



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **RIISAM202A Isolate and access plant**

**Release: 1**

## **RIISAM202A Isolate and access plant**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This unit covers the isolation and accessing of plant in resources and infrastructure industries. It includes: determining plant isolations, isolating plant, completing permit-to-work form, and returning plant to service.

### **Application of the Unit**

This unit is appropriate for those working in operational, service or maintenance roles on fixed or mobile mechanical plant and equipment, at worksites within:

- Civil construction
- Coal mining
- Drilling
- Extractive industries
- Metalliferous mining

### **Licensing/Regulatory Information**

Refer to Unit Descriptor.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</p>
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Determine plant isolations	1.1. Access, interpret and apply <b>compliance documentation</b> relevant to the isolation and accessing of plant 1.2. Identify, record and confirm item(s) of <b>plant</b> , and work to be carried out 1.3. Correctly apply <b>permit</b> procedure (written or oral) according to site procedures 1.4. Identify <b>hazards</b> and risks to personal wellbeing and identify and implement <b>preventive strategies</b> 1.5. Obtain permit clearance in accordance with site procedures before work is commenced
2. Isolate plant	2.1. Resolve <b>coordination</b> requirements with others at the site prior to commencing and during isolation activities 2.2. Establish and maintain a safe working area in accordance with site <b>safety procedures</b> 2.3. Carry out isolation of all required energy sources and <b>immobilisation of potential energy sources</b> in accordance with site permit procedure and <b>safety requirements</b> 2.4. Place locks and <b>tags</b> on isolation devices in accordance with the type of permit procedure 2.5. Identify and act on or report breaches in permit procedure safety to authorised personnel in accordance with site procedures
3. Complete permit-to-work form	3.1. Prepare statement of isolations according to site and/or permit procedures 3.2. Complete sign-on and sign-off requirements according to site procedures 3.3. Carry out hand-over of plant and equipment in accordance with site procedures
4. Return plant to service	4.1. Resolve coordination requirements with others at the site prior to commencing and during de-isolation activities 4.2. Receive confirmation that work has been completed and is ready for return to service

	<p>4.3. Check designated work to be completed in accordance with work/site contract and/or site procedure</p> <p>4.4. Remove <b><i>locks and tags</i></b> from isolation devices according to site permit or work procedures</p> <p>4.5. Restore energy sources according to site procedures</p> <p>4.6. Identify and correct or report situations, which may endanger individuals or workers</p> <p>4.7. Confirm all permits are cancelled before plant is brought back into operation</p>
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## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to isolate and access plant:

- apply legislative, organisation and site requirements and procedures
- apply operational safety requirements
- access, interpret and apply technical information/maintain accurate records
- identify plant status
- use safety equipment
- apply diagnostic techniques
- use oral and written communications

### Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to isolate and access plant:

high and low voltage distribution and switching systems

- plant and equipment isolation points
- potential plant and site hazards
- site and equipment safety requirements
- operational and maintenance procedures
- permit-to-work system and documentation
- isolation devices type and purpose
- emergency, fire suppression, fire alert and disaster procedures
- relevant operational and maintenance procedures
- hazard identification and risk assessment response procedures

## Evidence Guide

<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<p><b>Overview of assessment</b></p>	
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following:</p> <ul style="list-style-type: none"> <li>• knowledge of the requirements, procedures and instructions for the isolation and accessing of plant</li> <li>• implementation of requirements, procedures and techniques for the safe, effective and efficient isolation and accessing of plant</li> <li>• working with others to undertake and complete the isolation and accessing of plant that meets all of the required outcomes</li> <li>• consistent timely completion of the isolation and accessing of plant that safely, effectively and efficiently meets the required outcomes</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<ul style="list-style-type: none"> <li>• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills.</li> <li>• The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.</li> <li>• Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances.</li> <li>• Where applicable, physical resources should</li> </ul>

	<p>include equipment modified for people with disabilities.</p> <ul style="list-style-type: none"> <li>• Access must be provided to appropriate learning and/or assessment support when required.</li> </ul>
<b>Method of assessment</b>	<p>This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of the candidate's required knowledge</li> <li>• observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes</li> <li>• consistently achieving the required outcomes</li> </ul> </li> <li>• first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• working with others to undertake and complete the isolation and accessing of plant</li> </ul> </li> </ul>
<b>Guidance information for assessment</b>	<p>Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.</p>



## Range Statement

<p>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, if used in the performance criteria, is detailed below. 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) may also be included.</p>	
<p><b>Relevant compliance documentation</b> may include:</p>	<ul style="list-style-type: none"> <li>• legislative, organisation and site requirements and procedures</li> <li>• manufacturer's guidelines and specifications</li> <li>• Australian standards</li> <li>• code of practice</li> </ul>
<p><b>Plant</b> may include:</p>	<ul style="list-style-type: none"> <li>• mobile plant</li> <li>• bucket wheel/chain excavators</li> <li>• stackers</li> <li>• mobile slew conveyors</li> <li>• hoppers</li> <li>• conveyors</li> <li>• pumps</li> <li>• loading units</li> <li>• bunkers</li> </ul>
<p><b>Permits</b> may include:</p>	<ul style="list-style-type: none"> <li>• written or oral access procedures to mechanical plant</li> </ul>
<p><b>Hazards</b> may include:</p>	<ul style="list-style-type: none"> <li>• HV switchgear</li> <li>• dust and water</li> <li>• power lines</li> <li>• overhead service lines</li> <li>• obstructions</li> <li>• structures</li> <li>• other equipment/vehicles</li> <li>• dangerous material</li> <li>• formation/earthworks/batters</li> <li>• underground services</li> <li>• water</li> </ul>
<p><b>Preventive strategies</b> may include:</p>	<ul style="list-style-type: none"> <li>• locks</li> <li>• tags</li> <li>• barriers</li> <li>• HV isolation gloves for 6.6kV isolation</li> <li>• rubber mat/non-conductive platform</li> <li>• other site prescribed clothing apparel</li> </ul>
<p><b>Coordination</b> may be required</p>	<ul style="list-style-type: none"> <li>• control centre</li> </ul>

with:	<ul style="list-style-type: none"> <li>• other operators</li> <li>• mobile plant operators</li> <li>• maintenance contractors</li> <li>• shift supervisors</li> </ul>
<b>Safety procedures</b> and practices may be contained in:	<ul style="list-style-type: none"> <li>• legislation and regulations</li> <li>• relevant Australian standards</li> <li>• management plans</li> <li>• manager's rules</li> <li>• OHS Policy</li> <li>• code of practice</li> <li>• manufacturer's manuals and instructions</li> <li>• safe working or job procedures</li> <li>• training resources</li> </ul>
<b>Immobilisation of potential energy source</b> may include:	<ul style="list-style-type: none"> <li>• protective clothing</li> <li>• non-conductive platform</li> </ul>
<b>Safety requirements</b> may also include:	<ul style="list-style-type: none"> <li>• boarding and disembarking procedures</li> <li>• working behind protective barriers</li> <li>• procedures for clearing blocked chutes and excessive spills</li> <li>• procedures covering moving parts</li> <li>• hot machinery</li> </ul>
<b>Tagging</b> may be:	<ul style="list-style-type: none"> <li>• individual tagging, group tagging or mass tagging</li> </ul>
<b>Authorisation of personnel</b> may vary between sites and may include:	<ul style="list-style-type: none"> <li>• issuing officers</li> <li>• recipients-in-charge</li> </ul>

## Unit Sector(s)

Service and Maintenance

## Competency field

Refer to Unit Sector(s).

## Co-requisite units

Not applicable.