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Paper Title: A strategic approach for the identification and approval of redevelopment on potentially contaminated sites in Victoria.

Subtitle: You just approved a sensitive landuse where?!?

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Introduction

Transition of a site to a more sensitive use from a statutory planning perspective requires confirmation that the land is fit for the intended use. However currently, planning “triggers” are not linked to assessing the contamination risk associated with the transition, or determining the financial value specific to the transaction. Are we expecting too much of our decision makers, in many cases Council’s statutory planners, to be able to identify whether a site is appropriate for an intended, more sensitive use? A strategic approach is required to improve the outcome of these complex and multi-stakeholder transactions relative to potentially contaminated land.

The Victorian perspective

In Victoria, the disconnect between planning and environmental practice and legislation has long been lamented. The Victorian Auditor General’s Office (VAGO) *Audit Report (2011)*, “Managing Contaminated Sites” concluded that, “The Department of Planning and Community Development (DPCD)¹, the Environment Protection Authority (EPA) and councils are not effectively managing contaminated sites, and consequently cannot demonstrate that they are reducing potentially significant risks to human health and the environment to acceptable levels.” The VAGO Report also noted that approximately “80 per cent of situations involving contaminated sites are dealt with through the planning element of the framework, and the remaining

¹ Now Department of Environment, Land, Water and Planning (DELWP)

20 per cent are dealt with through the environment protection element.” While these are broad statements, this reinforces the importance of clear integration of the planning and environmental regulatory spheres. Additionally, it highlights the need for a clearer understanding of the ways in which the development of unidentified contaminated land, can negatively impact human health and the environment. An improved understanding allows for more appropriate processes to be implemented for the redevelopment of potentially contaminated land, reducing risk and assessment and remediation costs.

The VAGO Report defines a contaminated site as, “land, and in most instances groundwater, where chemical and metal concentrations exceed those specified in policies and regulations”. Case studies included in the VAGO Report provides examples where the approval authority did not follow applicable guidelines, as well as instances where sufficient guidance was not available to the decision maker.

Current legislation for contaminated land

Contaminated land assessment in Victoria is regulated via the *National Environment Protection (Assessment of Site Contamination) Measure, Amended 2013* (National Environment Protection Council, 1999) (NEPM) made under the Commonwealth *National Environment Protection Council Act 1994* and provisions of the Victorian *Environment Protection Act 1970* (EP Act). The EP Act and the *Environment Protection (Scheduled Premises and Exemptions) Regulations, 2007* provide boundaries for the operation of scheduled premises i.e. operational sites.

Contaminated land management is generally required only where the extent of the contamination poses significant risks to human health or the environment and therefore primarily relates to impacts resulting from historical polluting activities. It is the site assessment process, usually triggered by transactional due diligence or redevelopment, which consolidates the available information on the potential for contamination at a site.

Options for legislation reform

Major reform of the contaminated land management process in Victoria was anticipated by now, following the VAGO Report and the subsequent *Potentially Contaminated Land Advisory Committee Report, 9 March 2012*. However, to date, the opportunity for an integrated approach by approvals stakeholders has not been fully deployed. Environmental assessment or environmental audit requirements are not consistently triggered in accordance with existing guidelines during the statutory planning process. As a result, approval of sensitive land uses at contaminated sites continues to be documented.

Two possible approaches for legislation reform are:

- Risk-based approach, or
- Prescriptive approach.

There are myriad and complex reasons that will influence the pace at which major changes can be made in contaminated land management. Risk-based approaches are the preferred mechanism identified by key institutional stakeholders in Victoria, including EPA, Department of Health and Human Services and DELWP. EPA Victoria has consistently stated its intention to transform into a “modern regulator” with a focus on addressing the greatest risks to the environment.

A risk based strategic approach offers advantages for contaminated land identification and redevelopment including:

- Allows resources to be focussed on identification and understanding of highest risk sites.
- Policy development and capacity building within approval authorities and industry can be focussed and adjusted to address key risk areas.
- Less, but potentially more effective, assessment or screening could be achieved at a larger number of sites.
- Appropriate due diligence can be demonstrated throughout the redevelopment process.

While there are guidance documents produced for, or applicable to local government and authored by Victorian regulatory agencies, a risk-based approach is often more complex to implement than a prescriptive directive. A risk-based approach necessarily requires a level of information to be available in order to assess risk given a proposed end use. Risk-based assessment may result in a variety of options being appraised, each with differing risk profiles and resultant recommendations.

However, a prescriptive approach is disadvantageous because it specifies which sites are “in” and which are “out” of the assessment net; potentially expends resources on low risk sites; and may not identify “latent” sites where there is little known history. Alternatively a prescriptive approach may be easier to implement and potentially does not require as much integration between agencies, instead shifting the onus to purchasers or developers. Unfortunately, in the case of residential development, the least informed group may be future occupants, who may neither be purchasers or developers, but may be exposed to unquantified health risks.

Transacting potentially contaminated land

In terms of transactional environmental due diligence, the existing legislation and guidance documents do not ensure the most appropriate outcome for contaminated sites. Transactional due diligence is often driven by the principle, *caveat emptor*, “let the buyer beware”. While a “polluter pays” model exists in Victoria, inadequate environmental due diligence results in issues for subsequent parties that come into contact with contaminated land. Redevelopment of a contaminated site with a sensitive land use could require a subsequent owner, occupier, mortgagee or even local government, to bear the potentially expensive cost of cleanup if required.

Where a formal environmental audit process is engaged, a certificate or statement of environmental audit provides certainty about the appropriateness of a contaminated site for a defined future use. However, one difficulty is that the environmental audit process can also result in statement conditions that define potentially onerous requirements that must be maintained in perpetuity. Statement conditions are often required at contaminated sites, in order to deliver an appropriate level of risk relative to the intended land use. Examples of environmental audit statement conditions relevant to redevelopment of contaminated land include:

- Maintenance of engineered caps;
- Limiting the future land use options;
- Basement ventilation systems; or
- Ongoing groundwater monitoring and reporting programs.

It is beyond the remit of this paper to delve into the complexities surrounding the implementation and maintenance of institutional controls applied to contaminated land. However, it is clear that there is not uniform implementation nor effective management and communication over the long time frames for which the institutional control must remain effective.

There are a number of examples of “where things went wrong” in the context of the development of contaminated sites, including those cited in the VAGO Report. This report indicates that adequate environmental information is not necessarily accessible to decision makers nor implemented. Further it suggests that current practices do not consistently identify environmental concerns or liability, particularly for unsophisticated buyers or developers.

The *Planning and Environment Act 1987* (the P&E Act) provides for the preparation of a set of standard provisions for planning schemes called the Victorian Planning Provisions (VPPs). The VPPs provide a framework, standard provisions and State planning policy for all planning schemes. The VPPs also reference incorporated documents, common to all planning schemes.

The P&E Act (Section 12) requires a planning authority to *‘take into account any significant effects which it considers the scheme or amendment might have on the environment or which it considers the environment might have on any use or development envisaged in the scheme or amendment’*. The P&E Act (Section 60), also requires a responsible authority consider, before deciding on an application, *‘any significant effects which the responsible authority considers the use or development may have on the environment or which the responsible authority considers the environment may have on the use or development’*.

The VPPs also contain specific requirements that contaminated land must be considered in planning decisions. Clause 13.03-1 of the VPPs requires planning to *“ensure that potentially contaminated land is suitable for its intended future use and development, and that contaminated land is used safely”*.

It relevantly requires planning to consider the:

- *State Environment Protection Policy (Prevention and Management of Contamination of Land) 2002 (the SEPP)*;
- *Ministerial Direction No. 1 – Potentially contaminated land*; and
- The ASC NEPM.

The *Potentially Contaminated Land General Practice Note*, June 2005, provides consolidated guidance to planners and applicants and is intended to address how to:

- Identify potentially contaminated land;
- The appropriate level of assessment of contamination relevant to the planning context for redevelopment;
- Conditions relevant to contamination that may be included on planning permits; and
- Where the application or removal of an Environmental Audit Overlay (EAO) is appropriate.

Guidance regarding triggers for a site assessment, environmental audit, or an independent review of a furnished site assessment, all exists within the *Practice Note* and planning legislation. Best practice environmental site assessment processes should be deployed during the review of planning applications, and if this is demonstrated not to be the case, then Council is unequivocally exposed to liability. This inherent liability may not be realised until transactional environmental due diligence activities uncover an issue in the future.

Unfortunately there continues to be examples of inappropriate uses approved for potentially contaminated land. When the land turns out to be “*actually contaminated land*” it is difficult and costly to retroactively apply the same types of controls, or undertake appropriate assessment.

There are multiple cases within Victoria, of sensitive land uses being approved inappropriately on contaminated land. These case histories demonstrate that planning applications continue to be decided on a “case by case” basis, thus leading to confusion and inconsistencies. In some examples, Council maintained institutional knowledge and records of historical land use that reasonably indicated that land was likely to be contaminated, representing considerable liability to Councils approving such development.

Gaps in the existing redevelopment process

Where contaminated or potentially contaminated land is identified, technical information may be furnished by a proponent during the planning application process describing conditions at the site. The appropriateness and purpose of any third party information, such as a preliminary site investigation report, needs to be evaluated in order for an informed decision to be made. The environmental audit program (statutory) and the ability to request an independent environmental review (non-statutory) is currently available to support Council planners with decision making. There are also many examples in which a “case by case” approach results in the decision

without a technical or statutory review, in the case of an environmental audit. The *Practice Note* provides clear guidance that where land is identified as being potentially contaminated, “*an assessment is necessary before a decision is made about the future use or development of that land*” and therefore requires either:

- i) A site assessment; or
- ii) An environmental audit.

Guidance on what land uses could indicate potential contamination, and also the proposed level of assessment is provided in the *Practice Note*. There are however, instances where this guidance is not strictly followed, is not sufficient to trigger an environmental review process (either site assessment or environmental audit), or does not result in the identification of a historical site use that would indicate that it is potentially contaminated land. As a result, sensitive land uses have been approved on sites that are subsequently confirmed to be contaminated. This has resulted in significant but largely unquantified, human health and ecological risks associated with the use and development of the land. Additionally, there are a number of negligence cases where there has been financial compensation provided to developers as a result of the approval of inappropriate development on contaminated land.

Planning scheme overlays

Overlays are one of the existing mechanisms for achieving the desired strategic outcomes of the planning scheme. An overlay is also one of the statutory planning mechanisms that currently exists to assist in identifying land that may be impacted by contamination. These include Environmental Audit Overlays (EAOs), and to a lesser extent with respect to contaminated land, Environmental Significance Overlays (ESOs).

The purpose of an EAO is to “*ensure that potentially contaminated land is suitable for a use which could be significantly adversely affected by any contamination.*” An EAO requires that before a sensitive use (residential use, child care centre, pre-school centre or primary school) commences or before the construction or carrying out of buildings and works in association with a sensitive use commences, either a certificate of environmental audit or a statement of environmental audit must be made in accordance with the provisions of the EP Act by an environmental auditor appointed under that Act.

Where an EAO has been applied, it is clear that there is actual or potential contaminated land, however if no EAO exists, this does not mean that there is an absence of contamination. Some planning schemes in Victoria identify very few properties by EAOs.

To further complicate matters, land contamination is only one of a number of considerations that could be inconsistent with a sensitive land use. This is the case where EPA guidelines exist for separation distances but there is no immediate obligation to refer a planning application, and no trigger that a sensitive land use is proposed which may fall within an established separation distance. ESOs are also used to protect

sensitive land use and to minimise or mitigate encroachment around industries or activities that could result in an impact to amenity.

An ESO is one mechanism that has been utilised to provide a dual outcome namely:

- To inform land owners or potential owners of possible development constraints for sensitive uses; and
- To ensure proposed development is compatible with the identified environmental values.

Current status of legislative reform

In 2014, the Victorian Government committed to reforms to more closely align the planning and environment portfolios via a four year programme from 2014 to 2018 as part of *Cleaner Environments - Smarter Urban Renewal*. The “Cleaner Environments” initiative promised to be risk-based and enable more efficient Brownfield redevelopment. The new focus speaks to facilitation of development, being “risk responsive” and supporting growth.

The first phase of reform activities under the “Cleaner Environments” initiative is planned for implementation from 2014 to 2016 and is focussed on statutory reform that is being dubbed “modernisation of the statutory framework”. The SEPP (Prevention and Management of Contamination of Land), and SEPP (Groundwaters of Victoria) are under review and amendments are proposed to the SEPPs and the EP Act. Additionally, Ministerial Direction No. 1 and the EAO are also being reviewed. In phase 2 from 2015 to 2018 the capabilities of both industry and local government are proposed to be enhanced and strengthened in order to build the required capacity to develop local remediation and renewal plans. This will be supported with target grant funding for Brownfield renewal. In phase 3 information and accountability is emphasised from 2016 to 2018 including the concept of a “one stop shop” for whole-of-government information. New compliance, enforcement and performance reporting is also proposed.

Brownfield redevelopment initiatives are not a new concept, but have not been rolled out as a priority in Victoria. The economies of scale in conducting area-wide assessment, remediation, risk management, and ultimately redevelopment, streamlines regulatory and technical aspects of redevelopment. This results in innovation and efficiency in remediation and redevelopment. The United States deployed a Federal program of Brownfield grants for redevelopment more than ten years ago. As an environmental professional working on area-wide assessment projects in Minnesota (Twin Lakes Redevelopment Project, City of Roseville) and California (National City), this author has seen first-hand the type of area-wide and demonstration-type projects proposed for priority sites, such as Fisherman’s Bend and E-gate in Melbourne. Both projects were implemented by Councils that were recipients of targeted Brownfield redevelopment monies from US EPA,

In Victoria, in addition to promised reforms under the “Cleaner Environments” initiative, an Independent Inquiry into the Victorian EPA is currently being conducted by a Ministerial Advisory Committee (MAC). The Inquiry “will examine and review the role, powers and tools, governance arrangements and resourcing of the state’s environmental regulator, the EPA”. Specifically, the MAC will, among other issues, be looking at the role of EPA in landuse planning to prevent future environmental risks and landuse conflicts before they arise, and to minimise future hazards as a result of past practices.

Technical challenges

Pathways such as vapour intrusion where adjacent or properties even further away can be impacted by the offsite migration of contamination, further compounds the difficulties of the decision making required by our planning authorities. Emerging contaminants also challenge the current regulatory regime, which must evolve to both regulate and respond to risks that emerge once we are capable of its identification. Analytical techniques for screening for “new” contaminants, technology advancements that allow detection of lower concentrations, and improved understanding and studies of human health and ecological risks, means that emerging contaminants are also evolving as a practice area. Delays between identification, understanding, development of mitigation or remediation measures, and the regulation of emerging contaminants, challenges all those working in the areas of environment or planning to keep abreast of technical updates.

Vapour intrusion also complicates planning approval processes because the contaminative land uses giving rise to the vapour impacts, are not necessarily associated with the land subject to the planning application. Volatile organic compounds (VOCs) resulting in vapour intrusion in buildings or landfill gas migration are two examples that have resulted in considerable impacts on sensitive land uses that have been approved proximal to contaminated sites. Guidance on separation distances is available and an ESO may exist in the case of land proximal to a landfill, but does not always protect sensitive land uses even when consistently applied. Additionally, there are many examples where development with a sensitive land use is approved within the recommended separation distance, especially where an ESO has not been applied. Overlays provide greater certainty that planning approval will consider actions, such as permit conditions that minimise the risks associated with contaminated land.

Conclusion

It is obvious that significant reforms are needed to improve our current approach to approving formerly contaminated sites for alternative, more sensitive land uses. Capacity building across local government for those tasked with assessing planning applications should be focussed on the technical implementation of risk based guidance that acknowledges both existing and potential risks. In particular a well deployed process that guides the actions required at the transactional due diligence

phase and during development approval, would ensure a more consistent approach and reduced risk to the community and subsequent purchasers.

Maintaining the status quo does not adequately serve the community and also places unreasonable expectations on planners to make potentially highly technical decisions relative to the identification of potentially contaminated land. The wide variety of contaminative activities, historical chemical disposal practices, and undocumented land uses means that unidentified contaminated land continues to be approved for development that exposes all involved to undue risk. With greater emphasis on Brownfield redevelopment in order to progress infill development, there will be more instances where sites are identified as potentially contaminated. Not all site assessments are created equal, and the reliance on experienced third parties to review site assessments is an important consideration. This is due to the perspective afforded in a site assessment developed at a particular date in time, for a defined or undefined use, by a user with specific interest in the development. An objective or independent review of technical information furnished in support of redevelopment applications is available to planners and must be considered where contamination is confirmed but risk is deemed to be acceptable, and where an environmental audit has not been conducted.

Existing statutory requirements and mechanisms such as published guidelines are not sufficient to consistently identify and appropriately manage contaminated land, by those required to determine planning applications. Reforms in conjunction with appropriate resourcing to support implementation cannot arrive soon enough for those involved in the management of contaminated land. It is important that proposed changes to the existing context for management of contaminated land both adequately recognise, and then seek to manage risk.

It is difficult to plan for or mitigate risks that are not identified. In the case of potentially contaminated land in Victoria, "we do not know what we do not know", hence we need to continue to work across planning and environmental disciplines and proactively identify, assess, and manage contaminated sites, for the best possible future outcome.