

1. Module details

Module name

Introduction to the Powerline Clearance Industry

Module duration

It is expected that students with the appropriate entry knowledge and skills will successfully complete this module in 18 – 20 hours.

Module code

NUE257

Discipline code

0703130

2. Module purpose

The purpose of this module is to provide participants with an introduction to the operation practices, culture and scope of the powerline clearance industry, and associated training programs

3. Prerequisites

Nil.

4. Relationship to competency standards

NES101
NES450
RUH1

5. Content

Preparation for recognition of prior learning

Identification of literacy and numeracy needs

Training options in this program

Scope of industry

Occupational options

Employment and workplace conditions

Introduction to hazard identification and accident prevention

Hearing conservation and manual handling

Extinguishing small fires

Bush fire in the Australian context and bush fire migration

6. Assessment strategy

Assessment methods

The learning outcomes for this module may be assessed orally, by individual or group presentations, or in the form of short written assignments. More than one learning outcome may be assessed at once. Where appropriate, learning outcomes in this module may be assessed in conjunction with learning outcomes in other modules.

Conditions must provide for the demonstration of competence in skills and associated knowledge specified in all learning outcomes. Educators are encouraged to invite the participation of industry practitioners in the delivery of this module. Each participant should be provided with industry code/s of practice relevant to the State or region, detailing safe working practices.

Conditions of assessment

Oral and written work, group discussion, oral and group presentation, practical demonstration

7. Learning outcome details

Learning outcome 1

Investigate and list a range of vocational training options and employment opportunities appropriate to the learner's and individual needs, interests and abilities.

Assessment criteria

- 1.1 Identify and list personal needs, interests, abilities, strengths and weaknesses in relation to employment opportunities within the powerline clearance industry.
- 1.2 Identify opportunities to transfer skills to other related industries.
- 1.3 Identify training paths in the Certificate II in Powerline Vegetation Control and relate these to occupations in the industry.
- 1.4 Identify points in the Certificate II in Powerline Vegetation Control at which the participant must choose between above-ground and ground-based operations and the related selection of the elective modules.
- 1.5 Identify the need for and seek assistance to implement a program of literacy and numeracy.

Learning outcome 2

Outline the key steps in applying for Recognition of Prior Learning (RPL) in relation to this course.

Assessment criteria

- 2.1 Identify and record: the purpose of RPL; an outline of the process to be followed and the role of the applicant; forms and characteristics of the evidence required for the RPL process; timeline to prepare an RPL application in the educational organisation attended by the participants; a source of advice and support regarding RPL applications within the educational organisation attended by the learner (including costs); scope for meeting individual RPL support needs, e.g. NESB participants and Aboriginal and Torres Strait Islander applicants.

Learning outcome 3

Prepare a personal plan for a career within the powerline clearance industry.

Assessment criteria

- 3.1 Identify three powerline clearance employers in your region/State.
- 3.2 Identify two major clients of a power clearance enterprise/business.
- 3.3 Identify two different occupations in the powerline clearance industry.
- 3.4 Identify and record personal career interests and relate to them to current occupations with the powerline clearance industry.
- 3.5 Identify training courses associated with occupations in the powerline clearance industry.
- 3.6 Identify factors contributing to fluctuations in employment opportunities within the powerline clearance industry.

Learning outcome 4

Develop a profile of employment conditions within the powerline clearance industry.

Assessment criteria

- 4.1 Identify and record names and features of Industrial Awards, agreements operating within the Powerline Clearance Industry and the names of Union/s that have coverage in the industry.
- 4.2 Identify and record the superannuation entitlements, Industry Superannuation agencies, and the superannuation fund application processes for the Powerline Clearance Industry.
- 4.3 Identify and record the Workers Compensation arrangements as they pertain to the learner's workplace rights and responsibilities and State Workers Compensation administrative arrangements.

Learning outcome 5

Describe the health and safety environment of the Powerline Clearance Industry.

Assessment criteria

- 5.1 Describe the effects of contact with/exposure to high/low voltage electrical current.
- 5.2 Develop a list of 'do's and don'ts' when approaching and/or working around live electrical conductors.
- 5.3 Outline the risks in working around trees and ways to prevent/minimise personal injury or harm to self and others.
- 5.4 List tools and equipment commonly used in powerline clearance work which could cause personal injury or injury to others.
- 5.5 Develop a list of 'do's and don'ts' which support safe use of commonly used tools and equipment.
- 5.6 Identify and record the name and contact details of the enterprise's safety officer, and occupational health and safety employee representative.

Learning outcome 6

Assessment criteria

Practice hearing conservation.

- 6.1 Describe the responsibilities of the employer and employees to prevent hearing damage at the workplace.
- 6.2 Identify the noise exposure standard, and peak noise limit established by regulation/code of practice.
- 6.3 In simple terms, explain how noise is measured and the units by which noise levels are expressed.
- 6.4 Describe the function of a workplace noise identification/assessment.
- 6.5 Describe appropriate measures used to limit employee noise exposure.
- 6.6 Identify personal hearing protection equipment used at the workplace/work site.

Learning outcome 7

Assessment criteria

Practice safe manual handling.

- 7.1 Define 'manual handling'.
- 7.2 Identify manual handling risks associated with work in the Powerline Clearance Industry.
- 7.3 Describe manual handling injuries that can occur.
- 7.4 Identify manual handling activities work methods/skills designed to avoid injury.
- 7.5 Demonstrate physical warm up, stretching and strengthening exercises designed to protect the operator from injury.
- 7.6 Describe enterprise processes for the reporting of manual handling risks/injuries.
- 7.7 Identify the responsibilities of the employer and employees to minimise risks associated with manual handling as they are defined in regulations/codes of practice.

Learning outcome 8

Select and operate various media used to extinguish small fires.

Assessment criteria

- 8.1 Identify measures/practices designed to prevent outbreak of fire at the worksite.
- 8.2 Identify the appropriate extinguishing media and any other fire fighting equipment relevant to the worksite for various types of fires.
- 8.3 Identify personal protection equipment and procedures when fighting small fires.
- 8.4 Explain the communication, evacuation and any other safety procedures used by the enterprise during the fire season.
- 8.5 Operate a knapsack and dry chemical extinguisher.
- 8.6 Identify and demonstrate routine maintenance procedures for knapsack-type fire extinguishers.

Learning outcome 9

Describe major factors which significantly influence the nature and operation of the Powerline Clearance Industry.

Assessment criteria

- 9.1 Discuss the role of natural and human-related bushfire in shaping the Australian landscape and vegetation.
- 9.2 Identify two factors which have increased the possibility of unplanned and uncontrolled bushfire in Australia since European settlement.
- 9.3 Describe four ways in which powerlines can cause bushfires.
- 9.4 Explain the term 'bushfire mitigation'.
- 9.5 Identify and describe three different ways of minimising outbreak of bushfires.
- 9.6 Name at least one State/Local Government response following the Ash Wednesday fires in South Eastern Australia in 1983.
- 9.7 In addition to bush mitigation, identify and describe at least two other ways in which Powerline Clearance operators can demonstrate environmentally responsible practices.

- 9.8 Locate two newspaper/magazine articles which report common public perceptions of the impact of powerline vegetation control activities.
- 9.9 Locate and record the name of at least one publication dealing with bushfire mitigation and/or powerline vegetation control.

8. Delivery of the module

Delivery strategy

Educators are encouraged to visit workplaces that exemplify conditions and practices within the industry, employer and employer organisations should be encouraged to participate in the presentation of current and relevant information and to inform discussions about features of the industry

Learning outcomes identifying literacy and numeracy needs, and RPL opportunities should be delivered by educators with experience and skill in these areas

Delivery methods must provide for the demonstration of skills and associated knowledge specified in all learning outcomes, whether in workplace or simulated workplace conditions

Delivery methods must provide for the demonstration of skills and associated knowledge specified in all learning outcomes, whether in a workplace or simulated workplace conditions. Delivery should take into account current legislation, regulations and by-laws and be consistent with existing industry standards including Australian and International standards

Resource requirements

Participants require access to information (printed, verbally or electronically transmitted) pertaining to the powerline clearance industry. Participants should be provided with codes of practice relevant to each State. Personal protective equipment and apparel, provided by the enterprise to the participant. Commonly used tools and equipment for demonstration by the instructor only.

Student references

Code of practice for powerline clearance (Vegetation) 1996 (Vic.) and/or its equivalent in the participant's State/Territory
The Blue Book – legislative requirements guiding work in the electricity industry in Victoria
Electrical Industry Safety Guidelines, Queensland Electricity Commission, 1992
Guide to Tree Planting and Maintaining Safety Clearances Near Power Lines, Electricity Council of New South Wales, 1992

Educator references

An Assessment Guide for Adult Basic Education Programs in Victoria, Adult Community and Further Education Board, 1994
Stephen Pyne – *Burning Bush. A Fire History of Australia*, 1991, Henry Holt, New York
Tim Flannery - *The Future Eaters*, 1994, Reed
John Bora – Reconciling fire protection and conservation issues in Melbourne’s urban-forest interface in *Fire Management Quarterly*, No. 7, March 16, 1994
Code of Practice for Powerline Clearance (Vegetation) 1996 (Vic.) and/or its equivalent in the participant’s State/Territory
Barber Inquiry Report 1977
Part IV State Electricity Commission Act 1958 (Revised 1984)

Occupational health and safety requirements

All training must comply with current OH&S requirements and be delivered in a manner that ensures participant safety