

# 22325VIC Course in Workplace Spotting for Service Assets



*For office use only*

<b>Accredited by</b>	Victorian Registration and Qualifications Authority
<b>From</b>	1 July 2017
<b>To</b>	30 June 2022
<b>Course Code</b>	22325VIC

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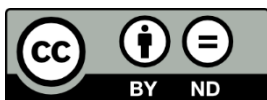
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# Contents

<b>Section A: Copyright and course classification information</b> .....	<b>1</b>
1. Copyright owner of the course.....	2
2. Address.....	2
3. Type of submission .....	2
4. Copyright acknowledgement .....	2
5. Licensing and franchise.....	3
6. Course accrediting body.....	3
7. AVETMISS information.....	3
8. Period of accreditation.....	3
<b>Section B: Course information</b> .....	<b>5</b>
1. Nomenclature.....	6
1.1 <i>Name of the qualification</i> .....	6
1.2 <i>Nominal duration of the course</i> .....	6
2. Vocational or educational outcomes.....	6
2.1 <i>Purpose of the course</i> .....	6
3. Development of the course.....	7
3.1 <i>Industry/ enterprise/ community needs</i> .....	7
3.2 <i>Review for re-accreditation</i> .....	10
4. Course outcomes .....	12
4.1 <i>Qualification level</i> .....	12
4.2 <i>Employability skills</i> .....	12
4.3 <i>Recognition given to the course</i> .....	12
4.4 <i>Licensing/ regulatory requirements</i> .....	12
5. Course rules.....	12
5.1 <i>Course structure</i> .....	12
5.2 <i>Entry requirements</i> .....	13
6. Assessment.....	13
6.1 <i>Assessment strategy</i> .....	13
6.2 <i>Assessor competencies</i> .....	14
7. Delivery .....	14
7.1 <i>Delivery modes</i> .....	14
7.2 <i>Resources</i> .....	15
8. Pathways and articulation.....	15
9. Ongoing monitoring and evaluation .....	15
<b>Section C: Units of competency</b> .....	<b>16</b>





## Section A: Copyright and course classification information




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<b>2. Address</b>	<p>Executive Director Industry Engagement and VET Systems Higher Education and Skills Group Department of Education and Training (DET) GPO Box 4367 MELBOURNE VIC 3001</p> <p><b><u>Organisational Contact:</u></b> Manager Training Products Higher Education and Skills Group Telephone: (03) 9637 3092 Email: <a href="mailto:course.enquiry@edumail.vic.gov.au">course.enquiry@edumail.vic.gov.au</a></p> <p><b><u>Day-to-day contact:</u></b> Curriculum Maintenance Manager - Building and Construction Holmesglen Institute PO Box 42 HOLMESGLEN VIC 3148 Email: <a href="mailto:teresa.signorello@holmesglen.edu.au">teresa.signorello@holmesglen.edu.au</a> (T): 03 9564 1987 (F): 03 9564 1538</p>
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## Section A: Copyright and course classification information

	HLTAID003 Provide first aid	
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<b>6. Course accrediting body</b>	Victorian Registration and Qualifications Authority (VRQA) Website: <a href="http://www.vrqa.vic.gov.au">www.vrqa.vic.gov.au</a>	
<b>7. AVETMISS information</b>	<b>ANZSCO code</b>	721211 Earthmoving Plant Operator (General)
	<b>ASCED code – 4 digit</b>	0403 Building
	<b>National course code</b>	22325VIC
<b>8. Period of accreditation</b>	1 July 2017 – 30 June 2022	







## Section B: Course information



## Section B: Course information

<p><b>1. Nomenclature</b></p> <p><b>1.1 Name of the qualification</b></p> <p><b>1.2 Nominal duration of the course</b></p>	<p>Course in Workplace Spotting for Service Assets</p> <p>26 nominal hours</p>
<p><b>2. Vocational or educational outcomes</b></p> <p><b>2.1 Purpose of the course</b></p>	<p>The 22325VIC Course in Workplace Spotting for Service Assets provides an accredited training program and vocational outcomes for a person to be registered as a spotter by Energy Safe Victoria (ESV), when working in the vicinity of overhead and underground assets with plant and equipment. The course does not align with any specific AQF level, but rather complements existing competencies gained by workers in the building and construction and electrical industry. Therefore, it is appropriately designated as a 'Course in Workplace Spotting for Service Assets'.</p> <p>On completion of the 22325VIC Course in Workplace Spotting for Service Assets, participants will have the skills and knowledge to:</p> <ul style="list-style-type: none"> <li>• provide a first aid response to a casualty in a workplace setting</li> <li>• ensure safe practice as a spotter</li> <li>• identify and address hazards associated with plant operating close to overhead assets</li> <li>• identify and address hazards associated with underground assets</li> <li>• undertake pre start activities and safety checks</li> <li>• communicate approach limit information to plant operators</li> <li>• facilitate emergency procedures and activities</li> <li>• identify the operational envelope of plant/machinery.</li> </ul>

### 3. Development of the course

#### 3.1 Industry/ enterprise/ community needs

#### Background information

The building and construction industry is a significant part of the Australian economy, accounting for 9% of the total workforce, employing over one million people and contributing 8.5% to national GDP. The industry's size and propensity for high risk work means that it is widely regulated and underpinned by workplace safety legislation. Recent reports from Safe Work Australia identify the construction industry as having the fifth highest fatality rate per 100 000 workers in 2013-2014; "contact with electricity" was the fourth main cause of fatalities from 2003-2013 resulting in sixty-one deaths, with 2% of those related to machinery operators and drivers. In terms of workplace spotting, no fatalities have been reported in the last four years to 2016; however five incidents involving crane operations were investigated over the last twelve months.

The role of the workplace spotter plays a vital safety function for the construction industry. Spotters are employed to minimise the risk of electrocution or interaction with pipelines and work where mobile plant and equipment are used in proximity to overhead assets (power lines) or underground assets (electrical conductors and pipelines).

Pre 2000, industry recognised that a form of training was required for persons outside of the electrical industry, who worked as safety observers with various items of plant and equipment in the vicinity of electrical assets. Energy Safe Victoria (ESV) the independent technical regulator responsible for electrical, gas and pipeline safety in Victoria, acted with other industry stakeholders i.e. WorkSafe Victoria, unions, electrical distribution companies, to develop 'No Go Zone Rules' that underpin safe spotter operations. These industry guidelines were incorporated in the initial accredited curriculum in 2006, 21705VIC Course in Workplace Spotting for Service Assets, to formalise the training requirements for persons working in the hazardous environment associated with electrical assets. The guidelines have been revised over time to reflect evolving safety requirements and have been an essential safety reference within each successive accredited curriculum.

#### Confirmation of industry support for the course

ESV operates within and enforces compliance with, a number of Acts, namely the Electricity Safety Act 1998, the Gas Safety Act 1997 and the Pipelines Act 2005 (the Acts). Together with their industry stakeholders, they share a strong commitment to the safe and efficient supply and use of electricity and gas, and the safety of its pipelines. Providing training to spotters about the hazards associated with plant and equipment when working near

overhead and underground service assets offers a range of benefits to the community, industry and workers alike. The flow of the energy resource is maintained, network assets are preserved, safety standards are upheld and productivity is improved. Given the importance of the regulatory environment concerning industry operations and the significant consequences associated with non-compliance, industry insists on and endorses the formal requirement for all workplace spotters to be registered with ESV before undertaking spotting duties.

### Target group for the course

Participants undertaking the course are generally labourers who have worked in the construction industry. They may have other qualifications and licenses required by the industry e.g. dogging, rigging. They are not expected to have knowledge of electricity, yet ESV, the regulator and issuer of Spotters licenses has established a number of conditions which must be met before a license will be issued. These conditions relate to time served within the construction industry, age and the completion of first aid training units of competency.

### Demand for the course

Employers want skilled and informed workers who are able to uphold safety standards and reduce the incidence of workplace accidents and associated WorkSafe claims. This is confirmed by the rising enrolment trend over the last three years.

Course enrolment data for the three years to 2015 is displayed in Table One below.

**Table One: Course Enrolments**

Year	Government Subsidised Enrolments	Fee Paying Enrolments	Total Enrolments
2015	19	1320	1339
2014	0	766	766
2013	0	66	66

From 2013 to 2015, course enrolments have increased by nearly 2000%, with the majority of enrolments representing fee paying students. The number of RTOs providing the course has also increased steadily to a total of twenty-three as at April 2016, compared to seventeen in 2010. Enrolment data analysed on an RTO basis for 2014 and 2015 shows that demand for the course varies between RTOs, which indicates demand is driven by workplace need and may be directly linked to the level of building and

construction activity occurring on a regional basis.

The number of spotters registered by ESV in 2014/2015 totalled 4,835, which further evidences demand for the course.

### **Ongoing demand for the course**

Demand for workplace spotters is related to the level of construction activity within the building sector. Recent unprecedented growth in the sector has been supported by low interest rates, a steadily growing population, an increase in private commercial development and heavy investment by Federal and State governments in capital infrastructure such as major road and rail projects. Economic forecasts predict employment within the industry to rise over the five year period to 2019 by approximately 11.8%, with Victoria accounting for one quarter of construction employment. Workplace spotting demand, as a supporting construction role, could reasonably be expected to grow in line with those predictions. The continued provision of training for spotters is therefore needed to ensure the industry has the capacity to meet economic and societal requirements and expectations into the future.

### **Course consultation and validation process**

Project steering committee (PSC) members represented the major stakeholders invested in the curriculum (refer PSC composition).

Consultation with the group involved:

- Email and telephone consultation to form the PSC.
- A review of the skills and knowledge profile of a spotter.
- Three PSC meetings held on 27th April, 30th June and 13th October 2016 to review and evaluate course content and structure in reference to contemporary workplace spotting practices and the Standards for Accredited Courses 2007.
- One-on-one meetings with the ESV representative to review potential course amendments.

Trainers and assessors of RTO network groups, represented by PSC members, participated in a workshop to review the content of the draft unit VU21936VIC Observe for the safe operation of plant and equipment around overhead and underground asset. Feedback was evaluated and included where required.

Desktop reviews of current workplace spotting safety statistics and related research was also undertaken to support the development of the curriculum.

### 3.2 Review for re-accreditation

#### Project Steering Committee

The re-accreditation of the course was guided by a Project Steering Committee (PSC) comprised of the following members:

- Rob Oldfield - Energy Safe Victoria (ESV) - Chair
- Allan Beacom - WorkSafe Victoria
- Michael Collins - Electrical Trade Union
- Barry Kearney - Construction, Forestry, Mining and Energy Union (CFMEU)
- Tony Lopez - Housing Industry Association (HIA)
- Rob Garrard - Civil Contractors Federation (Victorian Branch)
- David Tyrrell - The Gordon
- David West - Active Training Education and Compliance

In attendance:

- Ms Teresa Signorello, Curriculum Maintenance Manager (CMM), Building and Construction, Holmesglen Institute
- Ms Susan Fehner, Project Officer, Building and Construction, Holmesglen Institute

The role of the PSC was to evaluate, confirm and validate the outcomes of the course review. The members also provided technical information and training advice throughout the project.

The outcomes of the unit RIIRTM203D Work as a safety observer/spotter (release 1) were carefully considered by the PSC, with respect to its application to the energy context. The unit was deemed to have an alternate application, emphasising outcomes related to traffic management within the civil construction sector. The absence of 'range of conditions' within the unit and declaration that the unit is best assessed in the context of the resources and infrastructure industry also made the unit outcomes inappropriate for this regulatory setting.

The 22325VIC Course in Workplace Spotting for Service Assets does not duplicate, by title or coverage, the outcomes of any endorsed training package qualification.

#### Course monitoring and evaluation

A mid cycle review of the curriculum was undertaken in August 2014 to determine the relevance and currency of its outcomes to industry since re-accreditation in 2012. Registered Training Organisations (RTOs) delivering and assessing the curriculum distributed surveys to three groups, i.e. existing students undertaking the course,

trainers delivering and assessing the course, and graduates of the course.

Feedback indicated that:

- Learners undertake the course for career purposes
- Learners and trainers are satisfied with the structure of the course and the content, thinking it is complete in its current form
- Trainers believe that the learning outcomes of the course prepare students for the workplace. This correlates with the learners views that the course meets most of their training needs.
- Graduates of the course are employed in a field which is relevant to their training and are satisfied that the main reason for undertaking the course has been achieved.

The mid cycle review did not identify a need to change the curriculum.

ESV prompted one course modification after its initial release in May 2012. Changes were made to sections 4.4 and 5.2 of the curriculum relating to First Aid and CPR requirements resulting in version 1.1 being released in June 2015.

#### Transition arrangements

The 22325VIC Course in Workplace Spotting for Service Assets replaces and is equivalent to the 22195VIC Course in Workplace Spotting for Service Assets. There can be no new enrolments in the 22195VIC Course in Workplace Spotting for Service Assets after 30 June 2017. Table Two maps the unit from the previous course with the unit from the current course.

**Table Two: Units mapped from previous with current course**

22325VIC Course in Workplace Spotting for Service Assets	22195VIC Course in Workplace Spotting for Service Assets	Relationship
VU21936 Observe for the safe operation of plant and equipment around overhead and underground asset	VU20834 Observe for the safe operation of plant and equipment around overhead and underground asset	Equivalent
HLTAID003 Provide first aid		New

<p><b>4. Course outcomes</b></p> <p><b>4.1 Qualification level</b></p> <p><b>4.2 Employability skills</b></p> <p><b>4.3 Recognition given to the course (if applicable)</b></p> <p><b>4.4 Licensing/regulatory requirements (if applicable)</b></p>	<p>The 22325VIC Course in Workplace Spotting for Service Assets meets an identified industry and registration need but does not have the breadth, depth or volume of learning of a qualification.</p> <p>Not applicable.</p> <p>Not applicable.</p> <p>Participants who wish to work:</p> <ul style="list-style-type: none"> <li>As a spotter are required to be registered with Energy Safe Victoria (ESV). Spotter registration information is available at <a href="http://www.esv.vic.gov.au/Portals/0/electricity%20professionals/files/Guidelines%20for%20Spotters.pdf">http://www.esv.vic.gov.au/Portals/0/electricity%20professionals/files/Guidelines%20for%20Spotters.pdf</a></li> </ul> <p>The 22325VIC Course in Workplace Spotting for Service Assets must be completed before applying for registration as a spotter.</p>
<p><b>5. Course rules</b></p> <p><b>5.1 Course structure</b></p>	<p>To be awarded a statement of attainment for the 22325VIC Course in Workplace Spotting for Service Assets, participants must successfully complete the unit of competency: VU21936 Observe for the safe operation of plant and equipment around overhead and underground assets and the unit HLTAID003 Provide first aid.</p> <p><b>Sequencing recommendation:</b></p> <p>The industry regulators strongly recommend the following sequencing of assessment as a risk mitigation strategy.</p> <ul style="list-style-type: none"> <li>The unit HLTAID003 Provide first aid, is delivered and assessed <u>prior to</u> the delivery and assessment of VU21936 Observe for the safe operation of plant and equipment around overhead and underground assets.</li> </ul>

**Table Three: Total nominal hours for 22325VIC Course in Workplace Spotting for Service Assets**

Unit of competency / module code	Field of Education code (six-digit)	Unit of competency/module title	Pre-requisite	Nominal hours
HLTAID003	069907	Provide first aid		18
VU21936	040399	Observe for the safe operation of plant and equipment around overhead and underground assets		8
<b>Total Nominal hours</b>				<b>26</b>



## 5.2 Entry requirements

Entrants to this course must be aged 18 years at a minimum in order to satisfy the ESV registration requirement on course completion.

The following is a general guide to entry in relation to the language, literacy and numeracy skills of learners aligned to the Australian Core Skills Framework (ACSF), details of which can be accessed from:

[https://docs.education.gov.au/system/files/doc/other/acsf\\_document.pdf](https://docs.education.gov.au/system/files/doc/other/acsf_document.pdf).

Learners are best equipped to achieve the course outcomes in the Course in Workplace Spotting for Service Assets if they have minimum language, literacy and numeracy skills that are equivalent to Level 2 of the ACSF.

Learners with language, literacy and numeracy skills at a lower level than suggested will require additional support to successfully undertake the course in.

## 6. Assessment

### 6.1 Assessment strategy

All assessment will be consistent with the Australian Quality Training Framework (AQTF) Essential Conditions and Standards for Initial/Continuing Registration Standard 1.2./1.5

or

Standard 1: Clauses 1.1 and 1.8 of the Standards for Registered Training Organisations (SRTOs) 2015.

See: <https://www.legislation.gov.au/details/F2014L01377>

The nature of work undertaken in this industry is hands-on and practical. Assessment strategies should therefore reflect this.

It is recommended that the assessment strategy for the Course in Workplace Spotting for Service Assets includes:

- oral or written questioning related to underpinning knowledge
- the practical demonstration of activities which combine a number of learning outcomes to provide depth and context to the training
- holistic assessment that reflects realistic job tasks.

Assessment must be consistent with the evidence guide statements within the unit of competency VU21936 Observe for the safe operation of plant and equipment around overhead and underground assets.

## 6.2 Assessor competencies

Assessor competencies for this course are consistent with the requirements of the AQTF Standards for Registration Standard 1.4 that require trainers and assessors to:

- have the training and assessment competencies determined by the National Skills Standards Council (NSSC) or its successors
- have the relevant vocational competencies at least to the level being delivered or assessed, and
- continue to develop their vocational and training and assessment competencies to support continuous improvements in the delivery of RTO services.

See AQTF User Guide to the Essential Conditions and Standards for Initial/Continuing Registration.

or

Standard 1: Clauses 1.13, 1.14, 1.15, 1.16 and 1.17 of the Standards for Registered Training Organisations (SRTOs) 2015.

## 7. Delivery

### 7.1 Delivery modes

Delivery modes must be consistent with any mandatory requirements specified in the unit of competency.

The course aims to develop practical competencies within an industry setting. Practical demonstrations and opportunity for application are considered to provide the most suitable strategy to reflect the objectives of the course.

As spotting involves the physical observation of plant and equipment operating around a workplace, the practical/skills components of the course must be delivered:

- in a workplace
- or
- in a simulated workplace that accurately reflects workplace conditions.

The knowledge components of the course must be delivered via:

- Face-to-face, classroom-based delivery to enable development of teamwork, communication and interpersonal skills which are fundamental to the outcome of this unit.

Adequate supervision must be provided to ensure workplace safety, whenever participants are using tools/equipment, working near overhead or underground assets, within range of dangerous machinery or in potentially hazardous environments. The unit of competency VU21936 Observe for the safe operation of plant and equipment around overhead and underground assets, details the range of personal protective clothing and equipment that must be worn where the work situation warrants it to achieve the learning outcomes.

<p><b>7.2 Resources</b></p>	<p>Resources include teachers/trainers who meet the AQTF Essential Conditions and Standards for Initial/Continuing Registration Standard 1.4 or Standard 1: Clauses 1.13, 1.14, 1.15, 1.16 and 1.17 of the Standards for Registered Training Organisations (SRTOs) 2015.</p> <p>The resources, facilities and equipment required to deliver and assess the Course in Workplace Spotting for Service Assets are noted in the evidence guide of the units of competency.</p> <p>Physical resources include but are not limited to:</p> <ul style="list-style-type: none"> <li>• audio/visual materials depicting spotting situations, techniques, adverse incidents, overhead and underground assets</li> <li>• examples of approved communication and measurement equipment and tools</li> <li>• PPE.</li> </ul> <p>Specialised facilities, equipment and other resources essential to the delivery of the course are detailed in the units of competency comprising the program.</p>
<p><b>8. Pathways and articulation</b></p>	<p>There are no formal articulation or credit transfer arrangements into other VET or higher education qualifications for the Course in Workplace Spotting for Service Assets. Persons who have already completed the unit HLTAID003 Provide first aid, will receive a credit for that unit in this course.</p>
<p><b>9. Ongoing monitoring and evaluation</b></p>	<p>The Curriculum Maintenance Manager for Building and Construction is responsible for the ongoing monitoring and evaluation of the 22325VIC Course in Workplace Spotting for Service Assets.</p> <p>Formal course evaluations will be undertaken halfway through the accreditation period and will be based on student and teacher evaluation surveys and industry stakeholder surveys/consultations.</p> <p>The Victorian Registration and Qualifications Authority (VRQA) will be notified of any changes to the course.</p>

## Section C: Units of competency

## VU21936 Observe for the safe operation of plant and equipment around overhead and underground assets

<b>Unit Descriptor</b>	This unit specifies the competency required to observe the operation of plant and equipment, to warn the equipment operator when they are about to encroach into the No Go Zones surrounding an overhead or underground asset. This unit of competency is required by a person who intends to apply for registration as a Spotter with Energy Safe Victoria (ESV).
<b>Employability Skills</b>	This unit contains employability skills.
<b>Pre-requisite unit(s)</b>	Nil
<b>Application of the Unit</b>	This unit of competency supports the attainment of skills and knowledge required for working with various operators of plant and equipment in the vicinity of service assets on a worksite.

### ELEMENT

Elements describe the essential outcomes of a unit of competency. Elements describe actions or outcomes that are demonstrable and assessable.

1. Plan for safe practice as a Spotter

### PERFORMANCE CRITERIA

Performance criteria describe the required performance needed to demonstrate achievement of the element. Where **bold italicised** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

- 1.1. Knowledge of the role and responsibilities of Spotters is used to inform Spotter duties according to the scope of the job.
- 1.2. Applicable **Occupational Health and Safety (OHS)/Work Health and Safety (WHS), Electrical Safety legislative and organisational requirements** for the observation of plant and equipment are identified and reviewed.
- 1.3. **Component parts of electrical distribution systems** are identified on job documentation and the potential to impact site safety is identified.
- 1.4. **Hazard** identification and risk assessment documentation is sourced and confirmed with site manager.
- 1.5. **Operational specifications** of plant and equipment to be observed are reviewed.
- 1.6. Site plan and **job documentation** is read and confirmed with site manager.
- 1.7. **Service assets** are located on job documentation.
- 1.8. Clearance distances are established according to the appropriate No Go Zone Framework/permit documentation.
- 1.9. Plant and equipment (including operational specification) to be observed are correctly identified on job documentation.
- 1.10. Key stakeholders are correctly identified on job documentation.
- 1.11. **Permit documentation** is reviewed for clarity and suitability to the job.
- 1.12. Advice is sought prior to work commencing to clarify information in job documentation.

- |                                       |   |
|---------------------------------------|---|
| 2. Prepare for Spotter duties         | <p>2.1. Communication with others involved with the work is established and maintained to ensure efficient workflow coordination, personnel cooperation and safety.</p> <p>2.2. Appropriate <b>personal protective equipment (PPE)</b> is selected, checked for usability and fitted correctly.</p> <p>2.3. <b>Communication equipment</b> is selected, checked for serviceability and any faults reported to supervisor.</p> <p>2.4. Plant and equipment to be observed is located in accordance with job documentation.</p> <p>2.5. Service assets are identified and/or marked in accordance with job documentation permits and/or <b>asset plans</b>.</p> <p>2.6. Service asset type is assessed when determining their effect on site conditions and safety concerns are reported to supervisor.</p> <p>2.7. Equipment, emergency procedures and contact numbers are located according to prestart procedures.</p> <p>2.8. <b>Industry standards governing the limits of approach</b> of equipment to overhead and underground assets are applied to determine when No Go Zones Framework / Deemed to Comply provisions will be infringed.</p> <p>2.9. Spotter actively participates in the revision of <b>job site safety and risk documentation</b> to ensure compliance with site conditions.</p> |
| 3. Perform Spotter duties             | <p>3.1. Relevant Occupational Health and Safety (OHS)/Work Health and Safety (WHS), Electrical Safety legislative and organisational requirements are followed when performing Spotter duties.</p> <p>3.2. <b>Measuring equipment and techniques</b> are used to calculate distances according to industry recognised standards of accuracy.</p> <p>3.3. Plant and equipment is observed with regular consideration of site contingencies including sag and sway of overhead assets and depths of underground assets.</p> <p>3.4. Communication equipment is used according to manufacturer's guidelines and procedures.</p> <p>3.5. <b>Communication signalling methods</b> are used according to recognised standards.</p> <p>3.6. Clearance distances for the plant and equipment observed are communicated in accordance with the No Go Zones framework.</p> <p>3.7. Spot for the entry of plant and equipment into No Go Zones to industry standards to ensure safety of self and others.</p> <p>3.8. Emergency procedures are implemented in the event of an incident where plant or equipment makes contact with an electrical conductor or other service asset.</p> <p>3.9. First aid is applied in the event a plant or equipment operator or other worker is injured.</p>                       |
| 4. Complete and review Spotter duties | <p>4.1. Completion of Spotter duties is communicated clearly to appropriate personnel in accordance with workplace procedures.</p> <p>4.2. Tools and equipment, including PPE, are cleaned, checked for serviceability and stored in accordance with workplace procedures.</p> <p>4.3. Relevant worksite records are completed in accordance with organisational requirements and standards.</p> <p>4.4. Spotter duties performed are reviewed against quality standards and improvements identified are communicated to supervisor to improve future work flow.</p>  |

## REQUIRED SKILLS AND KNOWLEDGE

*This describes the essential skills and knowledge and their level required for this unit.*

### Required skills:

- Communication skills to:
  - Speak and listen, including when:
    - discussing the requirements of documents with others on site
    - contacting emergency authorities
    - explaining the nature of an incident.
  - Read and interpret permits, drawings and documentation
  - Write notes to contribute to incident reports in the event of an incident
  - Display non-verbal signals, such as hand gestures, to advise and warn colleagues
  - Provide verbal/auditory alert to colleagues of the presence of hazards/safety requirements.
- Teamwork skills to:
  - Work cooperatively as part of a workgroup.
- Technology skills to:
  - Use and maintain communication equipment effectively and safely
  - Use and maintain height measuring equipment.
- Numeracy skills to:
  - Correctly estimate/calculate heights, distances, positions and angles.
- Planning and organising skills to:
  - Review and modify the safe work method statement (SWMS) if required
  - Review and co-ordinate activities to ensure the safe operation of plant and equipment around areas of potential hazard.
- Self-management skills to:
  - Collect, organise and understand site information and relate this to the site safety documentation
  - Review and interpret information on the location of overhead and underground assets and identify areas of potential hazard and advise site personnel accordingly
  - Obtain and use supplied information, equipment and PPE to avoid any workflow interruptions
  - Plan own work within the given task parameters.
- Initiative, enterprise and problem solving skills to:
  - Identify faults or inconsistencies between job documentation and the job situation.
  - Locate and access information as appropriate from a range of potential sources such as:
    - Energy Safe Victoria
    - WorkSafe Victoria
    - Electricity/gas distribution and supply companies
    - Water supply companies
    - Communications companies
    - Electricity faults call line

- Gas faults call line
- 'Dial before you dig'
- Local government authority
- Statutory authority.
- Identify the presence and location of potentially hazardous overhead and underground assets and external surrounding interference in a variety of workplaces e.g. pedestrians, traffic, schools, shopping centres
- Recognise the characteristics of the asset, determine the level of risk, and establish if the proposed operation falls within the guidelines and/or 'permit to work'
- Initiate communication to alert plant operators if the work activity is about to become inappropriate and/or hazardous.
- Learning skills to:
  - Maintain the currency of industry knowledge and practice including regulations and standards governing the limits of approach to spotter activities and No Go Zones.

**Required knowledge:**

- Responsibilities, function, duties, operational procedures and limitations of spotter work
- Terminology that complies with the No Go Zone framework, including "spotter" and "permit" zone
- Basic concepts of electrical power generation and distribution, including:
  - Variations in conductor
  - Electricity taking the shortest path to ground
  - Effects of electrical incidents on the human body
  - Step and touch potential
  - Assumption that all electrical assets must be considered to be electrically live
  - Severed lines or cables must be considered to be live at all times
  - Variations which enhance the potential to arc.
- Component parts of electrical distribution systems including electrical assets
- Operational knowledge of working around overhead and underground assets related to:
  - Equipment and methods of communication used by No Go Zones spotters, including their reasons for use and justification
  - The control of plant and equipment at a workplace using visual and auditory control signals
  - The 'design envelope' and 'operating envelope' of the plant or equipment for which they are spotting
  - Clearance distances, the No Go Zones, permit zones, spotter zone and open area (no restrictions).
- Techniques to locate underground assets to minimise the risk of inadvertent damage
- Prestart safety activities and checks
- Industry regulations and standards governing the limits of approach/No Go Zone
- Workplace safety and equipment requirements:
  - Occupational health and safety site specific requirements.
  - Hazard identification and risk minimisation.
  - The No Go Zones system of control for plant and equipment working around overhead and underground assets as identified in the 'No Go Zones' framework document.
  - Fitting and use of PPE.



- Measuring equipment and techniques.
- Electrical safety for Spotters:
  - Fundamentals of electrical transmission, distribution and traction assets.
  - The potential of electricity to cause injury, death or damage.
- Job site safety and risk documentation, including SWMS, to ensure compliance of the health and safety of work site personnel, the public and the wider environment whilst spotting for plant and equipment around overhead and underground assets.
- Plans, specifications, documentation and drawings:
  - Operational procedures to employ when inconsistencies arise between “permit to work”/site documentation and the physical characteristics of the site.
- Emergency procedures relevant to a range of service asset types.

## RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

***Occupational Health and Safety (OHS)/Work Health and Safety (WHS), Electrical Safety legislative and organisational requirements may include:***

- SWMS/JSA.
- site specific induction
- No Go Zone Framework
- deemed to Comply processes
- asset specification safety approach
- organisational procedures.

***Component parts of electrical distribution systems may include:***

- overhead conductors/cables/lines
- underground service pits and pillars
- transmission towers, lines and easements
- tiger battens
- power poles
- transformers on poles or on-ground situations
- circuit breakers
- isolators
- disconnectors
- fuses
- insulators, capacitors
- cross arms
- sub-stations/kiosks in private/commercial and industrial locations
- earth systems and grids
- strainers, catenaries and support cables
- traction cabling
- conduits
- electrolysis return cabling involved with tram and train traction
- telecommunications systems
- construction installation wiring.

***Hazard may include:***

- A source which has the potential to cause illness, injury, damage or disruption to work
- A condition when plant or equipment comes close to an electrical conductor so as to contact it or cause arcing to occur resulting in earthing of the electrical supply to the ground.

***Operational specifications may include:***

- design envelope of equipment
- operational envelope of equipment, including:
  - Range of movement.
  - Range of movement effected by load or suspended load.

**Job documentation may include:**

- site plan and site specifications/mud map
- permit documentation
- council permits
- asset authority and permits (dial before you dig)
- SWMS/JSA.

**Service assets may include:**

- electrical conductors, earth systems, cathodic protection systems
- telecommunication cables, including fibre optic and co-axial cabling
- gas lines at distribution and transmission pressures
- liquid lines – water, sewerage, petroleum products
- drainage systems.

**Permit documentation may include:**

- permit to work
- private asset owner documentation.

**Personal protective equipment (PPE) may include:**

- head protection
- foot protection:
  - Steel capped boots
  - Rubber soled boots
  - Steel capped rubber boots.
- high visibility vest
- hearing protection
- dust protection (eyes or breathing)
- protection from the elements
- UV protection
- sun glare protection
- safety glass or goggles (depending on site requirements).
- first aid equipment appropriate to the requirements of the first aid competency required as a spotter, i.e. gloves, resuscitation mask/shield
- clothing appropriate to the environment in which the spotting is being undertaken depending on site requirements and protection required
- other items appropriate to the environment.

**Communication equipment may include:**

- whistle
- two-way radio
- air horn
- mobile phone
- stop/ slow bat
- torch
- flag.

**Asset plans may include:**

- 'dial before you dig'
- as built company plans and drawings

- asset location
- contact reference
- company drawing.

***Industry standards governing the limits of approach may include:***

- WorkSafe/ESV framework for undertaking work near overhead and underground assets
  - Deemed to Comply processes.
- Current Australian Standards relating to:
  - cranes and various subcodes
  - underground service identification tape colours
  - safety signs for the occupational environment.
- Electrical Safety Act 1998
- Electrical Safety (Installations) Regulations 2009
- Occupation Health and Safety Act 2004
- Gas Safety Act 1997
- Telecommunications Act 1997
- other legislation as appropriate.

***Job site safety and risk documentation***

- SWMS
- JSA
- safety assessments

***Measuring equipment and techniques may include:***

- distance/target finder
- industry standard practices in calculating distances
- using trained personnel to operate laser or other suitable measuring equipment to assist the spotter.

***Communication signaling methods may include:***

- visual:
  - hand signals
  - signage
  - light.
- auditory

## EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Elements, Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment section in Section B of the accreditation submission.

### Critical aspects for assessment and evidence required to demonstrate competency in this unit

A person who demonstrates competency in this unit must be able to provide evidence of the ability to comply with the specification of the role, responsibilities and limitations of the spotter.

Assessment must confirm appropriate practical knowledge and skills to:

- Apply actions, and report changes in working conditions to worksite management.
  - Comply with the following as applicable to workplace operations within the vicinity of overhead and underground assets:
    - site safety plan
    - OHS/WHS legislation
    - regulations
    - codes
    - guidance material
    - permit conditions
    - deemed to comply processes.
  - Select and apply appropriate PPE.
  - Identify hazards associated with the presence of utility assets and services both overhead and underground.
  - Identify and apply appropriate safe work control measures to the design and operational envelopes of plant.
  - Confirm employer documentation and or instructions required for the job to meet legal obligations and job specification requirements.
  - Locate, interpret and apply the guidelines governing work with plant and equipment in the vicinity of overhead and underground assets.
  - Identify and use appropriate systems of communications.
  - Identify and use appropriate systems, techniques and resources for determining distance.
  - Communicate and work effectively and safely with others.
  - Apply and respond to emergency procedures in the event of an incident involving service assets.
- Context of and specific resources for assessment
- The application of competency may be assessed in the workplace or realistically simulated workplace.
  - Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site face-to-face classroom context.
  - Assessment is to comply with relevant regulatory requirements.

The resources, facilities and equipment essential for the assessment of this unit are:

- Plant, tools and/or equipment for which they are spotting
- OHS/WHs relevant legislation governing work with plant in the vicinity of overhead and underground assets
- OHS/WHs relevant codes, industry standards and guidelines
- Job site safety and risk documentation such as SWMS
- Appropriate documentation examples
- Access to appropriate systems of communications
- Emergency procedures appropriate to a spotters workplace
- Measuring tools and equipment appropriate to the task
- Appropriate PPE such as:
  - head protection
  - foot protection – steel capped, rubber soled or steel capped rubber boots
  - high visibility vest
  - clothing appropriate to the environment in which the spotting is being undertaken (dependent on the site requirements and protection required.)
  - safety glasses or goggles (depending on site requirements)
  - hearing protection
  - dust protection (eyes or breathing)
  - protection from the elements.
  - UV protection
  - sun glare protection
  - whistle.

### Method of assessment

It is recommended that the assessment strategy for this unit includes:

- Oral or written questioning related to underpinning knowledge.
- The practical demonstration of activities which combine a number of learning outcomes to provide depth and context to the training.