<http://www.environment.nsw.gov.au/resources/sasfeb05.pdf>.



3.0 Procedures for Rezoning Applications

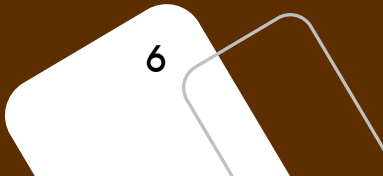
All Rezoning Applications will be processed by Council generally in accordance with the procedure tabled at page 8. SEPP No. 55 requires consideration of contamination issues when rezoning land. If a rezoning allows a change of use that may increase the risk to health or the environment from contamination, then Council must be satisfied that the land is suitable for the proposed use or can be remediated to make it suitable. If remediation is necessary, Council must be satisfied that suitable planning controls are in place to ensure that this occurs or it may need to be satisfied that appropriate remediation has taken place prior to proceeding with the rezoning.

The **key requirements** of this procedure are:

- (i) The submission, by the applicant, of a Stage 1 - Preliminary Investigation report (see section 2.1.1) at the time of lodgement of the application with Council, in circumstances identified at Section 1.2 of this Part.
- (ii) Should Council's assessment of the Preliminary Investigation report indicate the need for further information, or where it has not been clearly demonstrated that land is suitable for its proposed use in its present state, Council will require the submission of a Detailed Investigation report (see Section 2.1.2).
- (iii) Should the Preliminary Investigation report, and/or any additional information submitted, clearly and unequivocally show that contamination is not present, Council may proceed to consider the preparation of a draft Local Environmental Plan (LEP).
- (iv) If land is found to be contaminated and an applicant's consultant verifies that remediation to a level suitable for the intended use is practical, Council may proceed to consider the preparation of a draft LEP. If remediation is not practical the applicant may either withdraw the application or reconsider land use options for the subject land or, alternatively, Council will refuse the application.
- (v) If Council is uncertain about the findings of a Preliminary Investigation report or a Detailed Investigation report, it may require an independent review or site audit of work undertaken, as documented in Sections 2.4 to 2.6 of this Part.

For **spot rezonings** it would not be appropriate to proceed with the rezoning unless the land is or can be made suitable for the proposed development. In such cases, the rezoning will be treated as if it were a Development Application. It may be necessary for a Detailed Investigation to be undertaken or, in some circumstances, for remediation to occur prior to the rezoning becoming effective. The decision as to what level of investigation or remediation is undertaken in relation to spot rezonings rests solely with Council.

For **generalised rezonings** involving large tracts of land, it is often difficult to accurately assess the level of likely contamination. In such cases, rezoning studies should attempt to identify potential area "hot spots" and should have regard for possible future sensitive uses and the suitability of land on which they are proposed.



For some rezonings, contamination will not be an issue, e.g. if there is no change of use or where there is a change to a similar use.

4.0 Procedures for Development/Complying Development Certificate Applications

Those DAs/CDCs to which this Part of the DCP applies will be processed by Council in accordance with Council's procedures.

The **key requirements** of these procedure are:

- (i) The submission, by the applicant, of a Preliminary Investigation report (see section 2.1) at the time of lodgement of the application with Council, in circumstances identified at section 2.2 of this Part.
- (ii) Should Council's assessment of the Preliminary Investigation report indicate the need for further information, Council may call for additional sampling and/or justification to be submitted, at the applicant's cost.
- (iii) Where it has not been clearly demonstrated that land is suitable for its proposed use in its present state, Council will require the submission of a Detailed Investigation report (see section 2.1.2).
- (iv) Where land is found to be free of contamination or where, in Council's opinion, the extent of contamination does not pose a threat to human health or the environment, or otherwise render the site unsuitable for the proposed development, Council may proceed to determine the application without reference to clean-up standards or remediation requirements.
- (v) If the land is found to be contaminated, an appropriate Site Remedial Action Plan may be required to be submitted for Council's consideration. Where remediation is not practical, the application will be refused by Council.
- (vi) If Council is uncertain about the findings of a Preliminary Investigation report or a Detailed Investigation, it may require an independent review of work undertaken, as documented in sections 2.4 to 2.6 of this Part.
- (vii) Council may also require any necessary remediation to be validated by an independent environmental consultant.
- (viii) Depending on the degree of contamination and the remediation strategy proposed (as well as the category of remediation works pursuant to SEPP No. 55), Council may decide to issue a deferred commencement consent or require the developer or land owner to maintain and monitor the land to ensure the containment of contaminants. As a general rule, remediation which does not require ongoing monitoring is favoured by Council.

Information pertaining to land contamination which has been submitted as part of any relevant rezoning application may be sufficient to satisfy some of the requirements of this Part for DAs or CDCs.

It is incumbent upon an applicant to demonstrate to Council that previous investigations, and/or remediation strategy/works, carried out at any stage in the land development process, satisfy the provisions of this Part.



Where land has been previously remediated, contamination issues will still need to be considered when land is proposed for redevelopment. Council must be sure that any residual contamination is dealt with to permit the proposed new land use, particularly if clean-up standards have changed or there is on-site encapsulation of contaminated material.

Pursuant to SEPP No. 55, Council's development consent is required for certain remediation works (known as **Category 1 works**). These works typically relate to land that is critical habitat or otherwise environmentally sensitive or to remediation works which are separately listed as "designated development" under the *Environmental Planning & Assessment Regulation 1998*. Where remediation is proposed on a site declared to be a "remediation site" under the *Contaminated Land Management Act 1997*, the Minister for Planning is the consent authority. Applicants and developers should familiarise themselves with the provisions of SEPP No. 55 in relation to the need for development consent for certain remediation works.

If investigations undertaken as part of the assessment of a DA/CDC establish that contamination makes the land unsuitable for the proposed use and that remediation is necessary in order for the development to proceed, Council may, if the remediation requires separate consent under SEPP No. 55 (i.e. is a Category 1 work):

- (a) require the applicant to amend the proposal to include a remediation strategy as part of an amended DA; or
- (b) require a new and separate DA for the remediation before the original DA/CDC for the end use is determined.

Pursuant to SEPP No. 55, development consent is not required for remediation works which are not Category 1 works. These remediation works are known as **Category 2 works** and may be undertaken either as part of the DA/CDC process (i.e. where a DA/CDC is submitted for a proposed end use) or independent of the DA/CDC process (i.e. where remediation is completed ahead of the lodgement or determination of a separate application for the end use).

If investigations relevant to a DA/CDC establish that remediation of a site is necessary in order for the development to proceed and that remediation is a Category 2 work, then Council may:-

- (a) impose conditions on its consent requiring remediation to be carried out and validated either before other work commences or before occupation of the site; or
- (b) issue a deferred commencement consent for the use and require remediation to be carried out and validated before other work commences.

Where a Category 2 land remediation work is undertaken independent of the DA/CDC process, it must be carried out in accordance with the relevant Environment Protection Authority standards, the Planning Guidelines and in a manner consistent with the procedural requirements of SEPP No. 55. SEPP No. 55 requires that local Councils be notified 30 days before Category 2 remediation works commence (in order to allow Council an opportunity to verify that the work is not a Category 1 work).



SEPP No. 55 also requires that a Notice of Completion be issued to the Council for all remediation work (both Category 1 and 2 works).

Remediation is often carried out in conjunction with other development, to make the land suitable for that development. The SEPP contains the following rules for remediation as ancillary development:-

- (a) remediation work may be treated as Category 2 work instead of Category 1 if the only reason it is in Category 1 is that it is ancillary to designated development;
- (b) remediation work that meets the criteria for Category 1 work may not be treated as Category 2 just because it is ancillary to development without consent;
- (c) if Category 1 remediation work is carried out ancillary to development without consent, this does not result in a requirement for consent for that development;
- (d) if remediation work is designated development under Schedule 3 of the EP & A Regulation or the provisions of a planning instrument, this does not mean that any associated development is also designated.

5.0 Clean-Up Notice Remediation

Pursuant to SEPP No. 55 Amendment 1 dated 30 July 2004 - Clause 21 indicates that the SEPP 55 provisions do not apply to Clean-Up Notices.

Any development or activity carried out for the purpose of complying with a Clean-Up Notice:

- (a) may be carried out **without** development consent.
- (b) to the extent that it involves carrying out any remediation work must be carried out in accordance with:
 - (i) the Contaminated Land Planning Guidelines.
 - (ii) the guidelines (if any) in force under the *Contaminated Land Management Act 1997*.

6.0 Specified Clean-Up Notices

At present all Appropriate Regulatory Authorities as defined in the Protection of the *Environment Operations Act 1997* can issue a Section 91 Clean-Up Notice under this Act. Blacktown City Council is classified as being one of these Appropriate Regulatory Authorities and as such Council can issue such notices.



CONTAMINATED LAND GUIDELINES

APPENDIX A - Some Activities That May Cause Contamination

APPENDIX A

SOME ACTIVITIES THAT MAY CAUSE CONTAMINATION

Agricultural/Horticultural Activities	Land heavily treated with persistent chemicals such as arsenic and organochlorine based chemicals (e.g. banana plantations, cotton and sugar cane fields, local orchards and horticultural plantations and market gardens), and organophosphate-based chemicals.
Airports	Hydrocarbons (fuels and organic solvents), oils and heavy metals.
Asbestos Production and Disposal	Asbestos based waste such as asbestos tailings (usually contains 2% asbestos from asbestos mines).
Battery Manufacture and Recycling	May involve the use of metals including lead, manganese, zinc, cadmium, nickel, cobalt, mercury, silver or antimony or sulfuric acid.
Breweries/Distilleries	Involving the use and storage of alcohols (ethanol, methanol and esters).
Chemical & Petrochemical works	A variety of contaminants from the manufacture, formulation, recovery and storage of organic and inorganic chemicals, including petrochemicals e.g. tar and bitumen, solvents such as chloroform, trichloroethylene and tetrachloroethylene (e.g. for dry cleaning establishments), fertilisers, pesticides, pharmaceuticals, soaps and detergents, dyestuffs, inks and paints, acids and alkalis, adhesives, explosives, flocculants, foam production, plastics, photography, rubber and solvents.
Concrete & brick industry	In areas with clay deposits, open cuts were created from the extractive activities. These open cuts, which could reach a depth of up to 10 metres, are often progressively filled with waste and, in particular, industrial waste.
Defence Works	Possible unexploded ordnances, heavy metals, oils, hydrocarbons and asbestos.
Docks and Railway land, especially large sidings and depots	Oils and hydrocarbons (including polyaromatics such as PAHs, diesel fraction), volatile chlorinated hydrocarbons, heavy metals (copper, lead, mercury, chromium and zinc), and paints, arsenic, herbicides and asbestos.
Drum reconditioning works	Chemicals, oils, hydrocarbons, heavy metals, oxides, pesticides, fertilisers, detergents, dyestuffs, ink, paint, acids and alkalis.
Dry cleaning establishments	Involving the use of solvents such as tetrachloroethylene and other chemicals.
Electrical manufacturing (transformers)	Heavy metals, oils, PCBs, PAHs.
Gasworks, other local carbonisation plants and ancillary by products works	Hydrocarbons such as naphtha, especially aromatic hydrocarbons such as PAHs, coal tar derivatives, phenolics, "spent oxide" (iron or calcium oxides containing high concentrations of free sulphur, sulphides, sulphates), cyanides (free and complex) and asbestos.

Heavy engineering installations and engine works, e.g. shipbuilding, car manufacturing, electrical and electronic manufacturing	Heavy metals, oxides, antifouling paints (copper and tributyl and tin based), lead, asbestos, hydrocarbons, solvents, acids/alkalis, refrigerants (chloro-fluorocarbons, etc.).
Installations involving and processing, use or disposal of radioactive materials	Cobalt (e.g. gamma sterilisation and medical therapy), strontium, cesium and radium (e.g. research and medical applications), uranium (e.g. research), thorium (e.g. industrial processing of mineral sands), plutonium and tritium isotopes and others.
Landfills and other waste disposal, storage and treatment sites including transfer stations	Putrescible (e.g. food waste), paper, glass, plastics, metals and others, generated mainly by householders - in municipal landfills; bacteriological contaminants (e.g. infectious waste) and cytotoxic chemicals from clinical waste, pesticides from contaminated drums, ash containing heavy metals from coal fired power stations or other incinerators, aluminium and iron from water treatment residuals, heavy metal based waste from mining activities and liquid waste such as solvents, generated mainly by industry - in controlled and/or secured landfills.
Marinas	Anti-fouling paints, copper, tributyltin (TBT) and materials used in electroplating.
Metal/metallurgical industry, e.g. refining or recovery of metals, electroplating, heat treatment and metal finishing	Phosphates, nitrates, nitrites, sulphates, heavy metals (cadmium, chromium, copper, lead, nickel, zinc, cobalt, etc.) and cyanides (from alkali cleaning), aromatic compounds such as benzene, toluene, xylenes, styrene and chlorinated hydrocarbons (from solvent cleaning and paint removal), polycyclic aromatic hydrocarbons (from colouring and bitumenising agents), PCBs and mineral oils, asbestos and beryllium.
Metal mines	Acids, cyanides and heavy metals such as cadmium, copper and zinc from mine tailings and processing plants, asbestos and sulphates.
Mining and extractive industries	Arsenic, mercury and cyanides, explosives, aluminium, copper chromium, cobalt, lead, manganese, nickel, selenium, zinc and radio-radionuclides.
Munition production, testing sites and other explosive industries	Mercury and lead based compounds, RDX, sulphur, nitrates (organic and inorganic), TNT, detonating devices and others.
Oil refineries, petroleum storage and distribution	Petroleum hydrocarbons and lead from oil refineries, petrol stations, above and underground storage tanks and distribution sites.
Paper and printing works	Ash, hydroxides, peroxides, acids, foaming agents, chelating agents (e.g. DTPA), dyes.
Pesticide storage areas, areas where vehicles used for the transport and storage of pesticides are washed and areas where tanks are used to store pesticides	Insecticides, fungicides and herbicides.
Power stations and electrical works	Polychlorinated biphenyls (PCBs) from transformers and capacitors, ash, tin, lead, copper, mercury (heavy metals), asbestos and solvents.

Printing and photographic shops	Acids, alkalis, solvents, chromium, ammonium compounds, alcohols, silver, potassium, bromide, etc.
Scrap yards	Heavy metals, residues from drums including chlorinated hydrocarbon solvents.
Service stations	Heavy metals, hydrocarbons, oils, aromatic compounds.
Smelters, foundries, iron and steel works	Lead, copper, zinc, cadmium, mercury, aluminium, fluorides and acid from smelters and foundry operations, PAHs (Poly Aromatic Hydrocarbons), cyanides, heavy metals and benzene, toluene and xylene (BTX), ethyl benzene, asbestos, naphthalene, tars and ammonium sulphate from steel works.
Stock dipping, e.g. activities of cattle tick and sheep dip sites	Chemicals (mainly tickicides) disposed of in the 1960s and 1970s such as DDT, arsenic, BHC, delnev, carbaryl and ethion; current chemicals in use (e.g. taktic, amitraz, cypermethrin, bendiocarb, deltamethrin, flumethrin, bayticol, diazinon, chlorfenvinfos and barricade 's').
Tanneries and associated trades	Materials derived from the hides and skins such as grease and dung; chemicals used in the preservation and tanning process such as sulphate, lime, sulphide, hydroxides, chlorides and arsenic based compounds for pretreatment, tannins, sulphites and chromium salts for tanning.
Termite/ant control	Where substantial areas of soil may be contaminated with organochlorine residues (e.g. dieldrin, heptachlor, chlordane).
Timber treatment and preservation works	Creosote, polycyclic hydrocarbons, polyaromatic hydrocarbons (PAHs), copper, chromium, arsenic, boron and pentachlorophenol (PCP) from industries using or making wood preservatives and other organochlorines.

NOTE: It is not sufficient to rely solely on this list to determine whether a site is likely to be contaminated or not. The list is a guide only.

APPENDIX B - Site Auditor Scheme

List of Site Auditors Accredited under the Contaminated Land Management Act 1997 as at 18 August 2006

APPENDIX B
SITE AUDITOR
SCHEME

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NOTE: Further updates are provided by the Environmental Protection Authority advising of any changes to the accreditation list. For enquiries regarding the NSW site auditor scheme please contact the Environmental Protection Authority on 02 9995 5617