



Learner Assessment Guide Unit Standard 3294 Lead prescribed vegetation burning operations (Level 4, Credit 3, Version 3)

Level Descriptor

Level	Process	Employing	Responsibility
4	Carrying out processes that: <ul style="list-style-type: none"> • Require a wide range of scholastic skills • Offer a considerable choice of procedures • Are employed in a variety of familiar and unfamiliar contexts 	Employing: <ul style="list-style-type: none"> • A broad knowledge base incorporating some theoretical concepts • Analytical interpretation of information • Informed judgement • A range of sometimes innovative responses to concrete but often unfamiliar problems 	Applied: <ul style="list-style-type: none"> • In directed activity • Under broad guidance and evaluation • With complete responsibility for the quantity and quality of output • With possible responsibility for the quantity and quality of the output of others

Descriptors:

Credit 3 - will require approximately 30 - 36 hours of learning, practice or experience and assessment for a person with no previous knowledge or experience.

Version 3 - This document has been prepared based on version 3 of the Unit Standard.

Elements:

1. Demonstrate knowledge of vegetation burning equipment.
2. Demonstrate knowledge of lighting up patterns and hand ignition techniques.
3. Supervise a lighting up crew.
4. Assess fire environment and fire behaviour during lighting-up operations.
5. Communicate during a vegetation burning operation.

Prerequisites:

Recommended: Unit 14564, *Demonstrate knowledge of the fire environment on vegetation fire behaviour.*

Prerequisite: Unit 3285, *Demonstrate knowledge of protection of personal safety at vegetation fires, or demonstrate equivalent knowledge and skills.*

Assessment Conditions:

Assessment against this unit standard must take place using live fire.

Resources:

1. Burner or igniter and fuel.
2. Ignition crew.
3. Fire suppression equipment appropriate for burn plan.
4. Fire suppression crew/s appropriate for burn plan.
5. Communications equipment appropriate for burn plan.
6. Drinking water.
7. Site for prescribed burn.
8. Fire permit and approved burn plan.

Special Notes:

Compliance with the providers Health and Safety policy and procedures is mandatory.

Compliance with the fire and rescue service provider's SOPs on safety and operations is also mandatory.

Compliance with the Rural Fire Authority requirements for fire permits and/or burn plans must be met.

Experience as a Crew Leader, including knowledge of fire behaviour, understanding of CIMS, and ability to apply safe work practices and hazard management will be an advantage to a learner seeking assessment against this unit standard.

Assessment Brief Instructions:

The assessor may use pre-course, on course, post course or workplace written or oral assessments as evidence towards gaining the knowledge based components of this unit. The assessor will evaluate the relevance of the evidence against the unit standard. The lists below provide an outline of the assessment components a learner should expect to encounter in achieving this unit.

This unit may be assessed in three ways:

- As a theory test and a prescribed burn; or
- A prescribed burn with oral questions from the assessor to cover knowledge components; or
- A demonstration by the learner of knowledge components and a prescribed burn.

This Learner Assessment Guide is simply a guide and does not determine the sufficiency or validity of evidence the assessor must evaluate using assessment best practice criteria.

LEARNERS SHOULD ALWAYS REVIEW THE REQUIREMENTS CONTAINED IN THE UNIT STANDARD DOCUMENT PRIOR TO REQUESTING ASSESSMENT.

The learner will fill the role of crew leader of a light up crew and will comply with the requirements of the approved burn plan.

Learners may need the support of an Officer or supervisor/manager to provide a suitable level of authority to set up and monitor a trail evacuation, and to endorse any formal reporting requirements.

Assessing Element 1: Demonstrate knowledge of vegetation burning equipment

Learner will demonstrate knowledge of vegetation burning equipment by:

Describing the operation and capabilities of each of the following burning equipment:

- Igniters
- Drip torches
- Pressurised burners
- Backpack flame throwers

Explaining the safety requirements for hand operated burning equipment in accordance with own organisation's requirements.

Assessing Element 2: Demonstrate knowledge of lighting up patterns and hand ignition techniques

Learner will demonstrate knowledge of light up patterns and hand ignition techniques by:

Explaining the light up methods and patterns (including safety requirements) for any four of the following:

- Ignition point spacing
- Strip lighting
- Central ignition
- Spot ignition
- Back burning
- Flank burning
- Ring burning

Explaining hand ignition techniques in accordance with own organisation's requirements.

Assessing Element 3: Supervise a lighting up crew

Learner will supervise a crew performing a light up on a real fire and will ensuring crew members are tasked within their capabilities and competence.

Learner must conduct a briefing to cover:

- tasks
- responsibilities
- escape routes
- safety procedures

Crew is monitored to ensure they are doing the light up correctly, safety is being constantly monitored, and corrective action is taken where there are any deficiencies.

Assessing Element 4: Assess fire environment and fire behaviour during lighting-up operations

Learner will assess the fire environment and fire behaviour during lighting up operations. The assessment of the burn area will already have been conducted in the production of the burn plan. The learner is expected to compare the predicted fire behaviour and what is actually occurring during light up. Where changes in conditions or fire behaviour occur, the learner must report this to the IC/Operations manager and take corrective actions to ensure safety of the light up crew and efficiency of the burn.

This will include:

Considering the weather limitations (particularly wind speed/direction) set in the burn plan and taking site readings before light up to confirm conditions are still safe for light up.

Taking regular weather readings on site during the light up to monitor for changes.
Considering FWI figures and expected fire behaviour.

Monitoring actual fire behaviour and keeping IC/Operations Manager informed of changes.
Where a change of fire behaviour occurs, modifying the light up pattern in consultation with the IC/Operations Manager.

Monitoring crew safety and repositioning crew if changes occur in fire behaviour that could compromise crew safety, or could compromise control of the burn.

Modifying light up actions in consultation with the IC/Operations Manager to maintain efficiency of the burn.

Assessing Element 5: Communicate during a vegetation burning operation.

This must include communication with:

- crew
- fire supervisors
- higher authority

Learner will maintain communications with the light up crew, fire line supervisors, and IC/Operations Manager during the burning operation.

Learner will maintain communications using the communications plan (within the overall burn plan). This also requires the learner to ensure light up crew are briefed on communications method/frequency with him/herself.

Learner will maintain a flow of information to supervisory staff on progress of the

- light up
- work progress
- fire behaviour, and
- crew safety

This must occur in accordance with the burn plan and IC/Operations Manager briefing.