



Australian Government

UETTDRVC23 Plan the removal of vegetation up to vegetation exclusion zone near live electrical apparatus

Release: 1

UETTDRCV23 Plan the removal of vegetation up to vegetation exclusion zone 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 covers the preparation for the controlled removal of vegetation near live electrical apparatus up to the live work zone as defined for both authorised and instructed persons in the industry guidelines associated with live electrical apparatus. This includes electrical and communications conductors and cables/powerlines and associated equipment on poles and structures according to requirements and established procedures. It does not include the full gamut of rigging techniques and practices required of a rigger or entry into the safe approach distance (SAD) as defined for persons, mobile plant, equipment and specialised tools.

It includes the preparation of a plan for the control and removal of vegetation, specification of appropriate chemical control methods, use of slinging and loading techniques and practices to be used, traffic management, and appropriate pruning and/or cutting techniques and practices (encompasses cutting plan) for given vegetation species to minimise regrowth within the electrical field according to requirements and procedures. Also included is the preparation of risk assessment control measures that encompass job safety assessment. Encompassed is 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

Competency Field

Vegetation

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for the development of the plan for the removal of vegetation up to vegetation exclusion zone near electrical apparatus

PERFORMANCE CRITERIA

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

- 1.1** Work instructions are received and confirmed
- 1.2** Relevant requirements and established procedures to be followed for the development of the work plan 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** Suggestions to assist in meeting the planning for the removal of vegetation up to the live work zone near live electrical apparatus outcomes are made to others involved in the work
- 1.5** Hazards are identified and WHS/OHS risks are identified and reported according to established procedures
- 1.6** Scope of responsibility under the relevant work permits/access authorisations are identified and confirmed according to requirements and established procedures with relevant personnel
- 1.7** Resources, including, plant, equipment, tools and personal protective equipment (PPE) required for the job are identified in accordance with established procedures

- 1.8** Relevant responsibility associated with first aid, aerial rescue, tree-top rescue and/or other related work safety procedures at the worksite are confirmed, where appropriate, 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** Site preparation requirements are confirmed according to given instructions and planning of the work schedule for a quality outcome and to meet sustainable energy principles and practices to minimise risk and damage to property, commerce, stock and individuals in accordance and established procedures
 - 1.11** Road signs, barriers and warning device requirements are positioned in accordance with given instructions and requirements are confirmed
- 2 Carry out the development of the Plan for the removal of vegetation up to vegetation exclusion zone near live electrical apparatus**
 - 2.1** WHS/OHS and sustainable energy principles and practices to reduce the incidents of accidents and minimise waste are confirmed 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 confirmed in accordance with given instructions and according to requirements to eliminate the prospects of incidents
 - 2.3** Operational knowledge for planning the removal of vegetation up to the live work zone near live electrical apparatus to be applied to the work is confirmed to ensure completion will be within an agreed timeframe and to quality standards with a minimum of waste according to requirements and established procedures
 - 2.4** Plan for the removal of vegetation up to the live work zone near live electrical apparatus is produced in accordance with given instructions and established procedures
 - 2.5** 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

2.6 Non-routine events are referred to immediate authorised personnel for directions according to established procedures

2.7 Development of the plan is carried out in accordance with the work schedule and to requirements

2.8 Problems associated with producing the plan for the removal of vegetation up to the live work zone live electrical apparatus are attended to according to acquired known solutions and skills related to routine procedures to ensure the plan is produced in accordance with instructions and established procedures

2.9 Ongoing checks of quality of the work are undertaken in accordance with given instructions and established procedures

3 Complete development of the plan for the removal of vegetation up to vegetation exclusion zone near electrical apparatus

3.1 Work undertaken is checked against work schedule and anomalies reported to authorised personnel in accordance with established procedures

3.2 Potential accidents and/or incidents are identified and reported to authorised personnel in accordance with established procedures

3.3 Worksite is rehabilitated, cleaned up and made safe in accordance with given instructions and established procedures

3.4 Tools, equipment and any surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with established procedures

3.5 Appropriate personnel are notified of work completion according to established procedures

3.6 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 UETTDRVC23A Plan the removal of vegetation up to vegetation exclusion zone 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 UETTDRVC23 Plan the removal of vegetation up to vegetation exclusion zone near live electrical apparatus

Modification History

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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 planning of the removal of vegetation 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 so defined by relevant authorities
 - use of technical standards, acts, regulations, codes /guidelines and established/enterprise/asset owner's procedures
 - confirm environmental principals and procedures
- confirming safe practices associated with the planning of the removal of vegetation 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
 - hierarchy and methods of identifying and controlling 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 planning of the removal of vegetation 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
- 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:

- hazard assessment and risk management appropriate to the level of responsibility in the vegetation control field encompassing:
 - identifying the terminologies associated with risk assessment - risk management; risk analysis and risk evaluation activities and eliminating or minimising risk; principles and purposes of risk management; processes for conducting risk assessment, including risk analysis and risk evaluation activities for selecting and implementing appropriate options for eliminating or minimising risk
 - relationship risk assessment has with vegetation control
 - basic principles of hazard and risk assessment - what to look for, basic procedures in conducting worksite hazards/risk assessment, contingences, essential components of hazard assessment checks, and identification of hazards associated with work function and the environment (type of equipment to be used, location of the worksite, condition of the surrounding vegetation and climate conditions)
 - techniques in the elimination or minimisation of hazards/risks - identification of resources available, identification of appropriate methodology in hazard control, identification of the hierarchy of control, and formulating a worksite hazard and risk assessment checklist
 - pre-job hazard assessment check items - job safety analysis (JSA), planned inspection, hazard risk assessment form and prompt sheet reference (Vegetation Management Plan (VMP) 2 - electrical hazards, VMP1 – general, VMP3 - vegetation)
 - recognising electrical hazards
 - evaluation of risk assessment and management procedures
- procedures and protocols for access to powerline facilities and isolation of powerlines encompassing:
 - standards, codes, legislation, supply authority regulations and/or enterprise requirements associated with accessing powerline facilities together with the relevant certification and licensing (if required)

- powerline access permit procedures and documentation
- workplace signage - traffic management, unauthorised access and public protection
- powerline distribution voltages
- switching requirements for authorised tree trimming work on HV overhead lines - information required by system control, information to be included on the 'vicinity permit', system control functions, authorised work adjacent to an area under an access permit and communications
- weather conditions at worksite
- work team communications
- adequate light at worksite
- principles of tree preservation encompassing:
 - standards, codes, legislation, supply authority regulations and/or enterprise requirements associated with endangered species
 - identifying site conditions and inspection of tree and/or vegetation - suitability of this type of tree in this location; and identifying hazards, assessing and controlling risks with this tree in this location
 - inspecting location and determining work methods for tree preservation - tree defects, tree diseases and insect attacks
 - relationship to how a tree grows to vegetation control - Australian tree families
 - tree preservation - methods of clearing vegetation, tree trimming, pruning and tree felling
 - safety work measures/methods
 - prevention of soil erosion
 - regrowth control
 - disposal of debris
 - heritage, significant and urban/rural vegetation
 - fire prone areas
- vegetation control using chemicals encompassing:
 - Commonwealth/state/territory and local government legislation, standards, codes, supply authority regulations and/or enterprise requirements, including relevant certification and licensing applicable to the control of vegetation using chemicals
 - chemical treatment principles - types and characteristics of chemicals to be used, regulations and procedures in handling and transporting chemicals safely, application procedures of chemicals to be used, mixing desirable quantities, pouring, spraying, and storing procedures
 - techniques in handling equipment to eliminate/reduce risks to the environment from spillages of oils, herbicides, pesticides and chemicals from equipment
 - methods of disposing and storage of herbicides, pesticides and chemicals
 - safety precautions specific to working with chemicals - safe working practices and procedures; WHS/OHS hazards and precautions; identification of WHS/OHS hazards; assessment and control of WHS/OHS risks; types, selection, maintenance, storage and use of personal protective equipment (PPE) (appropriate selection of complete or partial body protection and processes of inspection prior to use and cleaning after use); and dangers of working in confined spaces and at heights while using chemicals, permit to work systems

- and isolation procedures/protocols
- safe working policies, procedures and practices when using/operating specialised chemical equipment
- emergency response and rescue, including first aid
- reasons and provisions of material safety data sheets (MSDS)
- precautions in the use of machinery, plant, equipment and tools when working with chemicals
- required safety techniques in the handling of herbicides - use and application of chemical agents, transporting and storage of chemicals and solvents, cleaning of equipment used in applications, and procedures for spillages and contamination outside of vegetation control area
- enterprise-specific policies and procedure instructions encompassing:
 - responsibilities and duty of care of employer and employee relationship
 - methods of obtaining the up-to-date information on enterprise policies and procedures
 - rules and regulations
 - induction into workplace - location of work area and storage area, timetable, uniform, personal well-being, housekeeping rules, emergency procedures and evacuation procedures
 - techniques when dealing with others - working in teams, customer relation, and complaint and issues procedures
 - overview of enterprise professional development - fire-fighting procedures, fatigue management, and training and competency development - understanding and promotion.

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.

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