



Australian Government

Department of Education, Employment and Workplace Relations

PMASUP432B Coordinate pipeline projects

Revision Number: 1

PMASUP432B Coordinate pipeline projects

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	In a typical scenario, the person is involved in the efficient coordination of projects on pipeline systems and facilities. Typical projects may include: • installation of new plant piping and equipment • pipeline repairs and modifications • upgrades of existing plant, piping and equipment • commissioning of pipelines and facilities • construction and upgrade of pipeline easements.
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Application of the Unit

Application of the unit	The person would: • prepare scoping documents, specifications and/or tenders • manage the project through the construction and commissioning phases • liaise with other staff, contractors, and authorities as required • ensure that the project conforms with all of the necessary safety requirements. Generally the person would be part of a team during the whole project and would perform all parts of this unit. At all times they would be liaising and cooperating with other members of the team. This unit does not require the operation of a central control panel.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
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Employability Skills Information

Employability skills	This unit contains employability skills.
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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 project specification documents.	1.1. Analyse the proposed project to establish contract specifications 1.2. Conduct a documented hazard and risk assessment on the proposed project, identifying all potential hazards and risks 1.3. Draft specification documents stating the required work activity and health, safety and environmental requirements 1.4. Seek tenders for the specified works, review as per the relevant company procedure and appoint a winning tenderer.
2. Prepare project schedule and documentation.	2.1. Draft a project schedule to establish project timeframe, work activities and procurement of materials 2.2. Apply the job safety analysis process to specific project activities reflecting any health, safety and environmental issues identified in the project risk and hazard assessment 2.3. Write procedures and work instructions for project work activities from the outcome of the job safety analysis process.
3. Conduct induction training for project.	3.1. Discuss company/site specific procedures and health, safety and environmental requirements with contractors/employees carrying out the specified works 3.2. Assess all persons who are inducted to ensure they understand the company/site procedures and health, safety and environmental requirements 3.3. Inspect all equipment and machinery utilised to carry out the works to ensure these comply with company/site requirements.
4. Monitor progress of project.	4.1. Purchase materials required for fabrication and installation on the project and inspect to ensure all items meet project specifications 4.2. Monitor project works to ensure activities are carried out to project specification and minimal impact occurs on existing operations and environment 4.3. Issue permits to work where project activities impact on existing pipeline operations 4.4. Amend and/or modify original specifications and communicate to all parties involved as per the relevant company procedure 4.5. Produce project reports updating project schedule progress, activities and health, safety and environmental issues, and discuss with all parties involved 4.6. Draft operations manuals and compile vendor data manuals

ELEMENT	PERFORMANCE CRITERIA
	to assist in the operation of the equipment/facility after project completion.
5. Complete and commission project.	5.1. Commission the project to ensure all work carried out meets project specifications and operational requirements 5.2. Restore the project site to meet environmental and operational requirements 5.3. Cancel permits to work and sign off at completion of works 5.4. Check all documentation, records and drawings pertaining to the project, verify for accuracy and hand over to the relevant operational department.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

The ability to coordinate project activities and report on project status would be considered as a critical component of this unit.

Required knowledge

Demonstrated working knowledge and application of company-specific work organisations and workflow would be highly regarded.

Demonstrated knowledge of process and pipeline equipment is essential in underpinning a person's competency in this unit including:

- architecture of pipeline systems and facilities
- pipeline operations knowledge
- pipeline system operating parameters
- quality assurance systems and plans
- emergency response plans and procedures.

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment for this unit of competency will be using a pipeline project. Where it is not appropriate to use an actual pipeline project, then a simulated project may be used. The unit will be assessed in as holistic a manner as is practical and may be integrated with the assessment of other relevant units of competency. Assessment will occur over a range of situations which will include disruptions to normal, smooth operation.

Simulation may be required to allow for assessment of parts of this unit. Simulation should be based on an actual project and will include walk-throughs of the relevant competency components. Simulations may also include the use of case studies/scenarios and role plays.

This unit of competency requires a significant body of knowledge which will be assessed through questioning and the use of what-if scenarios both on the plant (during demonstration of normal operations and walk-throughs of abnormal operations) and off the plant.

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

Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate corrective action. The emphasis should be on the ability to stay out of trouble rather than on recovery from a disaster.

Consistent performance should be demonstrated. In particular look to see that:

- early warning signs of items needing attention or with potential problems are recognised
- the range of possible causes can be identified and analysed and the most likely cause determined
- appropriate action is taken to ensure a timely return to plan.

These aspects may be best assessed using a range of

EVIDENCE GUIDE	
	scenarios/case studies/what-ifs as the stimulus with a walk-through forming part of the response. These assessment activities should include a range of problems, including new, unusual and improbable situations which may have been generated from the past incident history of the plant, incidents on similar plants
Context of and specific resources for assessment	Assessment will require access to a project over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations. A bank of scenarios/case studies/what-ifs will be required as will a bank of questions which will be used to probe the reasoning behind the observable actions.
Method of assessment	In all plants it may be appropriate to assess this unit concurrently with relevant teamwork, OHS and communication units. Consider co-assessment with: • <i>PMASUP242B Monitor pipeline civil works</i> • <i>PMASUP241B Maintain pipeline easements.</i>
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

Range Statement

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. 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.

Codes of practice/ standards	Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.
Context	This competency includes all of the interactions necessary to plan, implement and complete a pipeline project, including the following aspects: • Provision of legislative requirements and information: • OHS laws and codes of practice • guidelines for preparation and submission of safety cases • pipeline licenses • environmental statutes and standards. The use and operation of personal computers, other hardware mediums and associated software is required.
Authorities	Authorities may include: • Environmental Protection Authority (EPA) • Department of Primary Industry and Energy (DOPIE) • Departments of Minerals and Energy State and Territory • Worksafe.
Inspection and testing	Inspection and testing techniques may include: • hydrostatic testing • magnetic particle inspection • radiography • ultrasonic inspection • dye penetrant inspection.
Repair/modification techniques	Repair/modification techniques may include: • hot tap and stoppling operations • welding and cutting operations.
Reports	Reports may include: • budget updates • hazard and incident reports

RANGE STATEMENT	
	• safety statistics report • project schedule progress report • materials and spares listings.
Australian standards	Applicable Australian standards may include: • AS 2885 • AS 4041 • AS 3000.
Plans and drawings	Plans and drawings may include: • pipeline alignment drawings • process and instrument drawings • workshop fabrication drawings.
Health, safety and environment (HSE)	All operations to which this unit applies are subject to stringent health, safety and environment requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between Performance Criteria and HSE requirements, the HSE requirements take precedence.

Unit Sector(s)

Unit sector	Support/generic
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		
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