

About Site Environmental Audits and Reports

1. Introduction

This document explains the Environmental Audit process and the context that applies to the use of Environmental Audit Reports issued by Lane Piper.

2. What is an Environmental Audit?

Environmental Audits are undertaken in accordance with the provisions of regulations enacted in various states of Australia, and are referred to as Site Audits in some jurisdictions. The details of the regulatory framework applying in each case are explained in the body of the audit report.

The EPA (or equivalent) in each state has delegated the role of auditing contaminated land to a number of experienced contaminated land practitioners known as Environmental Auditor or Site Auditors or similar. Anthony Lane of Lane Piper is such an auditor. The roles and responsibilities of the Auditor are described in EPA Guidelines as explained in the text of the report.

Environmental Audits of contaminated land provide certification that a site is suitable for one or more uses. In some jurisdictions this involves issuing a "Statement" in cases where the level of contamination makes the site suitable for a restricted range of uses.

Please note that this is not legal advice, and if more precise detail is required on the applicable regulations and guidelines in any state jurisdiction, we suggest you consult a specialist environmental legal practitioner.

3. Reasons for Conducting an Environmental Audit

An Audit of Contaminated Land is usually undertaken where there is a statutory requirement – a statutory Audit. This is most commonly as a requirement of the local Planning Authority when a change to a more sensitive use is proposed or where there is a local policy or "overlay" in the planning scheme which calls for a statutory audit. EPA may also require an audit where

contaminating activities have resulted in the issue of a clean up or remediation order or notice. Removal of such notices generally requires an environmental audit to be completed.

The site owner may also undertake audits at other times for due diligence purposes. Such audits (due diligence audits) are undertaken to establish whether the site has been impacted to the extent that some beneficial uses of the site may be precluded. Due diligence audits in many cases may be completed as non-statutory Audits, although in some jurisdictions they can also be statutory audits.

4. The Auditing Process

The Client generally initiates the Audit process (the client must be the owner of the land or be acting with the written authority of the owner) by requesting an Audit. The Auditor notifies EPA of the request and commences the audit.

In most jurisdictions (except Victoria) the Auditor is not permitted to undertake the necessary testing of the soil and groundwater, and this must be by a specialist contaminated land consultant (The Assessor). It is prudent to engage the Auditor and the Assessor at commencement of the audit to allow the Auditor the opportunity of ensuring that the site assessment will be to the required standard and scope.

The Auditor independently reviews the Assessor's work and forms his own conclusions regarding the contamination status of the site. The Auditor is obliged to ensure that the Assessor has conducted the investigation in accordance with industry standards and guidelines before reaching any conclusion regarding the status of the land and groundwater (and other elements including water and air, where relevant).

A thorough site history assessment (Phase 1 Assessment) is essential to the process of identifying the potential for significant contamination at a site. However, where the history is unclear, a broad screening of chemical parameters can be used to test environmental media. This normally includes a broad range of organic and inorganic compounds and elements, often referred to as the EPA Auditor Screen.

The Assessor undertakes sampling of soil at representative locations across the site. A NATA

accredited laboratory does the analysis of soil. It is impractical for all of the soil to be assessed. The Audit is generally based on a statistical method of grid or random sampling, augmented by targeted sampling at locations known or suspected to be contaminated. Guidance on sampling strategy and density is provided in Australian Standard AS4482.1–1997. However, some considerable degree of judgment is still required in the application of any sampling and testing strategy. For example the blanket application of the “hot spot” method is often inappropriate given its limitations.

The field program also investigates the likelihood of contamination below the site surface. Field investigations must sample and test the natural soils. If contamination is found then it is common for further work to be undertaken to characterise, to the extent practical, its vertical and horizontal extent. However, where fill is encountered and testing shows it to be uncontaminated, it must be realised that the heterogeneous nature of the material might mean that not all pockets of contaminated material can be detected using normal sampling regimes.

The auditing guidelines indicate the need in all cases to consider the potential for groundwater contamination in any site Audit. This does not mean all sites need to be drilled to sample groundwater, but it is most often the case. Most hydrogeological conditions contaminated groundwater conditions are complex and vary in space and time. The condition of groundwater is investigated to identify if any beneficial use or environmental value of groundwater is precluded due to pollution.

As previously stated, all soil and groundwater at the site cannot be tested. The environmental investigations are conducted in accordance with industry standards and guidelines. This provides a level of confidence that a sufficiently comprehensive assessment of the land and groundwater at the site is achieved.

Where an investigation shows that groundwater is polluted, EPA often requires it to be cleaned up to the extent practicable. In some jurisdictions, only EPA can determine whether clean up has occurred to the extent practicable, after submission of relevant information by the Auditor.

5. Audit Outcome

If the site contamination is not found to preclude any beneficial uses of the land then an unqualified audit outcome can be obtained. For example, in Victoria a Certificate of Environmental Audit

(CoEA) would be issued – in NSW it would be a Site Audit Statement (SAS) without any conditions attached, or in South Australia (SA) and Western Australia (WA) a Site Audit Report concluding “unrestricted use”. This generally means the site is suitable for all beneficial uses including sensitive uses such as low and medium density residential.

If the beneficial uses of the site are limited or conditions need to be applied to maintain the beneficial uses, then in Victoria a Statement of Environmental Audit (SoEA) is issued; in NSW a SAS with conditions; in SA and WA a Site Audit Report concluding a “restricted use with conditions”. The statement and Audit Report outline the conditions applying to the management of contamination at the site, necessary to assure the continued suitability of the site for the stated uses.

Where conditions are likely to be included in a report, these are generally discussed, and if necessary, agreed between the Client and the relevant Local Planning Authority, prior to the issue of the Audit Report. It is noted that these conditions may require actions by the Client and/or council subsequent to the issue of the Audit report. In some cases, ongoing management plans to protect people and the environment may be required for an indefinite period.

When complete, the Audit report (containing either a SoEA or CoEA) is forwarded by the Auditor to the Client, the EPA and the Local Planning Authority. The EPA enters the site into a register of audited sites. The Local Planning Authority is responsible for ensuring that SoEA conditions are implemented.

There are generally obligations in each jurisdiction requiring the occupier of the site to provide a copy of any statement (SoEA, SAS or Site Audit Report) to any person who proposes to become the occupier of the site.

If significant contamination is encountered (in Victoria this means - where there is an imminent environmental hazard) during a statutory audit, then the EPA must be notified by the Auditor. Under some jurisdictions there is also an obligation on the owner of a site being the source of contamination affecting beneficial uses off site, to inform EPA.

6. Environmental Audit Report

The Environmental Audit Report details the findings of the Audit. It provides summary information on the site definition, the reasons for

the audit and other relevant facts. It reviews the scope and quality of the site investigations, laboratory testing and data analyses undertaken by the Assessor. The report also presents the Auditor's independent review of the contamination status of the site, the need for further clean up, and opinion on the suitability of the site for a range of beneficial uses and land uses such as "residential – low density".

The Audit Report contains the relevant certification being CoEA, SoEA or SAS, depending on the jurisdiction, as an appendix. In SA and WA the Executive Summary of the Audit Report constitutes the audit statement. The information contained in the statement or CoEA is the result of conclusions reached by interpretation of the data contained in the Audit Report. It is noted that these statements are brief documents (2 pages) and use the wording prescribed by EPA. They cannot fully explain the conclusions on which they are based or the details of the site contamination. The statement (or CoEA) must be read in conjunction with the Audit Report to fully appreciate the site condition.

The Audit Report generally includes a copy of the site assessment report(s) as an appendix. These generally contain more detailed information than the Audit Report. Care should be taken to also read the Assessor's report in full.

Lane Piper generally issues reports in electronic form (*e-Report*) on CD ROM. Audit Reports are issued in this format as Adobe Acrobat™ PDF files. However, a paper copy of the statement or CoEA and executive summary of the Audit Report are issued to EPA, council and client, or otherwise as required by regulation.

7. Limitations of Environmental Audit Report

The Environmental Audit Report is prepared in a manner that can be read and understood by a person with a legitimate interest in the site, such as the site owner or occupier, EPA and Local Planning Authority, for determining the contamination status of the site. The Audit report is not intended for use by other parties or for other purposes. Anyone who uses the Audit report for purposes other than specified in the report, does so at their own risk.

The site should only be used for one or more of the beneficial uses and land uses identified in the SoEA as suitable.

The conditions applying to the SoEA in each case are the responsibility of the Client to implement.

The Auditor and Lane Piper are only responsible for the issuing of the Environmental Audit Report and associated CoEA or SoEA. The Auditor and Lane Piper accepts no liability for the costs incurred in the implementation of SoEA conditions. The Audit provides a snapshot of the site conditions at the time of the site investigation. Consequently, the Audit report may not be valid at a later time if there has been any change to the contamination status of the site in that time. Verification of the status of the site may be required in cases where a significant time has elapsed, or site conditions have changed since the assessment and audit.

The Environmental Audit is necessarily limited by constraints such as time, cost and available information; although normal auditing practice at the time has been applied with all due care to prepare the report. A necessary requirement of this process is the horizontal and vertical interpolation of data from discrete locations. However, site conditions are generally not homogenous and some discrepancies will occur between the actual and predicted results at locations not directly sampled. There is a risk that contamination may occur at the site and not be identified by a competent investigation and assessment. The approach adopted in sampling (a combination of statistically based grid and judgmental sampling) seeks to reduce, but cannot eliminate, this risk.

Where unexpected occurrences of contamination arise, subsequent to the issue of the Audit Report, the Auditor should be permitted to make an interpretation of these facts in relation to the Audit Report. Consequently, the Client should inform the Auditor and seek their opinion. The Auditor and Lane Piper accepts no liability for costs incurred due to such unexpected occurrences, given the inherent uncertainties in the assessment process.

The Auditor uses information provided by the Assessor as the basis for the audit, and reliance on this information is at the Auditor's discretion. This is generally achieved by review of the Assessors Work Plan/Quality Plan, checking the progress and standard of work, inspecting the site and taking verification samples.

The Audit cannot guarantee any of the facts, findings or conclusions presented by the Assessor but must make a judgment about the validity of information relied upon in the conduct of the Audit. Further, the Auditor will not be liable for the use of information, provided by others that is subsequently found to be intentionally misleading.

The Audit Report is not and does not purport to be anything other than a contaminated land audit within the meaning of the EP Act. It is not a geotechnical report and bore logs produced (in most cases by the Assessor) are for interpretation of the likely distribution of contamination. They are not intended for geotechnical interpretations and may not be adequate for this purpose.

The Audit Report is not intended to be a comprehensive analysis of the presence and associated risk of asbestos in buildings and services. Where asbestos in buildings and services is known or likely, the report may only caution that an appropriately qualified person be engaged to undertake demolition to avoid contamination of the site.

Lane Piper Pty Ltd

July 03, 2006