



ENVIRONMENTAL AUDITING OF CONTAMINATED LAND

Publication 860.1

August 2007

The *Environment Protection Act 1970* allows for environmental audits of any segment of the environment and the issuing of a certificate or statement of environmental audit for that segment. This system is aimed at clearly identifying the environmental quality of a segment, and any detriment to the beneficial uses of that segment¹.

An environmental audit of land is designed to inform decisions by the planning authority, prospective purchasers, financial institutions and others regarding the environmental condition of a site and its suitability for use.

Contamination of land can be commonly encountered where land has been used for storage, handling and/or disposal of chemicals and wastes. Frequently, waste and chemical handling at historical industrial premises were not consistent with current practices, leaving a legacy of site contamination encountered during redevelopment. Recent trends to redevelop former industrial land, particularly in inner urban areas, have highlighted this issue.

Since the audit system commenced in 1990, more than 1,000 sites have been subject to environmental audit, allowing people to develop or buy these sites in confidence. The audit system has underpinned some of the most significant urban-infill and infrastructure projects across Victoria. It is a system other States are adopting.

WHEN IS AN ENVIRONMENTAL AUDIT REQUIRED?

The system for auditing of land focuses on ensuring that sites proposed for redevelopment for a sensitive use (for example, a school) are suitable for that use.

This focus is reflected in Minister's Direction No. 1², which was made in 1990. Minister's Direction No. 1 requires planning authorities, when considering a planning scheme amendment that would have the effect of allowing potentially contaminated land to be used for a sensitive use, to be satisfied that the site is suitable for the use.

The audit system is the mechanism by which a planning authority must be satisfied.

¹ In the case of land, the beneficial uses are linked to land use. For example, the beneficial uses protected for residential land include protection of human health, maintenance of ecosystems, aesthetics, buildings and structures and production of food, fibre and flora.

² Pursuant to the *Planning and Environment Act 1987*.

Similarly, where a planning authority is issuing a planning permit that allows the use or development of potentially contaminated land, it may require an environmental audit.

The system can also be used to confirm whether a site is suitable for its existing use or to assess the adequacy of works to clean up a polluted site. In some circumstances, the Environment Protection Authority (EPA) can require an environmental audit of contaminated land.

In some cases a person may choose to engage an auditor to undertake a statutory environmental audit, even though the person is not required to do so by a regulatory authority. For example, a person could use an environmental audit to satisfy commercial due diligence requirements.

WHAT IS AN ENVIRONMENTAL AUDIT?

The environmental audit system provides for an environmental auditor to undertake an independent assessment of the condition of the site and form an opinion regarding its suitability for use. The auditor must assemble sufficient information to form a reliable opinion regarding the condition of the site. Such information will usually include site history details and the results of sampling and analysis of soil, and possibly groundwater, surface water and air. The auditor must be satisfied that there is sufficient information and that it is reliable.

The auditor is required to follow guidelines and standards³ that ensure the environmental audit provides the best assurance available that the site is suitable for its intended use.

An environmental audit reflects the condition of the site at the date of issue. Anyone seeking to rely on an environmental audit should satisfy themselves that the condition of the site has not changed significantly. For example, they might ask whether fill has been imported to raise the level of the site and, if so what is the quality of that fill.

The auditor must provide EPA and the planning authority with a copy of the environmental audit report (and certificate or statement).

³ In particular, the *Environmental Auditor (Contaminated Land) Guidelines for Issue of Certificates and Statements of Environmental Audit*, Publication 759. Auditors are also required to refer to the *National Environment Protection (Assessment of Site Contamination) Measure*.

Audit reports provided to EPA's Manager Environmental Audit must comply with all relevant guidelines issued by the Authority, including Publication 1147 Provision of Environmental Audit Reports, Certificates and Statements.

ENVIRONMENTAL AUDITORS

Section 53S of the Environment Protection Act 1970 (the Act) provides for the appointment of environmental auditors to carry out environmental audits for the purposes of the Act, as outlined in Part IXD.

Environmental auditors are appointed by EPA based on the recommendation of an expert panel. The panel assesses applicants' knowledge and experience in assessing and managing contaminated land. The Act makes it an offence to purport to be an auditor when you are not.

All EPA appointed auditors have a duty to the environment and the people of Victoria above any duty they may have to their client. The value of the environmental audit system depends on the independence of the environmental auditor. To preserve this independence, there must not be anything that may result in a conflict of interest for the auditor. Examples may include:

- the auditor must not have a financial interest in the site; and
- the auditor must not have previously assessed the site and made comment as to its suitability for use (unless as part of a previous audit).

The Act also provides substantial penalties where an environmental auditor is found guilty of issuing an incorrect certificate or statement, withholding information or other similar offences.

OUTCOME OF AN ENVIRONMENTAL AUDIT

An environmental audit (contaminated land) results in the issue of either a Certificate of Environmental Audit or a Statement of Environmental Audit. The auditor first considers whether a certificate can be issued for the site and, if not, issues a statement.

Certificates

A certificate indicates the auditor is of the opinion that the site is suitable for any beneficial use; that is there is no restriction on use of the site due to its environmental condition.

Statements

A statement indicates that the auditor is of the opinion that there is, or may be, some restriction on use of the site.

Depending on the condition of the site, a statement may indicate that the site is:

- a) not suitable for any use;
- b) suitable for specific uses (that is, not detrimental to the beneficial uses associated with the nominated land use) without further conditions or limitations; or
- c) suitable for specific uses (that is, not detrimental to the beneficial uses associated with the nominated land use) subject to conditions and/or limitations related to its use and management.

Figure 1 presents a flow chart of the environmental audit process.

GROUNDWATER POLLUTION

The quality of groundwater associated with a site must be considered as part of the environmental audit. If groundwater is likely to be polluted (whether that be from an on-site or off-site source) it needs to be investigated. If groundwater is polluted, it needs to be cleaned up to protect the beneficial uses of the groundwater. Where full clean up to protect all uses of groundwater is not practicable, then groundwater needs to be cleaned-up to the extent that is practicable.

Determining the practicable level of clean up of groundwater requires consideration of the technical, logistical and financial aspects of clean-up, in addition to the risk posed by the pollution. If the auditor is of the opinion that it is not practicable to clean up groundwater to protect the beneficial uses, then the auditor needs to assess the level of clean-up that is practicable, seek advice from EPA and complete the audit in accordance with that advice from EPA.

The statement issued for such a site may require ongoing management or monitoring of groundwater. Typically this would be the responsibility of the occupier of the site or the polluter. EPA will normally consider identifying a groundwater quality restricted use zone (GQRUZ) to help track and provide information about the residual groundwater pollution. More information on GQRUZs is provided in EPA Publication 862.

WHAT HAPPENS ONCE A STATEMENT HAS BEEN ISSUED?

An occupier, having been provided with a statement of environmental audit, has a duty to use and manage the site in a manner consistent with that statement. For example, if the statement indicates the site is suitable for commercial use, the occupier has a duty not to use the site for more sensitive uses (for example, child care) without first ensuring that the site is suitable for that use.

Where a statement has been issued, the regulatory authority (if applicable) that requested the audit will consider the need for further requirements to give effect to any conditions that may be contained in the statement (for example, to reflect the statement conditions in a planning permit).

In some circumstances EPA may issue a notice to give effect to a statement condition, for example, a pollution abatement notice or clean up notice requirement for ongoing monitoring of groundwater quality.

Where a statement has been issued for a site, an occupier also has an obligation to provide a copy of that statement to any person who proposes to become an occupier of the site (for example, a prospective purchaser or tenant). If a copy is not provided, the new occupier has certain rights under the Act to recover reasonable costs associated with complying with the statement.

TERMINATING AN ENVIRONMENTAL AUDIT

If, having commenced an environmental audit, the auditor is requested or decides not to proceed with the audit, the auditor will terminate the audit and notify EPA of the termination.

Where an environmental audit is terminated, EPA may seek further information from the environmental auditor or any other person about the condition of the site and, if warranted by the condition of the site, EPA may require further clean-up.

WHAT IF THE AUDIT APPEARS TO BE INCORRECT?

While an environmental audit is designed to provide a high level of assurance regarding the condition of a site at the date the certificate or statement was issued, there is a small chance that something may have been missed.

If something is found at the site that does not appear to be consistent with the certificate or statement which may be perceived to impact on the site's suitability for the intended use, the auditor may have

already identified the issue within the audit report and commented on its significance. In these circumstances it is important the audit report is read in conjunction with the certificate or statement.

If the issue is not resolved, contact EPA or the auditor who issued the Certificate or Statement.

USING THE ENVIRONMENTAL AUDIT SYSTEM

A site may be audited in any condition. Most commonly however, environmental audits concern contaminated land, and aim to ensure that land proposed for redevelopment is suitable for the proposed use (usually in response to a planning requirement). The following guidance is provided for the efficient use of the environmental audit system in this context (that is, an audit where the desired outcome is a certificate or statement indicating the site is suitable for its current or intended use).

1. Engage an environmental auditor from the outset to undertake an environmental audit (a list of appointed environmental auditors is on EPA's website www.epa.vic.gov.au).
2. If there is reason to suspect the site is contaminated and that some clean-up is required, an appropriately qualified and experienced individual or company (for example, an environmental consultant) should be engaged to undertake an assessment of the site. The assessor should liaise with the auditor to ensure that the assessment undertaken will meet the requirements of the auditor (for example, quality, number and location of samples, analytes considered). The auditor and the company for which the auditor works must be independent of the person or company undertaking the assessment/investigation.
3. If the assessment indicates that the site is contaminated to the extent that it is polluted, an appropriate clean-up program should be implemented. The person conducting the clean-up should liaise with the auditor to ensure that an acceptable standard is achieved by the clean-up. The auditor must not be directly involved in the detailed design or implementation of the clean-up.
4. At the completion of the clean-up, a site validation program should be implemented to confirm that the clean-up has been effective. This may be implemented by the auditor, the assessor or the person who carried out the clean-up.
5. At the completion of the assessment and clean-up works, the auditor will prepare an

environmental audit report and determine whether to issue a certificate or statement of environmental audit.

6. If there are good grounds for believing that the site will be suitable for the intended use without clean-up (for example, because little or no contamination is expected), the auditor may be employed from the outset to undertake any necessary investigations (including sampling and analysis) as part of the environmental audit. If contamination requiring clean-up is subsequently found, the auditor may at the discretion of the person who engaged them to undertake the audit:
 - complete the audit for the site in its current condition and usually, issue a statement indicating the site is detrimental to certain beneficial uses; or
 - if serious contamination is identified, immediately cease work and allow any clean-up (and associated sampling and analysis) to be undertaken by others before completing the audit.
7. As set out in point two, where some requirement for clean-up is anticipated at the outset, a person other than the auditor should be engaged to undertake the necessary investigation work and provide advice regarding clean up. This process provides the continuity of strategic advice regarding the assessment and management of the site.
8. If the auditor did not undertake the primary sampling and analysis at the site, in most circumstances the auditor will undertake limited additional sampling to confirm the results obtained by others.
9. The auditor must provide EPA, in accordance with EPA publication 1147, and the relevant planning authority a copy of the environmental audit report and certificate or statement within seven days of completing the environmental audit report.

Relevant Publications

- Environmental Auditing in Victoria (Publication 902)
- Environmental Audit (Contaminated Land) Guidelines for Issue of Certificates and Statements of Environmental Audit (Publication 759)
- Environmental Auditor Guidelines for Appointment and Conduct (Publication 865)
- State environment protection policy (Prevention and Management of Contamination of Land)
- State environment protection policy (Groundwaters of Victoria)
- Ministers Direction No. 1, Potentially Contaminated Land

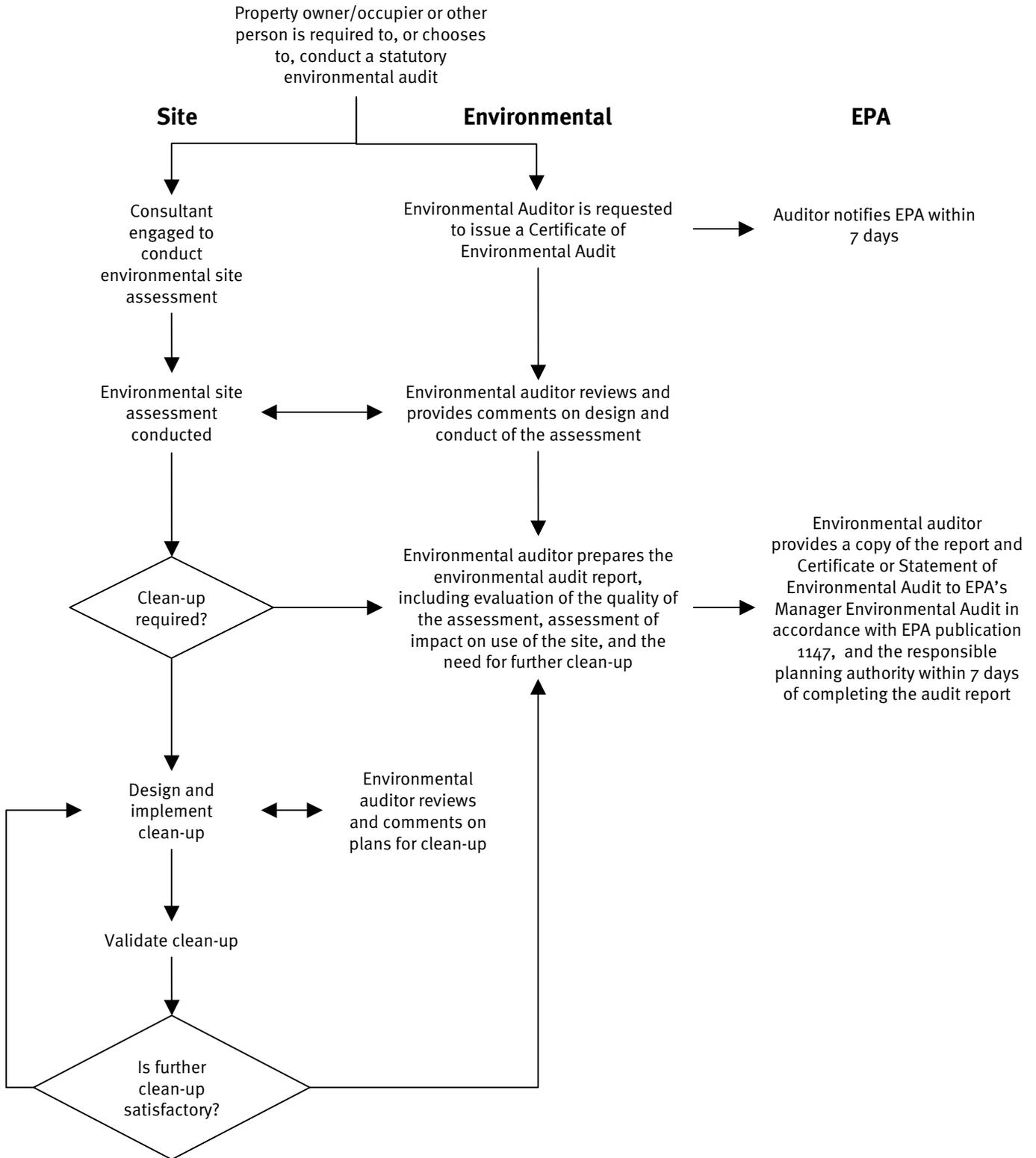
MORE INFORMATION

Certificates and statements:

- A list of certificates and statements is on EPA's website.
- Copies of certificates and statements are available from EPA's library.
- List of auditors and contact details:
- Refer to EPA website (www.epa.vic.gov.au)



Figure 1: Outline of the recommended environmental audit process where clean-up is anticipated



Note: 1. The assessment works may be undertaken by the auditor or a separate site assessor/contractor. Where the assessment work is undertaken by the auditor the assessment work must be conducted as part of the audit and the auditor must not be responsible for the design and/or implementation of the clean-up work.