

Title	Investigate origin and cause of vegetation fires		
Level	5	Credits	6

Purpose	<p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> - demonstrate knowledge of fire determination procedures and responsibilities; - collect and preserve evidence for the determination of the origin and cause of a vegetation fire; - determine area of origin and probable cause of a vegetation fire; and - report on a vegetation fire investigation.
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Classification	Fire and Rescue Services > Fire and Rescue Services - Vegetation
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Available grade	Achieved
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Prerequisites	Unit 4648, <i>Demonstrate knowledge of vegetation fire behaviour</i> , and Unit 20392, <i>Protect and preserve a fire scene</i> ; or demonstrate equivalent knowledge and skills.
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Guidance Information

- 1 Compliance with the fire and emergency agency's Health and Safety policy and procedures is mandatory.
- 2 Assessment against this unit standard must take place under real conditions.
- 3 Assessment against all outcomes must be in accordance with the fire and emergency agency's requirements.
- 4 Definition
Fire and emergency agency's requirements refer to policies, procedures and supporting documentation on safety and operations set down by each fire and emergency agency employer or host organisation.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of fire determination procedures and responsibilities.

Performance criteria

- 1.1 The procedures for investigating and determining fire origin and cause are explained.
- 1.2 The investigator's terms of reference are explained.

Outcome 2

Collect and preserve evidence for the determination of the origin and cause of a vegetation fire.

Performance criteria

- 2.1 Evidence is collected and preserved from a range of sources.
- Range may include but is not limited to – physical evidence, fire, behaviour data, fire response activity, micro fire travel indicators, macro fire travel indicators, witness statements.
- 2.2 The need for specialist investigation and assistance is identified.
- Range may include but is not limited to – fire behaviour analyst, electrical engineer, materials engineer, legal counsel, case management specialist, geographics information systems specialist, New Zealand Police.

Outcome 3

Determine area of origin and probable cause of a vegetation fire.

Performance criteria

- 3.1 Area of origin is determined.
- Range must include but is not limited to – path of fire travel, fire behaviour analysis.
- 3.2 Evidence is analysed and a hypothesis developed.
- 3.3 Probable fire cause is determined.
- Range ignition sources, elimination of other possible causes, environmental conditions, fire behaviour.

Outcome 4

Report on a vegetation fire investigation.

Performance criteria

- 4.1 Reports are prepared.

4.2 Evidence is presented.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 May 1998	N/A
Review	2	25 March 2004	N/A
Revision	3	20 November 2006	N/A
Review	4	20 November 2009	N/A
Revision and Rollover	5	30 September 2021	N/A

Consent and Moderation Requirements (CMR) reference	0039
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.