



Australian Government

UEEHA0004 Enter a classified hazardous area to undertake work related to electrical equipment

Release: 1

UEEHA0004 Enter a classified hazardous area to undertake work related to electrical equipment

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to enter a classified hazardous area to undertake work related to electrical equipment. It includes the obligations and safety practices for entering a classified hazardous area. It covers risks associated with flammable gas/vapours or combustible dust and the need for areas where such substances may be present to be classified as explosive atmosphere areas; basic principles of explosion-protected electrical equipment; the limitations of devices/equipment that be may be taken into the area; health and safety responsibilities; and the necessary procedures to enter and work in explosive atmosphere areas. It is adopted from clause 2.2 of AS/NZS 4761.1:2018 Competencies for working with electrical equipment for hazardous areas (EEHA).

This unit can be used in relation to any job function requiring entry to a classified hazardous area.

Site-specific work permits maybe required to work in the hazardous environment. In addition, other permits may be required, such as confined space and to operate specific pieces of equipment, such as elevated work platforms (EWPs), in various jurisdictions.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Pre-requisite Unit

Not applicable.

Competency Field

Hazardous

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Prepare to enter and work in a classified hazardous area

- 1.1** The need for specific safety, entry and work procedures is understood based on knowledge of the properties of flammable substances, the nature of hazardous areas and explosion-protected electrical equipment, and the responsibilities of owners/occupiers for safety of the area
- 1.2** Site safety procedures related to the explosive atmosphere area are obtained from the person authorised to issue site safety procedures and entry and clearance-to-work permits
- 1.3** Site safety procedures related to the hazardous area are obtained, interpreted and applied
- 1.4** Permission to take required devices and equipment into a hazardous area is obtained from the authorised person
- 1.5** Entry and clearance-to-work permits are obtained from the authorised person, read and understood

2 Follow safety instructions and procedures in a classified explosive atmosphere

- 2.1** Site safety procedures including entry and clearance-to-work permits are followed
- 2.2** Limitations on the use of devices and equipment permitted that can be taken into the hazardous area are followed
- 2.3** Instructions and signage related to the hazardous area are followed
- 2.4** Emergency procedures and instructions are followed

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 UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Entering a classified hazardous area to undertake work related to electrical equipment. must include:

- entering and applying safety responsibilities in an area classified as hazardous

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEEHA0004 Enter a classified hazardous area to undertake work related to electrical equipment

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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, performance criteria and range of conditions on at least two separate occasions and include:

- preparing to enter a hazardous area, including:
 - obtaining, interpreting and applying hazardous area site safety procedures
 - seeking permission from authorised person/s to take particular devices and equipment into a hazardous area
 - obtaining, interpreting and applying the conditions of entry and clearance-to-work permit
- complying with all safety requirements for the hazardous area, including:
 - limitations on the use of devices/equipment permitted to be taken into the hazardous area
 - entry permit and clearance-to-work conditions
 - hazardous area instructions and signage
 - emergency procedures and instructions

Knowledge Evidence

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

- nature of hazardous areas and explosion protection, including:
 - the standard definition of a hazardous area
 - conditions in an explosive atmosphere that will lead to ignition, combustion and propagation of a hazardous area
 - the explosive nature of flammable substances in the form of gas, vapour, dust, fibres or flyings
 - typical parameters for flammable gases and vapours such as lower explosive limits (LEL) and upper explosive limits (UEL), flash point, auto-ignition temperature, minimum ignition energy and relative density
 - the toxic nature of gases and vapours and potential harmful consequences
 - typical parameters for combustible dusts such as minimum explosible concentration, minimum cloud and layer ignition temperatures, minimum ignition energy and the

- considerations of clouds versus layers of dust
- the classifications given to hazardous areas
- electrical equipment as a potential source of ignition
- characteristics of devices/equipment that require authorisation to be taken into a hazardous area
- responsibilities for the safety of a hazardous area and the responsibilities of persons entering a hazardous area, including:
 - responsibilities of owners/occupiers of sites where production, process, handling and/or storage activities may cause explosive atmospheres to be present
 - features and purpose of an entry permit and clearance-to-work system
 - safety precautions to be taken while in a hazardous area
 - safety procedures to be followed before entering a hazardous area
 - typical procedures to be followed in the event of an emergency.

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 workplace operational situations that replicate workplace conditions and include:

- an area designated as a hazardous area which is a close facsimile of a real work environment
- an area entry point
- delineation of the area into zones for both gas and dust
- a person to act as the ‘authorised person’ for the site
- a qualified supervisor.

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 access equipment, explosive atmosphere equipment, tools and testing devices permitted in a hazardous area, materials and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, safe work methods, plan of the site showing delineation of classified zones, regulations, codes of practice and details of:
 - signage used on the site
 - limitations of devices and equipment that may be taken into the area
 - limitations of work that may be undertaken in the area

- an entry and clearance-to-work system.

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