



Australian Government

PMASUP241 Maintain pipeline easements

Release: 1

PMASUP241 Maintain pipeline easements

Modification History

Release 1. Supersedes and is equivalent to PMASUP241B Maintain pipeline easements

Application

This unit of competency covers the skills and knowledge required to maintain and ensure pipeline integrity.

This unit of competency applies to operators who are required to conduct ground and/or aerial patrols; monitor and report on signage, gate or other difficulties; identify and advise the organisation of any pipeline operational problems; and facilitate access and provision of resources to deal with pipeline incidents.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members and the control room operator, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Plan and prepare maintenance activity	1.1	Interpret topographical and geographical maps to determine the selection of access to pipeline route
		1.2	Select and operate equipment appropriate to the maintenance task in accordance with procedures
		1.3	Inspect and assess easement to determine the required maintenance activities
		1.4	Interpret assessment results and take action

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|---|---|-----|---|
| 2 | Maintain pipeline easement and surrounding environment | 2.1 | Maintain easement in accordance with legislative requirements and enterprise requirements |
| | | 2.2 | Isolate and secure any required work areas as required by procedures |
| | | 2.3 | Monitor and log the condition of signage/gates and easement ancillary equipment |
| | | 2.4 | Take action, as required |
| | | | |
| 3 | Maintain liaison with stakeholders | 3.1 | Maintain continuous liaison and contact with pipeline system stakeholders |
| | | 3.2 | Advise stakeholders of intended activities in accordance with procedures |
| | | 3.3 | Conduct meetings with stakeholders to discuss notified issues as required |
| | | 3.4 | Record meeting outcomes in accordance with legislative and enterprise requirements |
| | | 3.5 | Take action, as required |
| | | | |
| 4 | Control hazards | 4.1 | Identify hazards in pipeline work area |
| | | 4.2 | Assess the risks arising from those hazards |
| | | 4.3 | Implement measures to control those risks in line with procedures and duty of care |

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

All operations to which this unit applies are subject to stringent health, safety and environment (HSE) requirements, which may be imposed through state/territory 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.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, include one or more of the following:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Hazards Hazards include one or more of the following:

- gases and liquids under pressure
- equipment failures
- flammability and explosivity
- hazardous products and materials
- unauthorised personnel

- sharp edges, protrusions or obstructions
- extreme weather
- remoteness/isolation
- other hazards that might arise

Routine problems

Routine problems must be resolved by applying known solutions.

Routine problems are predictable and include one or more of the following:

- isolation and risk of exposure
- gas or fluid leaks
- accidental or geophysical rupturing of pipelines

Known solutions are drawn from one or more of the following:

- procedures
- training
- remembered experience

Non-routine problems must be reported according to according to relevant procedures.

Action

Action taken in response to problems includes one or more of the following:

- determining problems needing action
- determining possible fault causes
- rectifying problem using appropriate solution within area of responsibility
- following through items initiated until final resolution has occurred
- reporting problems outside area of responsibility to designated person.

Equipment

This unit of competency includes all such items of equipment and unit operations which are utilised in the maintenance of pipeline easements, as appropriate to the organisation, including one or more of the following:

- light aircraft (pilot provided)
- off-road vehicles
- gas leakage detectors
- vegetation control documentation and equipment
- workplace mapping (e.g. pipeline alignment drawings, topographical maps and geographical maps)
- pipeline access route manuals

Easement An easement is an area or strip through which a pipeline, or similar infrastructure runs. It may be owned by the operating company or a third-party (or government, non-government organisation (NGO) or similar). The pipeline may be above or below the easement.

Unit Mapping Information

Release 1. Supersedes and is equivalent to PMASUP241B Maintain pipeline easements

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=9fc2cf53-e570-4e9f-ad6a-b228ffdb6875>

Assessment Requirements for PMASUP241 Maintain pipeline easements

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include the ability to:

- interpret topographical and geographical maps
- identify maintenance needs
- plan and prepare for equipment, access and resources needed to undertake maintenance
- identify hazards and control risks
- distinguish between causes of problems/alarms/fault indications, such as:
 - various disturbances on or in the easement
 - visual evidence of a pipeline rupture
 - erosion and subsidence
- liaise and communicate effectively with internal and external stakeholders, including:
 - landowners
 - contractors
 - company personnel
 - regulators and other officials
- complete records.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- legal obligations and standing of both parties as it relates to access rights
- pipeline system and access routes
- appropriate and safe vegetation control techniques
- erosion control techniques
- pipeline signage and application requirements
- regulatory framework
- organisation procedures, including those covering
 - safety, emergency and hazard control
 - communications
 - use and maintenance of vehicles
 - environmental management
- hierarchy of control.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of an operating plant
 - will typically include a supervisor/third-party report or other evidence, focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include maintenance of an actual pipeline easement, the use of appropriate items of equipment requiring demonstration of operation and responding to problems
 - may use industry-based simulation for part only of the unit where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - demonstration of skills
 - industry based case studies/scenarios
 - 'what ifs'.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.

- In addition, the assessor or anyone acting in subject matter expert role in assessment must demonstrate both technical competency and currency. If the assessor cannot demonstrate technical competency and currency they must assess with a subject matter expert who does meet these requirements.
- Technical competence can be demonstrated through one or more of:
 - relevant VET or other qualification/Statement of Attainment
 - appropriate workplace experience undertaking the type of work being assessed under routine and non-routine conditions
 - appropriate workplace experience supervising/evaluating the type of work being assessed under routine and non-routine conditions
- Currency can be demonstrated through one or more of:
 - being currently employed undertaking the type of work being assessed
 - being employed by the organisation undertaking the type of work being assessed and having maintained currency in accordance with that organisation's policies and procedures
 - having consulted/had contact with an organisation undertaking the type of work being assessed within the last twelve months, the consultation/contact being related to assessment
 - conducting on-the-job training/assessments of the type of work being assessed
 - being an active member of a relevant professional body and participating in activities relevant to the assessment of this type of work

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