Australian Government

UEECD0050 Use and maintain the integrity of a portable gas detection device

Release: 2

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Modification History

Release 2. This minor update is the second release of this unit of competency in the UEE Electrotechnology Training Package.

Duplicate content in Knowledge Evidence removed and typographic errors fixed.

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 ensure a workplace, including hazardous areas, is safe from dangerous gases and/or vapours by using and maintaining a portable gas detection device.

Portable gas detection devices are used to detect combustible, flammable and toxic gases and/or vapours in a work area. Portable gas detectors transmit warnings via audible and visible signals, such as alarms and flashing lights, when dangerous levels of gas and/or vapours are detected.

Hazardous areas are defined as areas where fire or explosion may occur due to flammable gases, vapours, combustible dusts and/or ignitable fibres are present in the air, in quantities sufficient to produce explosive or ignitable mixtures.

Competency in this unit requires the ability to use measuring instruments such as portable gas detection devices, establish the safety of an area, monitor dangerous gases and/or vapours, follow workplace procedures in maintaining gas detection devices and completing all required documentation. Individuals will typically work, under supervision, as part of a hazardous area maintenance and repair team.

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

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

Competency Field

Cross Discipline

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 use portable gas detection device	**1.1** WHS/OHS policies and procedures for work in hazardous areas are identified and applied
	1.2 Safety processes, relevant permits and material safety data sheet (MSDS)/safety data sheet (SDS) and safe work method statements (SWMS) related to entering a hazardous area are obtained in accordance with workplace procedures and clearance to undertake work is obtained from supervisor
	1.3 Emergency and evacuation plans are reviewed prior to entering hazardous area
	1.4 Gas and/or vapour is identified in accordance with workplace procedures from plant and/or site records and in consultation with relevant person/s
	1.5 Portable gas detection device is checked for calibration and response in accordance with manufacturer instructions and workplace procedures
	1.6 Portable gas detection device is checked for damaged casing from use of incorrect batteries and/or chargers and use of incorrect spare parts and accessories which would nullify its Ex rating
2 Establish safety of area	**2.1** WHS/OHS policies and procedures relating to gas/vapour detection are followed
	2.2 Hazards are monitored and risk controls are implemented in accordance with workplace procedures

	2.3	Personal protective equipment (PPE) is worn for work in potentially dangerous atmospheres and/or hazardous areas
	2.4	Portable gas detection device is used in accordance with manufacturer instructions and workplace procedures
	2.5	Environmental impacts of gas and/or vapour readings in hazardous areas are taken into consideration when using a portable gas detection device
	2.6	Gas detection readings are recorded in accordance with workplace procedures
	2.7	Safe to work is determined from gas detection reading and then clearance to start or resume work is issued in accordance with workplace procedures
3 Provide training in using portable gas detection devices	**3.1**	Monitoring schedule for detecting dangerous gas and/or vapours in hazardous areas is implemented in accordance with workplace procedures
	3.2	Training is provided to relevant person/s in the use of portable gas detection devices, as required
	3.3	Documentation on training provided is maintained in accordance with workplace procedures
4 Maintain portable gas detection devices	**4.1**	Portable gas detection devices are stored and maintained in accordance with workplace procedures and manufacturer recommendations
	4.2	Gas detection devices are checked and calibrated regularly in accordance with workplace procedures, hazardous area requirements and manufacturer instructions
	4.3	Calibration records of portable gas detection device are maintained in accordance with the workplace 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 UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Using and maintaining portable gas detecting devices must include:	• at least two of the following classified hazardous areas:
	  • confined spaces
	  • drains
	  • pits
	  • excavations

Unit Mapping Information

This unit replaces and is equivalent to UEENEEM076A Use and maintain the integrity of a portable gas detection device.

Links

Companion Volume Implementation Guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6