



Australian Government

Department of Education, Employment and Workplace Relations

RIIPEO205A Conduct ship loading operations

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the conducting of ship loader operations in metalliferous mining. It includes the planning and preparation for the operation, conducting loader and associates equipment operation and undertaking operator maintenance in all contexts to bulk load ore into bulk cargo vessels.

Application of the Unit

This unit is appropriate for those working in a operational roles, 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

Elements describe the essential outcomes of a unit of competency.	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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for ship loading operations	1.1. Access, interpret and apply compliance documentation relevant to the conducting of ship loader operations 1.2. Obtain, interpret and clarify/confirm work requirements and shift details before proceeding 1.3. Access, interpret and apply information required to complete the allocated work 1.4. Carry out worksite inspection and rectify or report hazards or other notifiable conditions 1.5. Access and apply safety information and procedures throughout the work 1.6. Carry out pre-start, start-up, park-up procedures
2. Operate ship loader and associated equipment	2.1. Coordinate activities with others at the site prior to commencement of, and during the work activity 2.2. Operate controls for the following ship loader functions to load ship 2.3. Load ore in accordance with ship's hatch loading plan 2.4. Complete relevant ship loading and hatch tonnage documentation 2.5. Complete work in accordance with the agreed plan and outcomes and within the operating capacities of the Ship Loader 2.6. Carry out shutdown procedures
3. Fault find operational problems	3.1. Report or correct problems, monitoring systems and alarms 3.2. Recognise and respond to hazardous and emergency situations 3.3. Carry out reporting and complete and process documents
4. Carry out operator maintenance	4.1. Carry out plant and equipment inspections and faultfinding 4.2. Carry out routine operational servicing, lubrication and housekeeping tasks 4.3. Provide operator support during preparation for, and conduct of, major maintenance tasks in accordance with site

	requirements
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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 conduct ship loader operations:

- apply legislative, organisation and site requirements and procedures
- apply operational safety requirements
- access, interpret and apply technical information
- apply diagnostic techniques
- use hand and power tools
- apply equipment hose down and chute cleaning requirements and procedures
- communicate using radios, phones other techniques
- apply procedures for complying with environmental requirements (e.g. using dust suppression equipment)
- apply procedures for the disposal of environmentally sensitive fluids and materials
- apply records maintenance requirements
- apply data entry procedures into computer based system
- apply procedures for working at heights

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 conduct ship loader operations:

- site and equipment safety requirements and procedures
- ship-loader characteristics, technical capabilities and limitations
- ship-loader maintenance and operating procedures
- ore type and quality
- environmental requirements e.g. dust suppression and constraints related to ship-loading operations
- recording and reporting processes
- impact of ship-loader operations on customer quality requirements
- impact of ship-loader operations on vessel loading specifications
- layout of vessel and potential structural hazards

Evidence Guide

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.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	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: • knowledge of the requirements, procedures and instructions for conducting ship loader operations • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of ship loader operations • working with others to undertake and complete ship loader operations that meet all of the required outcomes • consistent timely completion of ship loader operations that safely, effectively and efficiently meet the required outcomes
Context of and specific resources for assessment	• 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. • 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. • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second

	language issues. • 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. • 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.
Method of assessment	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: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete ship loader operations
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

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.

Relevant compliance documentation may include:	• legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • code of practice • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Work requirements will be in the form of:	• work plans (hatch loading plans) • shift briefings • handover details • work orders
Shift details may include:	• nature and scope of the work • working conditions • production targets • defects on equipment • hazards and potential hazards • coordination requirements/issues
Information required may include:	• grade and ore type • hatch loading plans • position on wharf • weather conditions • tidal movements • ship movement • ship structure and potential hazards for boom collision
Safety information and procedures are contained in:	• site-specific safety processes and documentation such as JSAs
Coordination activities may include:	• communication with Control, Maintenance personnel, Supervision, Process Control Officer, Mobile Operators, shipping officer, representative on the ship (ship's master) etc • monitoring operation of ship loader ensuring

	that it does not collide with other equipment (anti-collision systems active)
Ship loader functions include:	• Conveyor start & stop • Long travel • Slewing (left & right) • Luffing (up & down)
Hazardous and emergency situations may include:	• emergency evacuation procedure • heat • vehicle movement on wharf • wet weather operation or cyclones • electrical start-up and shutdown of equipment • loss of electrical supply • electrical fires • windy and dusty conditions • chute cleaning • working in close proximity to moving equipment and parts • boom collision with ship structures
Reporting may include:	• accident/incident reports • pre-start equipment reports/defect reports • hatch loading reports • entry of data into computer systems • tagging

Unit Sector(s)

Plant and Equipment Operations

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.