



**Australian Government**

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

# **RIIUND208A Conduct skip operations**

**Release: 1**

## RIIUND208A Conduct skip operations

### Modification History

Not applicable.

### Unit Descriptor

This unit covers the conduct of skip operations in the resources and infrastructure industries. It includes conducting skip operations, operating a skip, removing blockages, conducting end-of-shift activities, and carrying out operator maintenance. Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Relevant information must be sourced prior to application of the unit.

### Application of the Unit

This unit is appropriate for those working in an operational or assistant role at worksites within:

- 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. Conduct skip operations	1.1. Access, interpret and apply <b>compliance documentation</b> relevant to the work activity 1.2. Conduct work safely and efficiently 1.3. Receive, interpret and clarify shift changeover details 1.4. Use appropriate personal protective equipment 1.5. Perform <b>equipment</b> and work area pre-start checks to ensure equipment is ready for operation 1.6. Check records for outstanding maintenance/inspections and record defects to establish the operational status of equipment and take action according to site procedures 1.7. Identify, manage and report defects and <b>potential hazards and risks</b> according to the site procedures 1.8. Carry out <b>start-up procedures</b> including checking that the area is clear for operations 1.9. Manage relevant <b>environmental issues</b> 1.10. Adhere to emergency procedures 1.11. Apply dust suppression and dust extraction methods
2. Operate skip	2.1. Load skip with <b>materials</b> not exceeding <b>capacity</b> and minimising spillage 2.2. Communicate with relevant personnel 2.3. Operate skip safely in the working environment with regard to the <b>site conditions</b> 2.4. Monitor and manage skip performance using appropriate <b>indicators</b> to aid safe operation 2.5. On identification of <b>contaminants</b> follow skip shutdown procedures and remove or dispose of contaminants
3. Remove blockages	3.1. Identify and confirm location and nature of <b>blockage</b> 3.2. Conduct skip isolation procedures and <b>safety provisions</b> to ensure safety of

	<p>personnel prior to visual inspection and/or removal of blockage</p> <p>3.3. <b>Remove blockages</b></p> <p>3.4. Restore skip operations</p>
4. Conduct end-of-shift activities	<p>4.1. Complete all required documentation clearly, concisely and on time</p> <p>4.2. Pass on end of shift information to oncoming shift</p>
5. Carry out operator maintenance	<p>5.1. Isolate skip before conducting <b>operator maintenance</b></p> <p>5.2. Service and make minor adjustments to equipment</p> <p>5.3. <b>Clean</b> skip equipment</p> <p>5.4. Restore skip operations</p>

## 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 of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes the ability to carry out the following as required to conduct skip operations:

- apply legislative, organisation and site requirements and procedures for conducting skip operations
- apply standard operating practices and procedures around shafts
- work safely and within level of competence
- monitor operations
- communicate and report
- use hand and power tools

### Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes knowledge of the following as required to conduct skip operations:

- key areas of legislated safety and health requirements
- winder systems and operations
- shaft configuration and construction
- shaft services and installations (pipes, cables, ladders etc)
- identification of defects relevant to skip operations through inspection or observation
- trip and fault procedures and abnormal conditions
- site emergency procedures
- communication system between cage and winder
- recording and logging requirements for winder drivers, and electrical and mechanical maintenance personnel
- environmental procedures
- equipment processes, technical capability and limitations
- geological and technical data (basic)
- isolation and permit-to work systems and procedures
- mining regulation
- mine ventilation system
- site procedures
- in-shaft communications equipment

## 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 conducting skip operations</li> <li>• implementation of requirements, procedures and techniques for the safe, effective and efficient completion of skip operations</li> <li>• working with others to undertake and complete skip operations that meet all of the required outcomes</li> <li>• consistent timely completion of skip operations that safely, effectively and efficiently meet 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>• Assessment of this competency requires typical resources normally used in a resources and infrastructure sector environment. Selection and use of resources for particular worksites may differ due to the site circumstances.</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>• Customisation of assessment and delivery environment should sensitively accommodate</li> </ul>

	<p>cultural diversity.</p> <ul style="list-style-type: none"> <li>• Aboriginal people and other people from a non English speaking background may have second language issues.</li> <li>• Where applicable, physical resources should include equipment modified for people with disabilities. 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 requirements, procedures and techniques for the safe, effective and efficient achievement of required outcomes</li> <li>• consistent achievement of 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 skip operations</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

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><b>Relevant compliance documentation</b> may include:</p>	<ul style="list-style-type: none"> <li>• legislative procedures including Acts and regulation dealing with:             <ul style="list-style-type: none"> <li>• mining safety and health</li> <li>• mine inspection</li> <li>• OHS</li> <li>• explosives</li> </ul> </li> <li>• organisational and site requirements and procedures including:             <ul style="list-style-type: none"> <li>• clean up</li> <li>• emergency procedures</li> <li>• equipment shutdown and isolation procedures</li> <li>• evacuation procedures</li> <li>• First Aid</li> <li>• notification of authorities</li> <li>• permit-to-work systems</li> <li>• safety equipment</li> <li>• use of personal protective equipment</li> <li>• portable electric apparatus procedures</li> <li>• fall arrestor and harness procedures</li> <li>• confined spaces</li> </ul> </li> <li>• manufacturer's guidelines and specifications</li> <li>• Australian standards</li> <li>• Employment and workplace relations legislation</li> <li>• Equal Employment Opportunity and Disability Discrimination legislation</li> </ul>
<p><b>Equipment</b> utilised for skip operations may include:</p>	<ul style="list-style-type: none"> <li>• winding engine</li> <li>• bucket</li> <li>• cage</li> <li>• skip</li> <li>• power supplies and equipment</li> </ul>
<p><b>Potential hazards and risks</b> may</p>	<ul style="list-style-type: none"> <li>• blockages or obstructions</li> <li>• communication failure</li> </ul>



include:	<ul style="list-style-type: none"> <li>• oversized material</li> <li>• spillage</li> <li>• unauthorised personnel</li> <li>• unsafe ground</li> <li>• poor visibility</li> <li>• explosion</li> <li>• asphyxiation and drowning</li> </ul>
<b>Start-up procedures</b> may include:	<ul style="list-style-type: none"> <li>• external damage/defects/wear</li> <li>• cleanliness of skip operating station</li> <li>• computer systems</li> <li>• danger/out of service tags</li> <li>• display instrumentation and gauges (indicators, gauges, laser levels)</li> <li>• fire suppression unit (pins in position in triggers)</li> <li>• loose wheels</li> <li>• lubricant/hydraulic/coolant levels</li> <li>• idle positioned and running</li> <li>• light positioning and cleanliness</li> <li>• missing/loose bolts</li> <li>• oil leaks</li> <li>• personal proximity</li> <li>• portable fire extinguisher (bracket, gauge, hose, ease of access)</li> <li>• skip door (including locking arms)</li> <li>• skip rope</li> <li>• visual and audio warning devices and lights</li> <li>• weigh machines</li> </ul>
<b>Environmental issues</b> may include:	<ul style="list-style-type: none"> <li>• dust</li> <li>• fumes</li> <li>• noise</li> <li>• water</li> <li>• heat</li> <li>• flammable and noxious gases</li> <li>• flammable dust</li> </ul>
<b>Materials</b> may include:	<ul style="list-style-type: none"> <li>• gravel</li> <li>• ore</li> <li>• overburden</li> <li>• oxidised waste</li> <li>• rejects</li> <li>• road base</li> <li>• sand</li> </ul>

	<ul style="list-style-type: none"> <li>• sulphide rock fill</li> <li>• tailings</li> </ul>
Factors which affect the <b>capacity</b> of skip may include:	<ul style="list-style-type: none"> <li>• duration of operation</li> <li>• efficient and safe operating speed</li> <li>• operating limitations</li> <li>• type of activities performed</li> <li>• weight and/or load limitations</li> </ul>
<b>Site conditions</b> may include:	<ul style="list-style-type: none"> <li>• air quality and quantity</li> <li>• dryness of material</li> <li>• noise</li> <li>• ventilation characteristics (fumes, dust)</li> <li>• visibility</li> <li>• wet material</li> </ul>
<b>Indicators</b> may include:	<ul style="list-style-type: none"> <li>• computer indicators</li> <li>• skip indicators</li> </ul>
<b>Contaminants</b> may include:	<ul style="list-style-type: none"> <li>• consumables</li> <li>• debris</li> <li>• explosives</li> <li>• metal bucket teeth</li> <li>• metal or steel rods</li> <li>• piping</li> <li>• plastic</li> <li>• timber</li> <li>• back-fill</li> </ul>
<b>Blockage</b> may include:	<ul style="list-style-type: none"> <li>• oversize materials</li> <li>• contaminants</li> </ul>
<b>Safety provisions</b> may include:	<ul style="list-style-type: none"> <li>• barricades</li> <li>• safety guards</li> <li>• visible signage</li> </ul>
<b>Remove blockages</b> may include:	<ul style="list-style-type: none"> <li>• firing</li> <li>• water flushing</li> <li>• hot work (including cutting, welding etc)</li> </ul>
<b>Operator maintenance</b> may include:	<ul style="list-style-type: none"> <li>• greasing</li> <li>• replacing broken or missing bolts</li> <li>• rope adjustments</li> <li>• skip door adjustments</li> <li>• tightening loose fittings</li> </ul>
<b>Clean</b> may include:	<ul style="list-style-type: none"> <li>• degreasing</li> <li>• forced air</li> <li>• steam cleaning</li> </ul>

	<ul style="list-style-type: none"><li>• vacuum</li><li>• water</li></ul>
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**Unit Sector(s)**

Underground Mining

**Competency field**

Refer to Unit Sector(s).

**Co-requisite units**

Not applicable.