

Hazardous Tree
Marking Audit –
Assessment of the
Audit Approach

May 2016

The Department of
Environment, Land, Water
and Planning

Background

During the preparation phase of a planned burn, trees that pose a risk are assessed, marked and managed in accordance with DELWP's 'Field Guide: Hazard tree marking for planned burn preparation' and the 'Hazardous Tree Management Pictorial Guide'.

Hazardous trees to be marked include:

- ▶ Trees presenting hazard to crews before ignition
- ▶ Trees that will impact on fire-fighter safety during ignition
- ▶ Trees that may become hazardous if affected by fire

Prior to the ignition of a planned burn, a 'Planned Burning Hazardous Tree Assessment and Treatment' checklist is completed and a signed declaration is made by the Burn Officer in Charge that obvious hazardous trees have been treated in accordance with the 'Field Guide: Hazard tree marking for planned burn preparation' and the 'Hazardous Tree Management Pictorial Guide'.

Hazardous tree assessment training is provided for all staff involved in the operational process.

Operational audits of the hazardous tree assessment process are performed periodically, however a formally documented DELWP approach outlining the process for auditing a hazardous tree assessment does not exist.

This document has been completed as part of EY's engagement to develop an Audit and Quality Assurance Framework for bushfire management, a component of which includes planned burning.

Objective

The objective of this review was to:

- ▶ assess the applicability and suitability of extending the hazardous tree marking audit approach to other aspects of bushfire management; and
- ▶ identify better practice principles in the current audit approach to incorporate into the Audit and Quality Assurance Framework.

This will address recommendation nine (3.1.2.12) in the Independent Investigation of the Lancefield-Cobaw Fire (the Investigation).

Approach

As a formally documented audit procedure surrounding hazardous tree marking assessments does not exist, we examined two hazardous tree marking audits: Hazardous Tree Marking in the Midlands (January 2015) and Hazardous Tree Marking in the Far South West (2014) to determine the audit process and to document elements of better practice utilised in the audit.

The relevant elements of these two audits have been incorporated into the Audit and Quality Assurance Framework, which is being developed by EY in response to recommendations nine and 13 of the Investigation, so that they can be applied to audits related to other aspects of burn planning, preparation and implementation.

Assessment of Hazardous Tree Marking Audit Approach

The following section outlines the key audit steps that DELWP takes (as determined through review of the two hazardous tree marking audits which are described above), and captures elements of better auditing practice which will be incorporated into the Audit and Quality Assurance Framework.

Current Hazardous tree marking audit steps

1. Identify the need to undertake an audit – in these instances, audits were based on risks associated with consistency and application of the marking guide and how the treatment of hazardous trees is conducted and findings from a previous audit.
2. Attend multiple burn areas prior to ignition.
3. For each burn area, examine whether the following assessments and treatment methods were appropriate and in line with the Field Guide:
 - Hazardous trees (x trees) and;
 - Trees requiring protection (dot trees)
4. Based on audit examination, apply rankings to each category examined using the following marking guide:
 - Improvements needed
 - Some inconsistencies but generally OK
 - High standard of work
5. Develop recommendations that address issues identified.
6. Perform a follow-up audit to determine whether consistency and understanding in how the guide should be implemented has improved.

Elements of better practice identified in the above audit process

- ▶ Risk based approach used to identify and target high risk processes and sites for auditing
- ▶ Audits performed through peer review by staff with skills and experience in bushfire management to achieve audit outcomes.
- ▶ Site attendance (not a desktop review of the completed 'Planned Burning Hazardous Tree Assessment and Treatment' checklist).
- ▶ Audit is performed by comparing the process to a defined and documented guideline
- ▶ Documentation of recommendations to address finding(s) to facilitate continuous improvement
- ▶ Audits are followed-up to examine whether issues have been addressed and hazardous tree marking aligns to required guidelines.

Summary and Next Steps

Examination of the hazardous tree audit process identified a number of elements aligned to better practice, as listed in the section above. These elements will be incorporated into the Audit and Quality Assurance Framework.

Given that procedural guidelines have not been formalised, additional elements of better practice may be in place however were unable to be identified by EY. Other elements of audit better practice, in addition to those listed above, will therefore be captured in the Audit and Quality Assurance Framework to further strengthen audit processes.

Further, it is recommended that DELWP formally documents the audit procedure for hazardous tree marking assessments. DELWP should also consider the better practice elements of the hazardous tree marking assessments as relevant to other operational procedures.

© 2016 Ernst & Young Australia.

Our assessment may be relied upon by the Department of Environment, Land, Water and Planning Management for the purpose set out in the Approach section only pursuant to the terms of our Response to Request for Proposal for the Development of Audit and Quality Assurance Framework for Bushfire Management - Request for Proposal dated 17 February 2016. We disclaim all responsibility to any other party for any loss or liability that the other party may suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to the other party or the reliance upon our report by the other party.

Inherent Limitations

We believe that the statements made in this assessment are accurate, but no warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by the Department of Environment, Land, Water and Planning Management and personnel. We have indicated within this assessment the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted with the report. We are under no obligation in any circumstance to update this assessment, in either oral or written form, for events occurring after the assessment has been issued in final form unless specifically agreed with the Department of Environment, Land, Water and Planning. The findings expressed in this assessment have been formed on the above basis.

Third party reliance

This assessment is solely for the purpose set out in the "Objective" section and for the Department of Environment, Land, Water and Planning information, and is not to be used for any other purpose or distributed to any other party without Ernst & Young's prior written consent.

This assessment has been prepared at the request of the Department of Environment, Land, Water and Planning. Other than our responsibility to Management of the Department of Environment, Land, Water and Planning, neither Ernst & Young nor any member or employee of Ernst & Young undertakes responsibility arising in any way from reliance placed by a third party, on this assessment. Any reliance placed is that party's sole responsibility.

Liability limited by a scheme approved under Professional Standards Legislation.

Ernst & Young

Assurance | Tax | Transactions | Advisory

About Ernst & Young

Ernst & Young is a global leader in assurance, tax, transaction and advisory services. Worldwide, our 152,000 people are united by our shared values and an unwavering commitment to quality. We make a difference by helping our people, our clients and our wider communities achieve potential.

For more information, please visit www.ey.com/au

© 2016 Ernst & Young Australia.

Liability limited by a scheme approved under Professional Standards Legislation.

Adelaide
Ernst & Young Building
121 King William Street
Adelaide SA 5000
Tel: +61 8 8417 1600
Fax: +61 8 8417 1775

Canberra
Ernst & Young House
51 Allara Street
Canberra ACT 2600
Tel: +61 2 6267 3888
Fax: +61 2 6246 1500

Perth
Ernst & Young Building
11 Mounts Bay Road
Perth WA 6000
Tel: +61 8 9429 2222
Fax: +61 8 9429 2436

Brisbane
1 Eagle Street
Brisbane QLD 4000
Tel: +61 7 3011 3333
Fax: +61 7 3011 3100

Melbourne
Ernst & Young Building
8 Exhibition Street
Melbourne VIC 3000
Tel: +61 3 9288 8000
Fax: +61 3 8650 7777

Sydney
Ernst & Young Centre
680 George Street
Sydney NSW 2000
Tel: +61 2 9248 5555
Fax: +61 2 9248 5959
