



Australian Government

PMASUP349 Monitor and control repairs and modifications on operational pipe

Release: 1

PMASUP349 Monitor and control repairs and modifications on operational pipe

Modification History

Release 1. Unit Code and Application changed. Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMASUP344 Monitor and control repairs and modifications on operational pipe.

Application

This unit describes the skills and knowledge required to monitor and control repairs and modifications on operational pipe. This includes all equipment and operations that form part of the pipeline system. It does not cover doing the repair/modification.

This unit applies to autonomous operators who are required to demonstrate a significant understanding of the process and the equipment operation in a plant with local control, or in liaison with the control-room operator in a plant with a centralised control panel.

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

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

This unit aligns to Australian Standard AS 2885.3—2012 Pipelines—Gas and liquid petroleum Part 3: Operation and maintenance.

Pre-requisite Unit

Nil

Competency Field

Support

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare and plan for pipeline repair or modifications	1.1 Communicate with personnel to identify and coordinate work requirements 1.2 Identify, control and report hazards 1.3 Examine the work area and ensure there is adequate access to the

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	affected section of the pipeline 1.4 Obtain and review plans, instructions, relevant codes and drawings of proposed works 1.5 Ensure pipeline repairers are aware of site hazards and confirm that a Permit to Work has been issued 1.6 Convey information regarding the identified repair or modification to all interested parties 1.7 Inform third-parties of the need for access to the site
2. Monitor pipe welding, cutting and fabrication	2.1 Ensure the pipeline system is prepared in accordance with procedures and made safe for work to commence 2.2 Monitor the work to ensure that welding, stoppling or modifications are carried out according to the approved work plan 2.3 Verify that the necessary inspection and testing is conducted on the repaired or modified area 2.4 Confirm that test results are valid and that the work has been conducted to specification 2.5 Facilitate site clean-up to remove waste materials and debris and restore the site to original condition 2.6 Sign off the Permit to Work upon completion of the work 2.7 Ensure that environmental and heritage obligations are met
3. Recommission pipeline	3.1 Contact the control centre and advise that repairs are completed successfully and arrange for the system to be brought back online 3.2 Where the line has been manually isolated, restore pipeline operation when authorised to do so 3.3 Inspect the area of the pipeline subject to the Permit to Work for sign of leakage or defects 3.4 Confirm the pipeline is holding pressure and the system is meeting operational requirements
4. Complete reports and documentation	4.1 Complete site reports and documentation according to procedures and regulatory requirements 4.2 Ensure site drawings are updated to show accurate location of repair or modification 4.3 Liaise with relevant company departments to ensure all records and drawings are updated to reflect the repair or modification

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
5. Respond to abnormal situations	5.1 Monitor pipeline frequently and critically throughout shift using own senses, and measured and indicated data 5.2 Identify impacts of changes upstream and downstream 5.3 Identify actual and developing situations that may require action 5.4 Take action to remedy abnormal situations according to operating procedures 5.5 Complete required documents outlining abnormal situation management and corrective action taken

Foundation Skills

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

- Learning skills to follow instructions, monitor process and select appropriate procedure.
- Reading skills to follow written procedures and documentation.
- Writing skills to complete workplace documentation.
- Oral communication skills to liaise and coordinate with team members, the control-room operator, other personnel and third parties.
- Numeracy skills to interpret data, plans and diagrams.

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

Unit Mapping Information

Release 1. Supersedes and is equivalent to PMASUP344 Monitor and control repairs and modifications on operational pipe.

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 PMASUP349 Monitor and control repairs and modifications on operational pipe

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit:

- at least 2 times, each in a separate work context.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- pipeline system operations and maintenance, including:
 - welding and cutting techniques on operational pipeline systems
 - hot tap and stoppling techniques
 - inspection techniques
 - pipeline codes and standards
 - pipeline drawings and plans
 - the operation of pipe cutting equipment
 - the operation of lifting and moving equipment
 - fitting of pipeline repair clamps and sleeves
 - excavation of pipelines
- regulatory framework
- pipeline system abnormal situations and required action including but not limited to:
 - leakages
 - blockages
 - instrument failure
 - mechanical failure
 - ice formation
 - flow variations
- organisation procedures and documentation, including:
 - safety, emergency and hazard control
 - work permit systems
 - maintenance
 - quality assurance

- standard operating procedures (SOPs)
- site reports
- hierarchy of control
- pipeline system hazards:
 - possible causes
 - potential consequences
 - appropriate risk controls.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - operation pipe, tools and equipment
 - operating procedures
- abnormal situations must be relevant to pipeline systems.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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