

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.

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