NSW PARLIAMENTARY LIBRARY RESEARCH SERVICE

Contaminated Land Management Bill 1997: Background and Commentary

by

Stewart Smith

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EXECUTIVE SUMMARY

Contaminated land occurs where hazardous substances are at concentrations above background levels and assessment indicates it poses or is likely to pose an immediate or long term hazard to human health or the environment (page 1). Contamination is usually the result of previous land use, and may be associated among other things with, airports, chemical manufacture and industrial plants, dry cleaning establishments, service stations and horticulture (page 2).

There are no reliable statistics on the extent of contaminated land across NSW. Some estimate that NSW has approximately 60,000 contaminated sites, with some 7000 possibly requiring remediation at a cost of $2 billion. Presently, there is no statutory requirement to report the existence or ownership of a contaminated site.

The Australian and New Zealand Environment and Conservation Council (ANZECC) has developed guidelines for both the management and financial liability of contaminated sites (pages 3-7).

The EPA administers contaminated sites under the *Environmentally Hazardous Chemicals Act 1985* and the *Unhealthy Building Land Act 1990* (pages 7-9). The present legislation dealing with contaminated sites is considered to be limited in its scope and effectiveness. In response to these limitations, the NSW government released a draft exposure of the *Contaminated Lands Management Bill 1997* on 15 October 1997. The Bill is divided into 11 Parts and provides specifically for the management of contaminated lands (pages 9-18). Much of the Bill follows from the ANZECC recommendations. In early November 1997, the government also released the draft State Environmental Planning Policy No 55 - Remediation of Land. The policy defines when consent is required to remediate land and requires remediation work to meet certain standards (pages 18-20).

1.0 Introduction

The presence of contaminated land creates some difficult issues for all levels of government and the public. Difficulties include on-site problems, such as identifying contaminants on a site and assessing their level of risk to the environment and human health. Other problems include policy issues, including formulating statutory criteria to determine who should pay for remediation of contaminated land, and establishing a system of contaminated site auditors who can remain impartial and independent. In any discussion on contaminated land, it is pertinent to note that due to the nature of their activities, governments are particularly prone to owning land which is contaminated.

Land is considered contaminated when hazardous substances occur at concentrations above background levels and where assessment indicates it poses, or is likely to pose an immediate or long term hazard to human health or the environment.[1] Most contamination occurs as a result of previous land uses, and materials which can cause contamination includes: metals; inorganic compounds such as cyanide; organic chemicals; oils and tars; toxic, explosive and asphyxiant gases; combustible substances; putrescible material and hazardous wastes.[2] Contaminated land can be a danger to both human health and the environment, and often involves chemicals that persist for long periods and has repercussions for intergenerational equity.

The extent of contaminated land across New South Wales is unknown, as is the extent of the risk to human health and the environment.[3] Some estimate that New South Wales has approximately 60 000 contaminated sites, with some 7000 of these possibly requiring remediation at a cost of $2 billion.[4] At present there is no program in New South Wales to identify contaminated sites, and the Audit Office concludes that most local councils have made only limited investigations of contamination in their area.[5]

Some of the likely activities that have led to site contamination include the disposal of wastes (controlled and uncontrolled); accidental spillage, leakage during plant operation; storage or transportation of raw materials, migration of contaminants into a site from neighbouring land, either as vapour, leachate or movement of liquids through the soil; and the use of agricultural chemicals. Specific industries which have been associated with

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1 Australian and New Zealand Environment and Conservation Council, National Health and Medical Research Council, 1992, *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites*.

2 *Ibid* p 2

3 The Audit Office of New South Wales, *Performance Audit Report. Environment Protection Authority, Management and Regulation of Contaminated Sites (A preliminary report).*1995

4 I Powell, *'A Regulators Perspective on Contaminated Sites'*, On-site Soil and Groundwater Remediation Seminar as cited in G Rowe & S Seidler (eds) *Contaminated Sites in Australia. Challenges for Law and Public Policy*, Allen and Unwin, 1992, p 81.

5 The Audit Office of New South Wales, 1995, op cit p2.

contaminated land include:[6]

- agricultural/horticultural activities
- airports
- chemicals manufacture and formulation
- dry cleaning establishments
- gas works
- iron and steel works
- power stations
- railway yards
- service stations
- sheep and cattle dips
- waste storage and treatment

Some of the main problems with contaminated sites include the mix of contaminants on the one site, selecting the right clean up remedy, the cost of clean up operations and liability. The final question for any clean up is "how clean is clean"? Central to this question is the idea of risk. At what stage contamination constitutes a risk to the environment or human health is open to debate, as the state of knowledge of chemicals and their risk is continuously developing.

Quite often land contamination is only found when a site is to be rezoned for a different land use. In an attempt to make cities more compact and reduce urban sprawl, governments are encouraging the rezoning of disused urban industrial sites for housing. The potential for many of these industrial sites to be contaminated is high, and consent authorities need to be aware of the risks of contamination. Similarly, market gardens and horticultural/agricultural areas on the outskirts of cities and towns are often contaminated with chemical residues, and careful assessment before rezoning is required.

Presently, a variety of legislative and policy mechanisms are available to manage contaminated land in New South Wales. These include the *Environment and Planning Assessment Act 1979*, the *Unhealthy Building Land Act 1990* and the *Environmentally Hazardous Chemicals Act 1985*. However, many people consider these pieces of legislation to be inadequate to successfully manage contaminated lands.[7]

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6 Australian and New Zealand Environment and Conservation Council, National Health and Medical Research Council, 1992, op cit p3

7 For instance, the Audit Office states that existing legislation does not adequately address all the issues relating to contaminated sites and urgent review is required.
The Audit Office of New South Wales, 1995, op cit p 2

In response to these concerns, the NSW government has released a variety of legislative packages. Planning guidelines for contaminated land[8] were released in 1995. Associated with these guidelines the *Environmental and Planning Assessment Amendment (Contaminated Land) Act 1979* provides local councils with statutory protection against liability for specified planning functions in relation to contaminated land.[9] The *Environmentally Hazardous Chemicals Amendment Act 1996* established a system of accredited site auditors for contaminated land, although this Act has not commenced. On 15 October 1997 the Minister for the Environment Hon Pam Allan MP tabled the exposure draft of the *Contaminated Land Management Bill 1997*. This Bill is explained in greater detail in part 5.0 of this paper. As part of the 'contaminated lands legislative package', the government has also released a draft State Environmental Planning Policy No 55 - Remediation of Land, which is explained in part 6.0 of this paper.

The policy framework for the management of contaminated sites is generally based on the Australian and New Zealand Environment and Conservation Council/National Health and Medical Research Council guidelines, issued in 1992.

2.0 The ANZECC/NHMRC Guidelines for the Assessment and Management of Contaminated Sites [10]

These comprehensive guidelines provide the policy framework for governments to manage contaminated land. Of paramount importance is the need to prevent future site contamination. However, once land is contaminated, management strategies need to ensure that remediation strategies protect all segments of the environment, including biological and physical factors. The potential impacts of the polluted soils, groundwater, surface water and air on the environment need to be considered. The guidelines note that other countries apply strict criteria to the rehabilitation of soils to protect groundwater, as this is an important source of domestic water. While Australia does not use a great deal of groundwater for domestic purposes, the protection of this resource is still vital as the cost of underestimating the importance of the groundwater protection may be high.

The guidelines note that the fundamental goal of contaminated site clean up should be to render a site acceptable and safe for long term continuation of its existing use and to maximise to the extent practicable the potential future uses of the site. Wherever human health is at risk, or the offsite environment at risk, a contaminated site should be cleaned up to the extent necessary in order to minimise such risks in the short and long term. The guidelines recommend that where there is no threat to human health or the environment is

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8 New South Wales Government, 1995, *Contaminated Land. Planning Guidelines for Contaminated Land*. Department of Urban Affairs and Planning, Environment Protection Authority.

9 See: Smith,S. *Contaminated Land in New South Wales*. NSW Parliamentary Library Briefing Paper No. 7/96.

10 Australian and New Zealand Environment and Conservation Council, National Health and Medical Research Council, 1992, *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites*.

not at risk, it may be appropriate to clean-up the site to some lesser degree, and to possibly accept a strategy of containing contaminants on the site or using planning controls to limit the site use.

A site should not be cleaned up if the process is likely to create a greater adverse effect than leaving the site undisturbed. If a site is to be cleaned the preferred order of options are:

- on-site treatment of the soil so that the contaminant is either destroyed or the associated hazard is reduced to an acceptable level
- off-site treatment of excavated soil, which is either then returned to the site, removed to an approved waste disposal site or used as fill for landfill.

If these options are not possible, other options include:

- removal of contaminated soil to an approved site, followed where necessary by replacement with clean fill
- isolation of the soil by covering with a properly designed barrier
- choosing a less sensitive land use to minimise the need for remedial works which may include partial remediation
- leaving contaminated material in-situ providing there is no immediate danger to the environment or community and the site has appropriate controls in place.

The guidelines recommend a range of implementation strategies. One considered essential is the reporting to relevant authorities of the existence of contaminated sites and pollution incidents which are likely to lead to contamination. Site owners should be required to advise prospective buyers or developers that a site is contaminated, and regulatory authorities need the ability to require, control and enforce the assessment, clean-up and long term management of contaminated sites. The guidelines recommend that the development of inventories or registers of contaminated sites should be considered, especially so that priorities for clean up can be determined. The guidelines stress the need for community involvement in the earliest stages of contaminated site management.

Whilst Australia has a relatively limited technical knowledge and experience in the cleaning up of contaminated sites, Europe and North America have trialed a number of strategies. There are two basic approaches in dealing with contaminated sites. The first approach involves a fairly rigid adherence to a set of predetermined soil criteria. The criteria are used to: define a condition of contamination and to serve as the standard which sites must meet in order to be considered to have been decontaminated. The second approach involves a more flexible use of pre-determined soil criteria. The criteria are used to provide guidance as to whether a detailed investigation is required, confirm no further action is needed or provide guidance for clean up operations. This second approach does not advocate any universal standard to which contaminated sites must be cleaned up. Rather, site specific data are to be used to develop acceptance criteria which will ensure that public health and environmental quality are protected.

The guidelines suggest that the most appropriate approach for Australia is to combine the

above two techniques. This combined approach incorporates, at a national level, a general set of management principles and soil quality guidelines which guide site assessment and may guide clean up action. This approach recognises that every site is different and that in many cases acceptance criteria and clean up technologies will need to be developed which reflect local conditions.

The cleaning up of contaminated sites can be expensive. The cost of disposing of contaminated soil to licensed landfills ranges from $30 per metre cubed for lightly contaminated soil to $250 per metre cubed for heavily contaminated soil. On-site remediation is likely to cost up to $300 per metre cubed depending on the extent and type of contamination and the required treatment technology.[11] These costs do not take into account the expense of development delays due to the remediation of contaminated land. A contaminated site may cost millions of dollars to clean, and may take many years to accomplish.

Central to the issue of the cost of remediation is the question of responsibility and liability. ANZECC issued guidelines on this issue in 1994. These guidelines are discussed below.

3.0 Financial Liability for Contaminated Site Remediation - ANZECC Position Paper [12]

This paper reinforced the differences between contaminated sites that are a risk, ie, pose a danger to human health and the environment, and non-risk sites, ie, those that do not pose a danger to human health and the environment. In the case of non-risk sites ANZECC recommends that governments do not intervene. Governments should put in place mechanisms within the planning process to ensure that potentially contaminated land is not rezoned to allow a more sensitive use without adequate assessment of environmental and human health risks and appropriate remediation where necessary (recommendation 2).

Where a site is contaminated and the environment/human health is at risk, governments should be empowered to intervene to direct remedial action to minimise those risks (recommendation 3). In doing so, ANZECC states that the polluter, where solvent and identifiable, should ultimately bear the cost of any remediation, even if a period of time had elapsed between the pollution event and remediation. However, if the polluter is insolvent or unidentifiable, the person(s) in control of the site (irrespective of whether that person is the owner or current occupier) should be liable for the costs of any necessary remediation. Parties directed by government to take remedial action at risk sites should be strictly liable to comply with that direction.

Recommendation 7 stated that there should be a statutory right to recover costs incurred in the clean up of a risk site from the polluter or polluters and any other party who may have exacerbated the situation for: an owner or occupier who is directed to clean up a site; a

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11 Environment Protection Authority, *New South Wales State of the Environment 1995*, 1995

12 ANZECC, *Financial Liability and contaminated site remediation. A position paper,* 1994.

polluter who is directed to clean up the site; a public authority which undertakes or funds clean up of the site. The right to join other polluters or parties who may have exacerbated the situation should also be afforded to parties from whom recovery is sought.

In the case of multiple polluters, ANZECC believes that the cost of remediation should ultimately be apportioned on the basis of each party's contribution to the contamination. Parties that have contributed to or exacerbated the damage or costs incurred should bear an appropriate portion of the overall liability. The determination of the appropriate liability is best left to the discretion of an appropriate fact finding tribunal. However, any resolution of apportionment or contributions from other liable parties should be subject to the necessary remediation first being completed.

An orphan site is one where a site requires remediation and: the person who caused the contamination is either unidentifiable or cannot be made to pay; and the person in control of the premises cannot be made to pay; or the site is abandoned. ANZECC believes that governments should be responsible for ensuring necessary remedial action is taken on orphaned sites. It was considered that individual jurisdictions were best suited to determine funding for the remediation of sites, rather than a central pool of money. Governments should also be empowered to sell abandoned orphan sites for which they have funded or undertaken remediation to recover as much as possible of the costs of the clean up.

ANZECC believes that the same rules for attaching liability should apply to Federal, State and Territory agencies and local governments which cause contamination, or own or occupy a risk site as apply to private parties. All tiers of government who have contributed to or exacerbated contamination by the exercise of their operational functions should be liable on the basis of negligence under the common law. However, where governments, in the light of new knowledge, change the standards in relation to the risk or clean up of contaminated sites, they should not be liable for the cost of impacts on parties resulting from changes in these standards.

The position paper reinforced the notion that governments should ensure that information about contaminated sites is available to the public in a readily accessible form to enable parties to make informed decisions.

Lender liability of a contaminated site is of great concern to many financial institutions. Recommendation 15 stated: governments should require lenders who merely hold security over a risk site which requires remediation to make a clear choice between the options of:

(i) assuming control and therefore responsibility for remedial action which may be necessary (as would any other owner or occupier)
(ii) transferring ownership to a party who is willing to undertake remedial action and provide financial assurance to that effect
(iii) agreeing that the necessary remedial action be undertaken or funded by the appropriate government authority, which may then recover the costs of that action in priority to the lender's security in the site
(iv) abandoning the property as an orphan site and transferring all right, title and interest

in the property to the appropriate government authority. Governments would then take the necessary remedial action and sell the site to recover the costs of that action.

The two ANZECC publications, guidelines for the management of contaminated sites and financial remediation of sites, provide governments with a framework in which to develop contaminated sites legislation.

4.0 Present Day Legislation to manage Contaminated Sites in New South Wales

The *Environmental Planning and Assessment Act 1979* is the principal legislative mechanism to plan for contaminated land. However, to actually manage contaminated sites the EPA relies on Part V of the *Environmentally Hazardous Chemicals Act 1985* (EHCA) and the *Unhealthy Building Land Act 1990* (UBLA).

Part V of the EHCA provides for the control of contaminated sites. Land is defined as contaminated if it is affected by a chemical or chemical waste and is: unsafe or unfit for habitation or occupation by persons or animals; degraded in its capacity to support plant life or otherwise environmentally degraded (s35).

Section 34 empowers the EPA to direct the licensee of a prescribed activity to take such remedial action where it is considered contamination of premises or adjacent premises may occur. The EPA may also require a licensee to lodge a written undertaking that they will take such remedial action as considered necessary in the event of misadventure in carrying, loading and pumping of an environmentally hazardous chemical or waste, and may require a lodgement of security.

Under s.35 of the EHCA, if the EPA suspects that premises used in connection with a prescribed activity in relation to a chemical or chemical waste are contaminated, they may direct the occupier to take remedial action. The EPA may also appoint a public authority to carry out the remedial work and then recover the costs from the appropriate person/company. A person may appeal to the Land and Environment Court against a s.35 direction on the grounds that: (i) the contamination of the premises to which the direction relates was not the result of the carrying out of any prescribed activity by the person or on the person's behalf; (ii) and at the time the person became the occupier of the premises, the person did not know and had no reason to suspect that the premises were becoming or had become contaminated as specified by the EPA.

EPA policy is to direct that remedial action be undertaken by issuing a s.35 notice only in relation to risk sites and when action is not being taken voluntarily. Points to note include that clean up notices can only be served on the occupier, who may not have been the polluter. The public can only determine if such a s.35 notice exists through an optional checking system administered by the Land Titles Office or by enquiry directly to the EPA.[13]

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[13] New South Wales Department of Urban Affairs and Planning and the Environment Protection Authority, 1995, op cit p 25.

At present it is not mandatory to notify the EPA of a contaminated site or any remediation activity. The majority of contaminated sites are not notified under the EHCA or the UBLA. The identification and remediation of sites is often driven by market forces. For instance, as contaminated sites come to the attention of authorities, most landholders have been happy to remediate the land to realise the value of the site for a changed use.[14]

The issue of a central register of potentially contaminated sites has been canvassed by the EPA. It could be argued that an official register of sites based on industry listings would be a direct and low cost instrument for governments to build a better information base. However, without follow up risk assessment of identified sites there is a risk that public expectations may be unduly raised and real estate values affected, and the EPA is concerned that a central register would tie up a large proportion of limited resources.[15] The Audit Office recommended that any new contaminated lands legislation should ensure that a significantly improved level of identification and recording of contaminated sites is achieved.[16]

The EPA estimates that they are officially aware of only one fifth of the total number of contaminated sites being remediated. This is a major limitation of the present legislation. The result is that local councils are supervising site remediations with only limited or no input and expertise from the EPA. The EPA has adopted, and the proposed legislation enshrines, the Victorian model where accredited contaminated site auditors may validate remediation techniques and results.

The *Unhealthy Building Land Act 1990* can be used to prohibit or limit the building of structures on a property. This Act has usually been used for land that is flood prone or former landfill and waste disposal sites. The legislation contains a number of constraints that limit its use to manage contaminated sites. These include the fact that the Act can only prohibit the erection of new structures, and so does not affect the habitation of existing buildings.[17] As of June 1995, the EPA database held 650 sites where a notice had been served under the *Unhealthy Building Land Act 1990* or the *Environmentally Hazardous Chemicals Act 1985*.[18]

Since the principal contaminated lands legislation was introduced in 1985, Australia has advanced a long way in terms of knowledge and policy work to deal with the issue in the late 1990's. It is clear the present legislation is not adequate to deal with the complexity of

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14 C Grant, "Insights from experience in the management of contaminated sites in NSW" in G.Rowe & S Seidler (eds) *Contaminated Sites in Australia. Challenges for Law and Public Policy*, Allen and Unwin, 1992, p 81

15 Ibid p 81

16 The Audit Office of New South Wales, 1995, op cit p 5

17 New South Wales Government, Department of Urban Affairs and Planning and the Environment Protection Authority, 1995, op cit p 25.

18 Environment Protection Authority, 1995, op cit p 134

the issue, and it is on this basis that the government tabled the *Contaminated Land Management Bill 1997* in October. Key features of the Bill are described below.

5.0 The NSW Contaminated Land Management Bill 1997

An exposure draft of the *Contaminated Land Management Bill 1997* was released by the Minister for Environment Hon Pam Allan on 15 October 1997. The Bill provides specifically for the management of contaminated land, and is divided into 11 parts. An ideal framework in which to analyse the Bill is the two ANZECC position papers as described in sections 2 and 3 of this Paper. On this basis, the Bill is explained below.

Part 1 Preliminary

The object of the Bill is to establish a process for investigating and (where appropriate) remediating land areas where contamination presents a significant risk of harm to human health or some other aspect of the environment. The Act: sets out accountabilities for managing contamination if a significant risk is identified; sets out the role of the EPA in the assessment of contamination and supervision of remediation; provides for accreditation of site auditors; and aims to ensure that contaminated land is managed with regard to ecologically sustainable development.

Part 1 includes definitions, including the following. Contamination is defined as: the presence in, on or under the land of a substance at a concentration above that normally present in, on or under (respectively) land in the same environment, being a concentration that presents a risk of harm to human health or any other aspect of that environment. However, land is not contaminated: merely because in any surface water standing or running on the land a substance is present in such a concentration; or merely because of the presence of a substance prescribed in the regulations or in circumstances prescribed by the regulations. Land may also be contaminated even if it became contaminated partly or entirely by the migration of contaminants into, onto or under the land from other sources.

Commentary

The definition of contamination follows from the ANZECC Guidelines for the Assessment and Management of Contaminated Sites. Central to the definition of contamination is the concept of risk, specifically the risk to human health or the environment. A change in focus on 'what is contamination' can be seen by comparing the definition of contamination in the 1985 EHCA and the Bill. Clause 9 in Part 2 describes the concept of risk in greater detail.

Part 2 Main Functions of EPA under this Act

This Part contains the general roles and responsibilities of the EPA in response to contaminated land. Clause 6 states that it is a duty of the EPA to examine and respond to, in a manner and to an extent reasonable in the circumstances, reports of actual or possible contamination of land and any significant risk that may be posed by such contamination.

If the EPA is of the belief that land is contaminated in such a way as to present a significant

risk of harm, the Bill provides for six different responses. These are: make records of the evidence of the contamination and risk; investigate that evidence and seek information; employ community based strategies to minimise contamination, risk or harm through education and public awareness; declare the land to be an investigation area; declare the land to be a remediation site, and order persons to remediate it; and any other thing that the EPA may lawfully do.

Clause 9 defines how to assess contaminated land to determine the level of risk to human health and the environment. Eight factors are listed, including: whether harm has already been caused; the nature and amount of substances; the exposure pathways of the substances; the use of the land and any national guidelines. Clause 10 reconfirms the actions of the EPA to maintain ecologically sustainable development.

Commentary

The EPA has been criticised for its inability to respond more comprehensively to the issue of contaminated land. Part of this reflects the lack of specialised legislation to deal with the issues. The Bill provides for greatly increased powers and responsibilities for the EPA in the determination of contamination in an area, as distinct from just one isolated site without considering any 'spillover' contamination onto neighbouring properties. This should greatly assist the EPA to carry out its duties. Local councils are the lead agency to manage contaminated land in terms of planning, whilst a system of accredited site auditors as defined in Part 4 of the Act will be able to bring expertise to investigation and remediation areas . Part 2 of the Bill requires the EPA to have a duty of care, but also allows it to 'pick and choose' which contaminated land sites it wishes to become involved in. Presumably, this will be restricted to those sites with the most serious contamination.

The Bill makes specific reference to the need to maintain ecologically sustainable development. Intergenerational equity is a foundation of ESD, and contaminated sites are a prime example of where one generation has handed on a potentially significant problem to the next (ie, the present). It is important that remediation strategies keep ESD principles in mind, and even more importantly the present generation does not create and leave contaminated sites for the next. The Bill incorporates strategies to achieve this in Part 5.

Part 3 Investigation and remediation of contaminated land

This Part allows the EPA to declare a site an 'investigation area' and a 'remedial site', and issue an order to the appropriate person to either investigate or remediate the site. Clause 12 provides guidelines on who the EPA should select as the appropriate recipient of the order, which in preferential order is as follows:

- a person who had principal responsibility for such contamination of the land with the substance (whether or not there were other persons who had responsibility for such contamination of the land with the substance) or, if that is not practicable;

- an owner of the land (whether or not the person had any responsibility for such contamination of the land with the substance), or if that is not practicable;

- a notional owner of the land (whether or not the person had any responsibility for such contamination of the land with the substance).

If there is more than one person in any of the above categories, the EPA may, but is not required to, make more than one person in the category the subject of that order. Any public authority may also be specified as the subject of an order, whether or not as an appropriate person.

A notional owner of land is defined as a mortgagee in possession of land or other person (not being the owner in fee simple or the Crown) who have vested rights so that they may be entitled to the land, or enable them to sell or deal with the land. However, the Bill also defines who is not a notional owner. These include: a financial institution that is acting solely as a holder of a security interest in the land; a financial institution that is a mortgagee in possession of the land and appoints a receiver or manager only to sell the land to a person who has agreed with the institution to carry out any action in relation to the land that has been approved by the EPA; or an executor of an estate of which the land is part who is in possession of the land and who is selling the land to a person who has agreed to carry out any action in relation to the land that has been approved by the EPA.

Sometimes contamination of a site is due to a combination of contaminants, or happens only after a period of time has elapsed which allows chemicals in the soil to combine and become toxic. Clause 13 of the Bill covers these circumstances so that a person is responsible for the contamination of land if what they added to it reacted with substances already there to make the site contaminated in such a way to present a significant risk of harm.

Commentary

Potentially one of the most controversial issues with contaminated site management is who is to pay for investigation and remediation of a contaminated site. The ANZECC[19] position is that the polluter, where solvent and identifiable, should bear the cost of any remediation. If the polluter is insolvent or unidentifiable, the person in control of the site (irrespective of whether that person is the owner or current occupier) should be liable for the costs of remediation. The Bill proposed by the government follows the ANZECC guidelines in that the person who had principal responsibility for the contamination is determined and assessed as an 'appropriate person to serve an order' on first by the EPA. This enshrines the 'polluter pays' philosophy. Failing this, the Bill proposes not the person in control of the site, but the owner of the land to be next assessed as the appropriate person.

Financial institutions go to great lengths to conduct 'due diligence' checks for projects they become involved with to minimise their risk of exposure to the costs of remediation of contaminated land. The Bill will help financial institutions to an extent, in that merely holding a security interest in land will not define them as a notional owner, and hence make them liable for remediation costs. However, as soon as a person, including a financial institution becomes a mortgagee in possession of land, they will be vulnerable to a remediation order by the EPA unless the institution can show that they only hold the land

19 ANZECC, *Financial liability and contaminated site remediation. A position paper*, 1994.

to sell to a person who has agreed to carry out any EPA orders for the site.

The Chamber of Manufacturers is of the strong opinion that liability should not extend to providers of services such as receiver/managers and lenders. The Chamber considers that no liability should be incurred by receivers of a site unless they became operators of the contaminating activity for a period longer that necessary for the implementation and conclusion of 'wind up' proceedings. Similarly, lenders should face no liability unless the lender was also in part or in whole the operator of the contaminating activity.[20]

The Bill makes no provision for an 'orphan sites fund' to pay for remediation of contaminated sites that have no apparent owner. For instance, the United States has a levy on some chemical products to fund a source of remediation money. To date, orphan sites have not been a real problem in NSW, so this should not be a serious shortcoming. In the worst case scenario, the EPA can make an investigation or remediation order against another public authority or carry out the work itself, in which case the cost of the remediation will be borne by taxpayers. Methods to recoup these costs are defined in Part 3 Division 6.

Division 2 Investigation

This division details procedures for the investigation of sites that the EPA has reasonable grounds to believe are contaminated with a substance in a way to present a significant risk of harm. The Bill provides for either the EPA or the appropriate person to investigate land that is declared an investigation area and report on: the nature and extent of contamination; the nature and extent of the harm caused by the contamination; and the risk that the contamination will cause such harm. It is an offence to fail to comply with an investigation order with a maximum penalty of $110,000 for a corporation or $55,000 for an individual. The Bill provides that the person carrying out the investigation may also have to make progress reports to the EPA, release details to the public and conduct meetings for the public to receive progress reports.

Division 3 Remediation

By notice published in the Gazette, the EPA may declare land to be a remediation site if it is found to be contaminated in such a way as to present a significant risk of harm. The declaration must also be served on the owner or notional owner of the land, as well as those persons who the EPA has reason to believe contaminated the land with the relevant substance. After this declaration, the EPA may then serve a remediation order on the appropriate person or a public authority, ordering the recipient to carry out such remediation as specified and submit for EPA's approval a plan of remediation. The EPA must also serve notices on the owner or notional owner of the land, and those believed to be responsible for the contamination. Failure to comply with a remediation order is an offence with a maximum penalty of $110,000 for a corporation or $55,000 for an individual. However, a public authority cannot be prosecuted for failure to carry out a remediation order if they are not the contaminators or owners of the relevant land.

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[20] Chamber of Manufacturers of New South Wales, *Finanical liability for contaminated site remediation. A submission to the Commonwealth EPA*. September 1993.

Persons may also reach agreement with the EPA to conduct a voluntary remediation, in which case a remediation order will not be issued. Under the *Conveyancing Act 1919*, the EPA may also impose on land a public positive covenant that requires any owner of the land to maintain remediation in relation to the land.

Division 4 Action by Public Authority

If a person fails to act upon an investigation or remediation order, the EPA may require another public authority to carry out the required works.

Division 5 Entry on land to investigate or remediate that or other land

This division makes it clear that receiving an order to investigate or remediate does not entitle that person to do anything on that land without the permission of the occupier of the land. If the occupier withholds or withdraws permission to enter the land, the EPA may then serve the investigation or remediation order on the occupier rather than the original person.

Clause 31 also protects the occupier of the land from suffering any losses as a result of land investigation or remediation work by another person. The person conducting the investigation or remediation work is responsible to the occupier of the land for any loss suffered by the occupier as a result of the works. Similarly, the person conducting remediation work is also liable to the owner of the land for any loss suffered by the owner as a result of that entry.

Commentary

Clause 3 of Division 5 is an important inclusion, as often investigation and remediation works are major events and have the potential to cause severe disruption to any existing commercial activities on the site. The statutory right to claim damages from those responsible for the works will help those affected businesses to a large extent. It also serves as a reminder that contaminating land can lead to major remediation expenses, and it is therefore much cheaper to prevent contamination in the first place.

Division 6 Cost of investigation or remediation

Clause 32 permits the EPA to recover their costs in connection with the preparation and serving of an investigation or remediation order, as well as any monitoring or compliance action with the orders. Similarly, a public authority may require a person to pay all or any costs incurred by the authority in connection with investigation and remediation work performed under division 4 (clause 33). Under clause 37, the public authority may apply to the Registrar-General to register the cost notice with the land. This charge has priority over every other charge or encumbrance to which the land was subject immediately before the notice was registered, and is not affected by change in ownership of the land. The charge ceases to have effect when the person pays the amount to the public authority, if the land is sold with the consent of the public authority, or the land is sold to a purchaser, in good faith for value, who had at the time of the sale no notice of the charge.

Significantly, if a person who had no responsibility for the contamination carried out investigation and remediation work under an EPA order, they may recover through court

action a portion of their costs from each person who did have such responsibility (clause 34).

If the person carrying out the investigation and remediation work is named by the EPA as having principal responsibility for the contamination, they are also given a statutory right to claim recovery costs from any other person who also had responsibility for the contamination. Similarly, if the owner or notional owner of the land pays any costs and expenses associated with the recovery of any EPA administrative costs (clause 32) or public authority's costs (clause 33), the owner may recover a portion of the costs from each person who had a responsibility for the contamination. In regards to the above clauses, 'portion' is defined as what is just in the circumstances, given the proportion of responsibility of each person for the contamination and the cost of remediation carried out by each person.

Commentary

The statutory right to claim costs from any other person responsible for contamination is in line with ANZECC recommendations, and is in agreement with the principle of the 'polluter pays'. However, it may be difficult to identify other people responsible for the contamination and to apportion the correct amount of responsibility to those people. Similar provisions exist in the United States, and it has been the experience that law companies have profited out of court action to determine appropriate responsibility for land contamination. The high legal costs in the United States occur primarily in litigation from one party against another to share some of the cost of remediation, and by a party held responsible for remediation against their insurer.[21]

Part 4 Audit of Investigation or Remediation

This Part deals with the review of investigation and remediation practices. Persons may be accredited as a contaminated site auditor, and the Bill provides for appropriate exclusions for conflicts of interest. Clause 45 makes reference to a site audit carried out for the purposes of a statutory requirement. This is a reference to an audit carried out to: secure compliance with a requirement under the Bill; a requirement imposed by SEPP 55 - Remediation of Land, or any other environmental planning instrument or any development consent given under the *Environmental Planning and Assessment Act 1979*. This is important, as under clause 50, any auditor who is requested to perform a statutory audit is required to notify the EPA of the request, and send the EPA and the local authority a copy of any site audit statement. The auditor is required to send an annual report to the EPA, listing the sites audited during the previous 12 months.

It is an offence for an auditor to knowingly make a false or misleading statement in relation to a site audit statement, with a punishment of $2000 or two years imprisonment, or both.

Commentary

With a potential 60,000 contaminated sites across NSW, it would be impossible for the EPA

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[21] For a more detailed description of United States contaminated lands legislation, see page 16 of: Smith,S. *Contaminated Land in New South Wales*. NSW Parliamentary Library Briefing Paper No. 7/96.

to take charge of investigation and remediation for each and every site. A system of accredited site auditors to conduct investigations and carry out remediation work, appears to be a workable solution to this problem. The Victorian EPA has had a system of accredited contaminated site auditors for some years with no apparent problems.

One of the criticisms of the current legislation is that the EPA simply does not know the extent of contaminated land across the State. Part 4 helps to solve this problem by requiring any statutory audit statements to be sent to the EPA. This requirement, as well as annual reports, will help in the identification and tracking of progress of contaminated sites. Part 5 of the Bill also includes provisions to increase the flow of information to the EPA.

Part 5 Information

Clause 56 states that the EPA is to maintain a record available to the public that contains information on land that is declared an investigation or remediation area. Any site audit statements relating to the area must also form part of the record. Furthermore, a section 149 certificate must show if the land in question is within an investigation area or remediation site, or subject to an investigation or remediation order.

Clause 58 provides a duty to report contamination. If a person believes that their activities on land have contaminated the land is such a way to present a significant risk of harm, they must notify the EPA in writing that the land may be contaminated. Failure to do so attracts a penalty of $110,000 for corporations or $55,000 for individuals. Furthermore, the Bill also proposes that an owner of land who has reason to believe that any activity on the land may have caused contamination (whether before or during the owner's ownership) in such a way as to present a significant risk of harm, must also notify the EPA. Failure to do so is also an offence with the same penalties as above. Clause 53(3) provides that the information provided to the EPA is not admissible as evidence in any proceedings against that person under this Act. However, this does not stop the EPA from issuing investigation and remediation orders.

Commentary

There is some debate in the community on the appropriate techniques to report and make available to the public information on contaminated sites. A section 149 certificate is the standard record maintained by the local council of what affects a 'lot' of land. As such, any person conducting their 'due diligence' search before purchasing the site will or should acquire a section 149 certificate on that site. Adding any investigation or remediation areas or sites to a section 149 certificate then makes that information easily available to the public.

The Bill also includes a mandatory notification process to the EPA if a person believes that their activities have contaminated a site in such a way as to present a significant risk of harm. This follows the ANZECC recommendations that considered it essential that pollution incidents likely to lead to contamination are reported to the appropriate authorities. Presently, this there is no compulsory notification requirement to report contamination. Any prosecution under this section may involve considerable debate over whether the person thought that the contamination could or would cause significant harm.

Part 6 Appeals

Under Part 3, the EPA may declare land to be an investigation area or a remediation site. These declarations are appealable in the Land and Environment Court by any person served with the declaration, and any person who contaminated the land. An appeal must be lodged within 21 days after the decision of the EPA. Similarly, clause 60 allows a person to appeal against an investigation or remediation order. The decision of the Court in an appeal is final and binding on the appellant and the EPA.

Part 7 Orders against directors or companies to investigate or remediate at own expense

This Part gives the EPA the ability to 'chase' the directors of corporations who have purposely folded their companies to avoid carrying out and paying for investigation and remediation orders. On application by the EPA, the Land and Environment Court may order a director or a person involved in the management of the corporation to comply with an investigation or remediation order at their own expense if: the corporation has been wound up within the two years before the Court's order is made; and the corporation has failed to comply with the investigation or remediation order. That person must then comply with the Court's order.

The Court may make an order under this section only if it is satisfied that the person was a director or concerned with management at the time when the investigation or remediation order was made, and there is reason to believe the corporation was wound up as part of a scheme to avoid compliance with the investigation or remediation order.

The Bill includes what reasons for belief there are that winding up of a company has occurred, including: carrying out transactions that violated the Corporations Law; and at the time of carrying out those transactions there was reason to believe that the land was contaminated; and any regulations made for the purpose of this section are satisfied.

Similar provisions apply to directors or management that transferred land, and the transferee has failed to comply with an investigation or remediation order in respect of that land. In this case, the Court must be satisfied that the corporation transferred the land as part of a scheme to avoid having to carry out investigation or remediation of the land - whether or not a formal EPA order had been made. There is reason for such belief if: at the time of the transactions there was reason to believe the land was contaminated; and the transfer of the land was to another company related to the corporation; or at a value below what the market value of the land would have been if the land had not been contaminated; or the corporation had reason to believe that the transferee would not be able to finance the remediation work that a reasonable person would have expected at the time of the disposal.

The Court may also order a corporation to comply with an investigation or remediation order at the corporation's expense if the corporation was the holding company of a company that: has been wound up within the two years before the Court's order is made; and has failed to comply with the order. The Court must be satisfied that the corporation was the holding company of the other company at the time the investigation or remediation order was made, and there is reason to believe was wound up as part of a scheme to avoid

compliance with the order.

Part 8 Evidence

Clause 66 provides a process of proving who was responsible for contaminating land, to be used to recover from a person the cost of carrying out an investigation or remediation order. A person is taken to have responsibility for contamination if they carried on activities on the land, and those activities generate or consume the same substances that caused the contamination, or generate or consume substances that may be converted by reacting with each other or natural processes that caused the contamination. However, if they can establish that they did not cause the contamination and took all reasonable steps to prevent contamination, they will not have to take responsibility for the contamination.

Part 10 Offences

Proceedings for an offence against the Act or the regulations may be instituted by the EPA. More importantly, with the leave of the Land and Environment Court, any person may institute proceedings for an offence against the Act or regulations. The Court must be satisfied that the EPA has not decided to take any relevant action, the EPA has been notified, the proceedings are not an abuse of the process of the court; and the particulars of the offence disclose a prima facie case of the commission of the offence. Any person may bring not just criminal proceedings, but include action to require a defendant to comply with an investigation or remediation order.

Similarly, any person may bring proceedings to the Land and Environment Court for an order to remedy or restrain a breach (or a threatened breach) of the Act or regulations, whether or not any right of that person has been or might be infringed as a consequence of that breach.

Clause 97 states that if a corporation contravenes any provision of the Act, each person who is a director of the corporation or who is concerned in the management of the corporation is taken to have contravened the same provision, unless the person satisfies the Court that: the contravention occurred without the knowledge of the person; or the person was not in a position to influence the conduct of the corporation in relation to the contravention; or the person used all due diligence to prevent the contravention by the corporation. A person may be proceeded against and convicted even if the corporation has not been proceeded against or been convicted.

Commentary

Similar provisions applying to corporations are also in other pollution control statutes, and the effect has been very positive to environmental protection. Directors are ordering their corporations to conduct ‘due diligence’ investigations. The result is companies instituting proactive environmental management procedures and safeguards.

Part 11 Miscellaneous

Clause 100 makes it clear that the Act binds the Crown. If a dispute arises between the EPA

and another government authority in regard to an EPA decision, either the EPA or public authority may refer the dispute to the Premier for settlement. The Premier may or may not hold an inquiry, and make a decision as the Premier sees fit. The decision of the Premier is final.

Clause 108 states that the Act does not affect or limit any right, remedy or proceeding under any other Act. However, no person is liable to be punished twice for the same offence.

Schedule 2 Savings and transitional provisions

Clause 2 states that nothing in the Act prevents the application of it to contaminated land just because the land was contaminated before the commencement of the Act, or the risk presented by the contamination was present before the commencement of the Act.

Commentary

In the United States the retrospective nature of contaminated sites legislation[22] has created some controversy. However, the United States government believes that their laws are necessarily focused on the past, because the actions that created contaminated sites occurred primarily before the statue was enacted. Arguments to support retrospective provisions include: it is reasonable to require the parties who made a mess to clean it up; the companies who created the problems benefitted economically from the manufacturing and other activities that generated the waste - those who have not yet paid their costs of cleanup continue to benefit economically from the deferred costs of cleaning up their wastes; and this cost should not be passed on to the public when responsible companies can afford to pay; at least some of the companies who disposed of hazardous wastes were well aware of the dangers wastes posed long before the public was; and the lack of public disclosure of the dangers presented by these wastes contributed to the creation of the problem of uncontrolled hazardous waste sites.

6.0 State Environmental Planning Policy No 55 - Remediation of Land

This draft SEPP was released by the government on 4 November 1997. The Policy aims to promote remediation of contaminated land by: specifying when consent is required for remediation work; specifying certain considerations that are relevant in determining development applications; and by requiring remediation work to meet certain standards and notification requirements.

The policy applies to the whole of the State. Clause 7 states that consent authorities must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated, and if so, whether remediation is necessary.

Often it is possible to foresee what contaminants are on a parcel of land by assessing its land use history. The SEPP takes account of this relationship in Clause 8. This clause ensures that a consent authority does not consent to development on certain land unless it is satisfied

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22 This is known as the *Comprehensive Environmental Response, Compensation and Liability Act 1980* (CERCLA, also known as Superfund).

that the land, if contaminated consistent with its site history, is suitable for the use proposed under the development either in its contaminated state or after remediation. The consent authority may then require the applicant to prepare a report on an investigation of the land. This clause applies to land which is: within an investigation area under Part 3 of the *Contaminated Land Management Act 1997*; on which an activity in Table 1 in the Contaminated Land Planning Guidelines is being carried out[23]; or historical records indicate that such an activity has been carried out; or if records are incomplete and the land use zoning allowed any of those activities in Table 1. If the proposed development is of a sensitive use (such as a child care centre, residential) this clause is also applicable and the consent authority may require a contamination investigation report.

The SEPP divides remediation work into two categories, called category 1 and category 2. Category 1 is remediation work that needs consent and a development application for remediation work must be submitted. Category 2 is remediation work that does not need consent by the consent authority. The SEPP defines remediation work in category 1 as that which is designated development, or which is on environmentally sensitive land. The consent authority is not permitted to refuse consent to the development application to carry out remedial work unless the work would result in a more significant risk of harm to human health or some other aspect of the environment (clause 12).

Category 2 remediation work, which does not need consent, is defined as those works that do not fall into category 1, or work that is required by a remediation order and needs to be started or completed as a matter of urgency

Normal advertising requirements under the EPAA must be complied with in respect of a Category 1 remediation work as if it was a designated development, unless the remediation work is carried out in accordance with a remediation order (clause 14). At least 14 days notice must be given to the local council before the commencement of Category 2 remediation work.

Clause 17 states that all remediation work must be carried out in accordance with the contaminated land planning guidelines and any guidelines made under the *Contaminated Land Management Act*. At the completion of remediation, a notice of completion of remediation work must be prepared and signed. Clause 18 details the information the notice must contain. This includes a brief site history and the substances that contaminated the land in such a way as to present a risk of harm to human health or the environment. The method of remediation used in the work, the guidelines complied with, the level of remediation achieved in light of the proposed use of the land, and what action must be maintained on the land after the completion of remediation work if the remediation is to be maintained.

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23 See NSW Government, *Contaminated Land. Planning Guidelines for Contaminated Land*. Department of Urban Affairs and Housing and Environment Protection Authority, 1995. Typical activities on Table 1 include: agriculture; airports; chemical works; concrete and brick industry; docks and railway land; gas works; heavy engineering installations; landfills; metal industries; oil refineries; scrap yards; stock dipping sites; timber treatment works and more.

Clause 19 determines the relationship of the SEPP to other planning instruments. The Policy does not apply to any remediation work that is development to which SEPP 38 - Olympic Games and Related Projects - applies.

7.0 Conclusion

Contaminated sites are an emerging issue for NSW and Australia. A comprehensive approach is required to manage these sites, involving specialised involvement from both industry and the government sector. It could be argued that increased communication with the public is required to convey concepts of risk and how it affects the community. Since the early 1990s, Commonwealth and State governments have been working together to develop common guidelines concerning contaminated sites. The release of the ANZECC guidelines on the assessment and financial liability of contaminated sites is a result of this consultation process. Over more recent years, the NSW government has responded with the development of a legislative package dealing with contaminated sites. However, without doubt the most important activity all sectors of the community can do now is to avoid contaminating land in the first place.