



CONTAMINATED LAND POLICY

Development Control Code – Kurnell Peninsula

Development Control Plan – Land Deferred or Excluded from Sutherland
Shire Local Environmental Plan 2006



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Note: Where does this plan apply? This plan applies to all part of Sutherland Shire Council that is not covered by Sutherland Shire Development Control Plan 2006. This includes Kurnell Peninsula, and land Deferred and Excluded from Sutherland Shire Local Environmental Plan 2006.

1.0 Contaminated Land Management

Contaminated land is defined as land in, on or under which any substance is present in soil, the underlying groundwater or surface water at a concentration that exceeds normal background levels for that area that may present a risk of harm to human health or the environment. Land contamination may be the result of past or current uses. The land may have been contaminated by a land use activity directly on that site, as a result of improper chemical handling or disposal practices, or accidental spillages or leakages of chemicals during manufacturing or storage. Contamination of a site may also occur through migration of contaminating substances from sources such as contaminated groundwater from an adjoining site, run-off from an upstream site or from dust settling out from industrial emissions.

Section 79C(1c) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) requires Council to consider 'the suitability of the site for the development' when assessing a development application. Therefore, when carrying out planning functions under the EP&A Act, Council must consider the possibility of land contamination and the implication it has for any proposed or permissible future uses of the land. The extent of the contamination may preclude the future development of the site for particular uses. A precautionary approach will be adopted to ensure that land contamination issues are identified and dealt with early in the planning process. The *State Environmental Planning Policy 55 – Remediation of Land* (SEPP 55) under the EP&A Act 1979 provides for consistent State-wide planning controls for remediation of land. Clause 9(f) of SEPP 55 allows Council to make a policy under the contaminated land planning guidelines and this policy must be considered during the planning process.

The *Contaminated Land Management Act 1997* (CLM Act) sets the overall legislative framework and powers for the Environment Protection Authority (EPA) to manage contamination that is significant enough to warrant regulation under the Act. The CLM Act, SEPP 55 and any current guidelines and Regulations issued under these acts shall be referred to and complied with during assessment and remediation of contaminated land. In addition, *WorkCover NSW, Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000, Australian and New Zealand Environment and Conservation Council (ANZECC 2000), National Environment Protection Council (NEPC)* and other relevant current guidelines may need to be complied with.

This policy applies to all development involving works on land identified as being contaminated or potentially contaminated. Council will maintain a contaminated lands information register to assist in the identification of potentially contaminated land. It is the

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aim of Council to record all contaminated and potentially contaminated sites in the contaminated lands information register and on s149 Planning Certificates. However there may be land uses unknown to Council which may not be recorded. Therefore it is the responsibility of the owner or the purchaser to conduct investigations to determine the current status of the site.



2.0 Objectives

2.1 Objectives for All Development

1. The objectives of this policy are:
 - a. To enable any land contamination issues to be identified and dealt with at an early stage in the planning process in order to prevent and reduce the risks of harm to the environment and human health and reduce delays and costs.
 - b. To ensure developments adequately consider the potential risk arising from contaminated land.
 - c. To ensure that any future development employs preventative measures to eliminate the risk from existing land contamination.
 - d. To avoid contamination of land in the first instance by taking precautionary steps to prevent the release of substances that cause contamination of our environment.
 - e. To facilitate appropriate site remediation to ensure the land is suitable for the intended use.
 - f. To outline the requirements for contaminated and potentially contaminated sites.
 - g. To ensure adequate information is submitted to Council demonstrating that the land is suitable for the proposed use or can be and will be made suitable for the use.



3.0 Controls for All Development

3.1 Controls for all Contaminated or Potentially Contaminated Land

1. Council must consider whether the development is located on contaminated land or land that may be contaminated. The site history and in particular past and current uses need to be considered as a potential indicator of contamination.
2. Development of contaminated land or potentially contaminated land will need to determine:
 - a. The extent to which land is contaminated (including both soil and groundwater contamination) and;
 - b. Whether 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. Whether the land requires remediation to make the land suitable for the intended use prior to that development being carried out, and;
 - d. If the land has been previously investigated or remediated, development cannot be carried out until Council has considered the nature, distribution and levels of residues remaining on the land and Council has determined that the land is suitable for the intended use.



4.0 Development where a Site Investigation Process is required

Note: The EP&A Act and SEPP 55 – Remediation of Land requires Council to consider the suitability of land for a proposed use or development. If contamination is, or may be, present the proponent must investigate the site and provide information to Council to enable Council to make a decision that a site is suitable or can and will be made suitable prior to use of the site. This decision is based on the information provided by a proponent. Council must not grant consent for works until the land is deemed suitable for its intended purpose.

A four stage site investigation and reporting process may need to be followed as outlined in the guidelines made under the Contaminated Land Management Act 1997. A proponent may need to provide the following information to show the land is suitable for the proposed use. This may include one or more of the following:

- A Preliminary Investigation (Stage 1)
 - A Detailed Investigation (Stage 2)
 - A Remedial Action Plan (Stage 3)
 - Validation, Monitoring and Remediation reporting (Stage 4)
-

4.1 Controls for all Development where a Stage 1 – Preliminary Investigation is required

1. A Preliminary Site Investigation must be undertaken for the land outlined below. The Preliminary Site Investigation must be prepared in accordance with Guidelines made under Section 105 of the *Contaminated Land Management Act 1997* and contains a detailed appraisal of the site's history, as well as a site inspection and assessment in addition to other information.
 - a. Land that is Significantly Contaminated Land, as declared under the *Contaminated Land Management Act 1997*.
 - b. Land on which development referred to in Table 1 (see note below) of the *Managing Land Contamination – Planning Guidelines* issued under *State Environmental Planning Policy No.55 – Remediation of Land* is being, or is known to have been, carried out.
 - c. Land on which there is to be a change of use from industrial or commercial usage, to a more sensitive land use such as residential, educational, recreational, childcare, residential care accommodation or hospital usage.
 - d. Land where development referred to in Table 1 of the *Managing Land Contamination – Planning Guidelines* issued under *State Environmental*



Planning Policy No.55 – Remediation of Land, may have occurred, or land where knowledge of previous land uses is incomplete.

- e. Land that is within 100m of a site that has or has previously had a contaminating activity as listed in Table 1 (see note below) of the *Managing Land Contamination – Planning Guidelines* issued under *State Environment Planning Policy No.55 – Remediation of Land*.
- f. Land that Council has reasonable grounds to believe is contaminated based on the lands history, condition or other information known to Council or as notified on a s149 Planning Certificate.
- g. Land that has been previously investigated and/or remediated but there is sufficient evidence to suggest that the land is not suitable for its intended use due to the nature and extent of contamination, pollution incidents or illegal dumping of wastes; or if the circumstances have changed or if there has been a significant time lapse since previous investigations.
- h. Land where a planning or regulatory authority has placed conditions or restrictions on the use of the land regarding contamination and sufficient information regarding the current nature and extent of contamination of the site is not available.

Note: Table 1: Some Activities that may cause Contamination. This is based on an extract from the SEPP 55 Managing Land Contamination – Guidelines 1998 and is a guide only. Other activities not provided below may also cause contamination. Refer to the SEPP for the current list of activities.

- 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
- explosives 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

4.2 Controls for all Development where a Stage 2 – Detailed Site Investigation is required

1. Where a Preliminary Site Investigation indicates the presence of contamination or where there are gaps in information relating to the history of the site, a Stage 2 – Detailed Site Investigation is required. A Preliminary and Detailed Site Investigation may be conducted together.
2. A Detailed Site Investigation shall be prepared in accordance with Guidelines made under Section 105 of the *Contaminated Land Management Act 1997*, 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)*. If the contamination consists of asbestos, then the Detailed Site Investigation must also be prepared in accordance with the appropriate *WorkCover NSW*, and *National Environment Protection Council (NEPC)* guidelines and advice and any other relevant guidelines. The Detailed Site Investigation must:
 - a. Adequately investigate the extent and degree of contamination on site including soil and groundwater contamination.
 - b. Assess the risk posed by the contaminants to human health and the environment.
 - c. Provide a recommendation as to whether the land is suitable in its current state or if the land can be made suitable for the proposed land use following remediation. Recommendations must include feasible remediation options, if required.

4.3 Controls for all Development where a Stage 3 – Site Remedial Action Plan is required

1. Where the Detailed Site Investigation indicates contamination in soil or groundwater above normal background levels for that area or above thresholds for health based investigation levels provided in NSW DECCW *Guidelines for the NSW Site Auditor Scheme* or other appropriate guidelines, and development



consent is required for site remediation work, a Site Remediation Action Plan will be required by Council.

The Site Remedial Action Plan must be prepared in accordance with Guidelines made under Section 105 of the *Contaminated Land Management Act 1997*, 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)*. If the contamination consists of asbestos, then the Site Remedial Action Plan must also be prepared in accordance with the appropriate *WorkCover NSW*, and *National Environment Protection Council (NEPC)* guidelines and advice and any other relevant guidelines. The Site Remedial Action Plan must:

- a. Identify and assess a range of feasible remediation options and justification for the option(s) chosen for the site remediation.
 - b. State the clean-up objectives for the site and set remediation goals suitable for the intended use of the site.
 - c. Demonstrate how the applicant or their consultant proposes to reduce environmental and human health risks to acceptable levels and achieve the clean-up objectives for the site.
 - d. Identify and include proof of any necessary approvals and licences required by regulatory authorities.
2. Following the submission of the Site Remedial Action Plan, Council may:
- a. Require the works to be carried out and validated prior to the determination of the application in cases where the remediation of the site is uncertain or if risk to human health or the environment is significant, and/or
 - b. Impose conditions on the development consent requiring the remediation and validation works to be undertaken prior to commencement of building and construction works, and/or
 - c. Issue a deferred commencement consent for the proposed use, requiring remediation and validation to be carried out before other work commences, and/or
 - d. Appoint a Site Auditor accredited under the NSW Site Audit Scheme to undertake a review of any or all stages of the site investigation, remediation or validation process in accordance with the *Contaminated Lands Management Act 1997*.



4.4 Additional Controls for all Development where Stage 4 – Validation and Ongoing Monitoring and Remediation is required

1. Where remedial works have been undertaken in accordance with the approved Site Remedial Action Plan, a Validation Report is required by Council within 30 days after remediation works have been completed.
2. The Validation Report is to be prepared in accordance with Guidelines made under Section 105 of the *Contaminated Land Management Act 1997*, 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:
 - a. Confirm whether the clean-up objectives set out in the Site Remedial Action Plan have been attained, or where there is no RAP, against standards endorsed by DECCW, and whether any further remediation work is required or restrictions on land use imposed.
 - b. Confirm statistically (in accordance with the NSW DECCW Sampling Design Guidelines) that the remediation works have satisfied clean-up criteria set for the site.
 - c. Where targets have not been achieved, state reasons for such failure and propose additional site work that will achieve the original objectives or will enable the site to be made suitable for the proposed use. An additional Validation Report must be submitted to the satisfaction of Council when additional work is required to be carried out.
 - d. Include information confirming that all licences, approvals, waste disposal requirements and development consents have been complied with.
3. 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. The Environmental Management Plan must be prepared in accordance with Guidelines made under Section 105 of the *Contaminated Land Management Act 1997* 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, the monitoring locations and the frequency of monitoring.



- 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 or monitoring works.

Note: Council may require as a condition of development consent, the creation of a positive covenant under Section 88B/E of the Conveyancing Act, 1919, on the title of the affected property. This covenant will ensure the ongoing approved Management Plan for the site is carried out in order to ensure the land is able to be used for its intended purpose.



5.0 Remediation Categories

Note:

Contaminated Site Remediation is classified into two categories under *State Environmental Planning Policy 55 – Remediation of Land*. Each of these categories has different legislative and approval requirements and are outlined below:-

- Category 1 Remediation Work – work needing consent
- Category 2 Remediation Work – work that does not need consent

Category 1 remediation work, as defined by Clause 9 of *State Environmental Planning Policy 55 – Remediation of Land* (SEPP 55), is work that requires consent. Category 1 Remediation Work is advertised development for a period of 30 days pursuant to section 29(A), Clause 65 (5d) of the EP&A Act unless the remediation work is Designated Development or State Significant Development.

Category 2 Remediation Work is work that does not need consent under SEPP 55. Clause 14 of SEPP 55 provides a description of works classified as Category 2 Remediation Works. Council is required to be notified in writing of Category 2 Remediation Works, 30 days prior to the works commencing in accordance with Clause 16(2)(a) of SEPP 55. Council requires the name and contact details of the contractor who is carrying out the works to be supplied.

5.1 Controls for all Development identified as Category 1 Remediation Work – work needing consent

1. In accordance with Clause 9(f) of SEPP 55, Council specifies the following additional works as Category 1 remediation works:
 - a. Remediation work within 40m of an open drainage channel, creek or water body.
 - b. Remediation work involving treatment of groundwater.
 - c. Remediation work involving on-site treatment of contaminated soil eg: soil stabilisation, land-farming, soil washing or thermal desorption.
 - d. Remediation work involving on-site capping or containment of contaminated soils.
 - e. Remediation work on a site where off site migration of contaminants has occurred.



Note: All remediation works shall comply with the requirements of Sutherland Shire Environmental Site Management policy.



6.0 Controls for all Development where Council requires the Appointment of a Site Auditor

1. Council may require the appointment of a DECCW accredited Site Auditor (under the Contaminated Lands Management Act 1997) to undertake a site audit of any or all stages of the site investigation, remediation and validation process. A site audit will lead to the provision of a certificate called a site audit statement, stating for what use the land is suitable and a site audit report that comments on the adequacy of the information provided by a proponent. Council may request the appointment of a Site Auditor at the proponent's cost if:
 - a. Council believes that the information provided by the proponent is incorrect or incomplete.
 - b. Council wishes to verify the information provided by the proponent adheres to appropriate standards, procedures and guidelines.
 - c. Council does not have the internal resources to conduct its own technical review.
2. If the appointment of a Site Auditor is required by Council, then Council may also specify any issues that must be included within the scope of the site audit. In addition to requiring a site audit to address any issues raised in Section 47(1)(b) of the *Contaminated Land Management Act 1997*, the following are examples of issues that Council may request a NSW DECCW accredited Site Auditor to address in a site audit:
 - a. Whether the contaminated land consultant has complied with all appropriate standards, procedures and relevant NSW DECCW Guidelines made under Section 105 of the *Contaminated Land Management Act 1997*.
 - b. What further investigations or remediation is required before the land is suitable for any specified use or range of uses.
 - c. Whether the Site Auditor considers that the remediation proposal is adequate, and if undertaken, will render the site to be suitable for the proposed use.
 - d. Whether it can be concluded that there is no unacceptable off-site migration of contaminants.
 - e. Whether the contamination conditions at the site are suitable for in-ground absorption of stormwater (on site detention and absorption).



7.0 Controls for all Development to prevent contamination of lands and water

1. Contamination in the first instance should be avoided by ensuring all development takes precautionary steps to prevent the release of substances that cause contamination of soil, surface water, air or groundwater.

7.1 Additional Controls specific to lands that contain Underground Petroleum Storage Systems

1. To ensure early detection, reporting and investigation of leaks, Underground Petroleum Storage Systems (UPSS) are to be designed and installed as per industry best practice techniques. Any lands containing UPSS must comply with the *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008*, Department of Environment, Climate Change and Water's *Guidelines for Implementing the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008*, and *AS4897-2008: Design, installation and operation of underground petroleum storage systems*.
2. Premises such as Service Stations containing Underground Petroleum Storage Systems must comply with *Sections 116, 120 and 142A of the Protection of the Environment Operations Act 1997*. To achieve compliance, DECCW guidelines *Environmental Action for Service Stations* must be considered.
3. Decommissioning and removal of Underground Petroleum Storage Systems must be completed in accordance with the *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008*, *Clause 174ZF of the Occupational Health and Safety Regulation 2001: Cleaning or decommissioning plant, equipment and containers*, *AS1940: Storage and handling of flammable and combustible liquids*, *AS4976 – 2008: The removal and disposal of underground petroleum storage tanks*, *State Environmental Planning Policy 55 – Remediation of Land* and Guidelines made under Section 105 of the *Contaminated Land Management Act 1997*, in particular the *Guidelines for Assessing Service Station Sites*.

7.2 Additional Controls specific to lands that store chemicals or dangerous goods

1. Premises that store flammable liquids, toxic substances or dangerous goods must comply with the relevant Australian Standard(s) (see note below). It is an offence under the *Protection of the Environment Operations Act 1997* to pollute waters or



land and to wilfully or negligently introduce or place any matter, whether solid, liquid or gaseous that results in actual or potential harm to human health or the environment.

Note: Australian and/or New Zealand Standards that govern the storage and handling of dangerous goods. The most recent version of the Australian and/or New Zealand Standard should be referred to.

- AS 1894 - 1997; The storage and handling of non-flammable cryogenic and refrigerated liquids
 - AS 1940 – 2004; The storage and handling of flammable liquids
 - AS 2022 - 2003; Anhydrous ammonia—Storage and handling (known as the SAA Anhydrous Ammonia Code)
 - AS 2507 - 1998; The storage and handling of agricultural and veterinary chemicals
 - AS 2714 - 2008; The storage and handling of hazardous chemical materials—Class 5.2 substances (organic peroxides)
 - AS 3780 - 2008; The storage and handling of corrosive substances
 - AS 3846 - 2005; The handling and transport of dangerous cargoes in port areas
 - AS 3961- 2005; Liquefied natural gas—Storage and handling
 - AS 4326 - 2008; The storage and handling of oxidizing agents
 - AS 4332 - 2004; The storage and handling of gases in cylinders
 - AS/NZS 1596 - 2008; The storage and handling of LP Gas
 - AS/NZS 2927 - 2001; The storage and handling of liquefied chlorine gas
 - AS/NZS 3833 - 2007; The storage and handling of mixed classes of dangerous goods in packages and intermediate bulk containers
 - AS/NZS 4081 - 2001; The storage, handling and transport of liquid and liquefied polyfunctional isocyanates
 - AS/NZS 4452 - 1997; The storage and handling of toxic substances
 - AS/NZS 4681 - 2000; The storage and handling of Class 9 (miscellaneous) dangerous goods and articles
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8.0 Definitions

Actual Contaminated Site (ACS) is a site on which a potentially contaminating activity has occurred, and a detailed investigation has shown that contamination is present at a concentration that exceeds normal background levels for that area.

Category 1 remediation work³ is remediation work that needs development consent.

Category 2 remediation work³ is remediation work that does not need development consent.

Contaminated land¹ means land in, on or under which any substance is present at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.

Contaminated Lands Information Register⁴ provides relevant information which facilitates the control of land use to minimise the risk to health and the environment. It is a record of historical or current contaminating activities on the land and includes any investigations or remediation works on site that council is aware of. The register is maintained by Sutherland Shire Council.

Detailed Site Investigation⁴ is an investigation that comprehensively defines the extent and degree of contamination, assesses potential risk posed by contaminants to health and the environment, and shall obtain sufficient information for the development of a remedial action plan if required.

Harm² means, in relation to the contamination of land, harm to human health or some other aspect of the environment (including any direct or indirect alteration of the environment that has the effect of degrading the environment), whether in, on or under the land or elsewhere.

Land² includes water on or below the surface of land and the bed of such water.

Notice of completion³ is a notice to the council (or Minister for Planning where he is the consent authority) in accordance with SEPP 55 that remediation work has been completed.

Notification of remediation³ is prior notice of a category 2 remediation work given to the council 30 days prior to commencement of works in accordance with SEPP 55.

Planning Authority⁴ is a public authority or other person responsible for exercising a planning function.



Planning function¹ means a function exercised by a planning authority under the *Environmental Planning and Assessment Act 1979*, such as the preparation or making of an environmental planning instrument.

Potential Contaminating Activity (PCA)⁴ is any industrial, commercial, agricultural or other activity, which involves the use, production, storage or illegal dumping of hazardous or other substances that have the potential to cause site contamination.

Potential Contaminated Site (PCS) is a site on which a potentially contaminating activity has occurred, but for which no testing has been conducted to confirm the presence or absence of contamination.

Preliminary investigation⁴ is an investigation undertaken to identify any past or present potentially contaminating activities on or adjacent to the site and to provide a preliminary assessment of any site contamination.

Remediation³ means:

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

Significantly Contaminated Land³ means land declared contaminated land by a declaration in force under Division 2 of Part 3 of the *Contaminated Land Management Act 1997*.

Site Remedial Action Plan⁴ is a plan which sets remediation goals and documents the process to remediate a site.

Site audit² is an independent review by a site auditor of any or all stages of the site investigation process conducted in accordance with the *Contaminated Land Management Act 1997*.

Site Auditor² is a person accredited by the Environment Protection Authority under the *Contaminated Land Management Act 1997* to conduct site audits.

Site Audit Statement² is a certificate issued by a Site Auditor stating for what use the land is suitable.

Underground Petroleum Storage System⁵ is a system of tanks, pipes, valves and other equipment that is designed:

- (a) to contain petroleum, or
- (b) to control the passage of petroleum into, out of, through or within the system, and includes any structure through which petroleum routinely passes from one part of the system to another.



Validation⁴ is the process of determining whether the objectives for remediation and any conditions of development consent have been achieved.

Waters² means the whole or any part of:

- (a) any river, stream, lake, lagoon, swamp, wetlands, unconfined surface water, natural or artificial watercourse, dam or tidal waters (including the sea), or
- (b) any underground or artesian water.

Notes

- 1 Defined in the Environmental Planning & Assessment Act 1979.
- 2 Defined in the Contaminated Land Management Act 1997
- 3 Defined in State Environmental Planning Policy 55—Remediation of Land
- 4 Defined in State Environmental Planning Policy 55 – Remediation of Land, Managing land contamination: guidelines
- 5 Defined in Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008