



**Australian Government**

# **UETTDRVC33 Apply pruning techniques to vegetation control near live electrical apparatus**

**Release: 1**

# **UETTDRC33 Apply pruning techniques to vegetation control near live electrical apparatus**

## **Modification History**

Release 1. This is the first release of this unit of competency in the UET Transmission, Distribution and Rail Sector Training Package.

## **Application**

This unit involves the skills and knowledge required to apply pruning techniques to perform vegetation control near live electrical apparatus in the electricity supply industry (ESI).

It includes applying vegetation pruning principles and techniques in accordance with relevant industry standards to achieve statutory vegetation clearance requirements near live electrical apparatus up to live work zone as defined for both authorised and instructed persons in the industry guidelines associated with live electrical apparatus. Pruning activities may be performed from ground or above ground level.

It also includes the preparation of risk assessment control measures including job safety assessments, adhering to relevant State or Territory regulatory agencies/bodies, local government legislation, industry bi-partite body guidelines/codes of practice or other related requirements for safe work and access near live electrical and mechanical apparatus.

It does not include the full gamut of rigging techniques and practices required of a Rigger or entry into to the safe approach distance (SAD) as defined for persons, mobile plant, equipment and specialised tools.

This unit of competency applies to the transmission, distribution, rail traction, telecommunications and vegetation management control industry sectors.

The application of the skills and knowledge described in this unit may require a licence to operate specific pieces of equipment such as elevated work platforms.

Other conditions may apply under State and Territory legislative and regulatory licensing requirement which must be confirmed prior to commencing this unit.

## **Pre-requisite Unit**

Common Unit Group

UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

UETTDREL13 Comply with sustainability, environmental and incidental response policies and procedures

UETTDREL14 Working safely near live electrical apparatus as a non-electrical worker

UETTDRC23 Plan the removal of vegetation up to vegetation exclusion zone near live

electrical apparatus

UETTDRC27 Monitor safety compliance of vegetation control work in an ESI environment

## Competency Field

Vegetation

## Unit Sector

Not applicable.

## Elements and Performance Criteria

### ELEMENTS

Elements describe the essential outcomes.

#### **1 Identify pruning principles and pruning techniques**

#### **2 Prepare for pruning near live electrical apparatus**

### PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** Pruning principles are identified in an arboriculture context
- 1.2** Differentiation between formative, corrective and preventative pruning is identified
- 1.3** Poor pruning practices effecting the shape and future structure of various tree species are identified
- 1.4** Pruning requirements for various situations and plant types growing in proximity to power lines are detailed
- 1.5** Principles of natural target pruning are identified and applied in accordance with industry standards
- 1.6** Branch collars, branch bark ridge and the sequence for branch removal are identified
- 2.1** Pruning instructions are obtained and confirmed
- 2.2** Pruning tools and equipment are selected in accordance with the location, access and size of material to be pruned
- 2.3** Pre-operational and safety checks are carried out on pruning tools and equipment in accordance with

|                                                                   |            |                                                                                                                                                                                             |
|-------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                   |            | manufacturer specifications and enterprise work procedures                                                                                                                                  |
|                                                                   | 2.4        | Pruning tools and equipment are prepared for use                                                                                                                                            |
|                                                                   | 2.5        | Suitable safety and personal protective equipment (PPE) are selected, used and maintained                                                                                                   |
| <b>3 Undertake pruning near live electrical apparatus</b>         | <b>3.1</b> | Pruning site is suitably signed and barricaded during pruning operations in accordance with workplace procedures                                                                            |
|                                                                   | <b>3.2</b> | Plant material to be pruned or removed is carried out in accordance with relevant industry standards                                                                                        |
|                                                                   | <b>3.3</b> | Pruning activities near live electrical apparatus are undertaken in accordance with workplace procedures and work health and safety (WHS)/occupational health and safety (OHS) requirements |
|                                                                   | <b>3.4</b> | Pruning tools and equipment are operated safely and effectively                                                                                                                             |
|                                                                   | <b>3.5</b> | Hygiene practices are observed during pruning operations                                                                                                                                    |
| <b>4 Complete pruning activity near live electrical apparatus</b> | <b>4.1</b> | Prunings and waste material removed from the site are disposed of in an environmentally aware and safe manner in accordance with enterprise work procedures                                 |
|                                                                   | <b>4.2</b> | Correct manual handling techniques are used when lifting or moving heavy loads                                                                                                              |
|                                                                   | <b>4.3</b> | Pruning tools and equipment are cleaned, maintained and stored in accordance with enterprise work procedures                                                                                |
|                                                                   | <b>4.4</b> | A clean and safe area is maintained throughout and on completion of work                                                                                                                    |
|                                                                   | <b>4.5</b> | Workplace records are maintained in accordance with enterprise guidelines                                                                                                                   |

## Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

## Unit Mapping Information

This unit replaces and is equivalent to UETTDRVC33A Apply pruning techniques to vegetation control near live electrical apparatus.

## Links

UET Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>

# **Assessment Requirements for UETTDRVC33 Apply pruning techniques to vegetation control near live electrical apparatus**

## **Modification History**

Release 1. This is the first release of this unit of competency in the UET Transmission, Distribution and Rail Sector Training Package.

## **Performance Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including the use of risk control measures
- applying sustainable energy principles and practices
- demonstrating correct pruning principles and techniques, including all of the following:
  - shaping, forming, correcting or controlling growth
  - preventing disease or damage
  - promoting health
  - controlling capacity and vigour,
  - providing clearance for electrical assets
- demonstrating all the following WHS/OHS requirements:
  - identifying hazards
  - assessing and reporting risks
  - cleaning
  - maintaining and storing tools and equipment
  - appropriate use of personal protective equipment (PPE), including sun protection
  - drinking to avoid dehydration
  - safe operation of tools and equipment
  - correct manual handling
  - basic first aid
  - personal hygiene and reporting problems to supervisors
- demonstrating all the following:
  - identifying potential hazards
  - practical application of legislation and codes of practice
  - implementing control measures to eliminate/reduce hazards/incidents
  - applying incident reporting/recording/investigation procedures
  - applying safe manual handling techniques
- demonstrating appropriate selection of all the following pruning equipment:

- ropes
- handsaws
- hand and battery-powered secateurs
- pneumatic snips and compressor
- hedge trimmers both manual and powered
- small chainsaws and hydraulic and motorised pole-saws
- determining PPE required to undertake pruning activities, including all of the following:
  - hat/hardhat
  - boots
  - overalls
  - gloves
  - protective eyewear
  - respirator or face mask
  - face guard
  - hearing protection
  - sunscreen lotion
- determining the following hygiene management practices required while pruning:
  - sterilisation of clothing, tools and equipment
  - management of debris removal
- demonstrating the correct cutting angle for all the following:
  - branch bark ridge
  - stem bark ridge
  - co-dominant stem
  - visible branch collar
- dealing with unplanned events on at least one (1) occasion.

## Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- pruning principles near powerlines, including:
  - reasons for pruning around powerlines
  - identifying site conditions - inspection methods of vegetation to be pruned, what to look for, determination of worksite working area, identification of possible endangered species, identification of appropriate PPE to be used, identification of the location of plant, tools, equipment and fellow workmates for safe work practices
  - inspecting location and determining work methods
  - principles of correct pruning practice - types of pruning (formative, corrective, preventative and natural target pruning)
  - cutting techniques - different branch cuts (single top-cut technique, single under-cut, handsaw technique for light small branches, chainsaw technique for heavy branches,

single side-cut technique, step cut-under-cut then a top cut technique, scarf under-cut then top-cut technique, top scarf-bottom-back cut technique, side scarf then opposite back-cut technique, spear-cut technique, and snipping/cutting back overhang (lv)

- correct pruning practices (AS 4373-2017 Pruning of amenity trees) according to enterprise requirements
- effects of pruning - incorrect pruning, how much to prune and size of cut.

## Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated conditions involving realistic and authentic activities that replicate operational workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and PPE currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

## Links

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