



**Australian Government**

# **UETTDRVC24 Assess vegetation and recommend control measures in an ESI environment**

**Release: 1**

## **UETTDRC24 Assess vegetation and recommend control measures in an ESI environment**

### **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 covers the assessment of vegetation, and in particular trees, for defects and hazards prior to cutting and pruning around live powerlines up to the live work zone as defined for both instructed and authorised persons in the industry guidelines associated with live electrical apparatus. The assessment is compiled and recorded in accordance with requirements and/or established procedures for defined species of vegetation and/or particular tree types.

Also included is the preparation of risk assessment control measures that encompass job safety assessment and compliance with relevant state or territory regulatory agencies/bodies, local government legislation, industry bi-partite bodies, guidelines/codes of practices or other related requirements for safe work and access near live electrical and mechanical apparatus.

The skills and knowledge described in this unit may only be practiced under the regulations pertaining to each state and territory for the safe planning for the removal of vegetation around live powerlines up to the live work zone, including near live electrical apparatus, and regulations that directly relate to work health and safety (WHS)/occupational health and safety (OHS) and/or contracts of training where they apply.

### **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 Prepare and plan to conduct assessment of vegetation and, recommend control measures for work near live electrical apparatus**

### PERFORMANCE CRITERIA

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

- 1.1** Work instructions are identified and confirmed
- 1.2** Relevant requirements and established procedures to be followed for the work to be performed are discussed with all personnel to establish and confirm the work schedule
- 1.3** WHS/OHS policies and procedures to be followed for the work to be performed are received and confirmed
- 1.4** Recommendations to assist in meeting assessment of vegetation and recommendation of control measures for working near live electrical apparatus outcomes are made to others involved in the work
- 1.5** Hazards are identified and WHS/OHS risks associated with working near live electrical apparatus are identified and reported according to established procedures
- 1.6** Scope of responsibility under the relevant work permits/access authorisations are received and confirmed with relevant personnel according to requirements and established procedures
- 1.7** Resources, including, equipment, tools and personal protective equipment (PPE), required for the job are identified and, where to be used, confirmed in working order according to established procedures
- 1.8** First aid, pole top rescue and/or other related work safety procedures at the worksite are identified in accordance with requirements and established

procedures to ensure safety measures are followed in the instance of an incident

**1.9** Client issues are identified and referred to appropriate personnel in accordance with industry/community standards

**1.10** Work schedule is prepared to produce a quality outcome, and sustainable energy principles and practices followed to minimise risk and damage to property, commerce, stock and individuals in accordance with established procedures

**1.11** Road signs, barriers and warning devices are identified, where appropriate, in accordance with given instructions and requirements

**2 Conduct assessment of vegetation and, recommend control measures for work near live electrical apparatus**

**2.1** WHS/OHS and sustainable energy principles and practices to reduce the incidents of accidents and minimise waste are followed in accordance with given instructions, requirements and/or established procedures

**2.2** Lifting, climbing, working aloft, and use of power tools/equipment, techniques and practices are identified for inclusion in the assessment report according to requirements confirmed to eliminate the prospects of incidents

**2.3** Operational knowledge for the assessment of vegetation and recommendation of control measures for working near live electrical apparatus to be applied to the work is confirmed to ensure completion in an agreed timeframe and to quality standards with a minimum of waste according to requirements and established procedures

**2.4** Assessment of vegetation, and in particular trees, for defects is undertaken in accordance with established procedures

**2.5** Analysis of assessment results and recommendations are made of vegetation control measures to be deployed for working near live electrical apparatus in accordance with requirements and/or established procedures

**2.6** Hazard warnings and safety signs are recognised and hazards and assessed WHS/OHS risks are monitored and reported/referred to immediate authorised personnel for directions according to established procedures

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|-----------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                       | <b>2.7</b> | Non-routine events are responded to and referred to immediate authorised personnel for directions according to established procedures                                                                                                                           |
|                                                                                                                       | <b>2.8</b> | Problems associated with the assessment of vegetation and the recommendation of control measures for working near live electrical apparatus are attended to using acquired known solutions and skills to ensure requirements and established procedures are met |
|                                                                                                                       | <b>2.9</b> | Ongoing checks of quality of the work are undertaken in accordance with given instructions and established procedures                                                                                                                                           |
| <b>3 Complete the assessment of vegetation and recommend control measures for work near live electrical apparatus</b> | <b>3.1</b> | Work undertaken is checked against work schedule and anomalies reported to authorised personnel in accordance with established procedures                                                                                                                       |
|                                                                                                                       | <b>3.2</b> | Accidents and/or incidents are actioned and reported to authorised personnel in accordance with established procedures                                                                                                                                          |
|                                                                                                                       | <b>3.3</b> | Worksite is made safe in accordance with given instructions and established procedures                                                                                                                                                                          |
|                                                                                                                       | <b>3.4</b> | Tools, equipment and any surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with established procedures                                                                                             |
|                                                                                                                       | <b>3.5</b> | Appropriate personnel are notified of work completion according to established procedures                                                                                                                                                                       |
|                                                                                                                       | <b>3.6</b> | Work completion records and report forms/data sheets are completed accurately in accordance with given instructions and established procedures                                                                                                                  |

## 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 UETTDRC24A Assess vegetation and recommend control measures in an ESI environment.

## **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 UETTDRVC24 Assess vegetation and recommend control measures in an ESI environment**

## **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
- confirming operational knowledge associated with the assessment of vegetation and making recommendations prior to working near live electrical apparatus, in all of the following:
  - principles of electricity and the three phase power system
  - power system
  - recognition of aerial voltage systems
  - identification of low voltage (LV) aerial circuits
  - identification of high voltage (HV) aerial circuits
  - safe working zone defined by relevant authorities
  - use of technical standards, acts, regulations, codes /guidelines and established/enterprise/asset owner's procedures
  - system control - information required and function
  - vicinity permit - information required and function
  - sensitive earth fault system
  - environmental principals and procedures
  - safe approach distances (SAD) for insulated cranes and plant
  - SAD for persons and handheld tools
- confirming safe practices associated with the assessment of vegetation and making recommendations prior to working near live electrical apparatus, in all of the following:
  - WHS/OHS safety practices and procedures
  - electric shock and resuscitation
  - release and rescue
  - role of the safety observer
  - events constituting an incident
  - procedures in the event of/responding to incidents

- methods of identifying hazards
- risk assessment procedures
- selection of the best position for monitoring and controlling work (cutting)
- selection of correct line of site to the cutter
- correct observation of the work from ground level
- constant analysis and decision making relevant to the safety of the work taking into account prevailing site conditions (lay of the land) and ongoing weather conditions
- confirming vegetation control associated with the assessment of vegetation and making recommendations prior to working near live electrical apparatus in all of the following:
  - identifying tree types
  - confirming vegetation species and types
  - confirming vegetation cutting techniques for different vegetation
  - confirming appropriate vegetation machinery and equipment to be used
  - using feeder route plans
  - conducting calculations related to loading and slinging
- confirming the safe assessment of vegetation and making recommendations prior to working near live electrical apparatus in all of the following:
  - safely using tools, plant and equipment
  - safely storing, transporting and using chemicals
  - conducting pre -and post-operational checks, inspections and minor maintenance on tools and equipment
  - safely deploying machinery and equipment in varying conditions and weather
  - safely using of appropriate personal protective equipment (PPE)
  - safely cutting/pruning and tree trimming methods
  - correctly advising on vegetation species, types and characteristics
  - correctly advising on cutting plans relevant to the vegetation species and type
  - analysing vegetation control measures, particularly of trees for defects
  - safely assessing vegetation for defects and hazards
  - correctly recommending appropriate pruning and/or cutting processes to be used near live electrical apparatus
  - preparing assessment reports with appropriate recommendations for course of action
- 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:

- principles of conducting assessment of the condition and type of vegetation for the purpose of controlling its growth away from live lines encompassing:
  - standards, codes, Commonwealth/state/territory legislation, supply authority regulations, permit requirements and/or enterprise requirements associated with the

cutting/pruning/controlling the growth of vegetation around live powerlines up to the HV live work zone as defined for both instructed and authorised persons in the industry guidelines associated with live electrical apparatus

- techniques in established procedures for defining species of vegetation and tree characteristics, including obvious tree defects and hazards
- techniques in selecting the relevant and suitably appropriate vegetation removal method
- techniques in identifying obvious hazards and risk assessment control measures that encompass job safety assessment and compliance with relevant state or territory regulatory agencies/bodies, local government legislation, industry bi-partite bodies, guidelines/codes of practices or other related requirements for safe work and access near live electrical and mechanical apparatus
- techniques in determining the appropriate safe working methods up to the defined “safe working zone” near energised electrical apparatus (including electrical powerlines) for non-electrical worker/ordinary persons
- safety precautions working on vegetation control - safe working clearances from live line; identifying WHS/OHS hazards; assessing and controlling WHS/OHS risks; types, selection, maintenance and uses of PPE; permit to work systems and isolation procedures; safe working practices when using specialised equipment; and emergency response and rescue, including first aid, working at heights and in confined spaces
- techniques in establishing the appropriate safe work methods and/or type of plant, tools and/or equipment to control vegetation - the selection of the most appropriate tools, such as chainsaws, mowers, saws, trimmers and/or the most appropriate chemical applicator
- use and application of plant, tools and equipment use to control vegetation - chainsaws, mowers, saws, trimmers and chemicals
- techniques in communicating and relaying information to other personnel
- techniques in compiling and recording assessment data collected
- enterprise-specific vegetation control equipment encompassing:
  - types and application of vegetation mulching tools
  - types and application of herbicide application equipment
  - purpose and use of cutting plans relevant to the vegetation type
  - cutting techniques of vegetation control tools and equipment
  - types of PPE used in conjunction with vegetation control equipment - head protection, eye protection, hearing protection, hand protection, foot protection, body protection and general protection.

## 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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