



Australian Government

PMAOPS338 Communicate and monitor pipeline activities

Release: 1

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Modification History

Release 1. Unit code and Application changed. Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMAOPS330 Communicate and monitor pipeline activities.

Application

This unit describes the skills and knowledge required to gather and relay information about pipeline activities from the pipeline control centre. This unit includes all such items of equipment and operations that form part of the pipeline control system.

This unit applies to autonomous operators who are required to demonstrate a significant understanding of pipeline operations in a plant with a centralised control panel. In the case of a large, complex plant, the operations technician would be part of a team during startup and shutdown procedures.

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 and the control-room operator, as appropriate. They may also be communicating with customers.

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 reflects relevant aspects of the Australian Standard AS 2885.3—2012 Pipelines—Gas and liquid petroleum Part 3: Operation and maintenance.

Pre-requisite Unit

Nil

Competency Field

Operations

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. Gather information about pipeline operation needs	1.1 Respond to and record messages and information received from field operations and pipeline system stations 1.2 Interpret and acknowledge alarm codes to ensure the correct response strategy is selected and applied to the situation

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Clarify additional information needs and select an appropriate communication medium to deliver required information 1.4 Improve operational efficiency through adequate and timely application of information provided 1.5 Interpret and action gas forecasts from customers and shippers to ensure correct gas flow rates into the pipeline system are achieved
2. Communicate pipeline information	2.1 Monitor activities of pipeline personnel in the field and data from the control centre 2.2 Evaluate internal messages and response communications concerning system alarms and incidents to establish the scope and severity of the alarms and incidents 2.3 Convey pipeline system operation information to relevant personnel in other work areas to ensure safe and efficient operation of the pipeline system 2.4 Relay information to technicians and other services and stakeholders so that fault-finding or safety checks can be conducted to identify risks to product supply, pipeline equipment, environment and personnel 2.5 Authorise, record and monitor work permits to allow operational activities to be undertaken or cancelled
3. Coordinate pipeline systems operations	3.1 Monitor field and pipeline station operations data 3.2 Monitor and observe equipment operating conditions, pressures and temperatures, and maintain correct equipment operating parameters 3.3 Identify faults and initiate required repair or reporting of the fault 3.4 Isolate identified faults in the pipeline 3.5 Respond to system alarms and emergencies 3.6 Determine the required course of action or emergency response to the identified system condition or emergency 3.7 Complete and document pre-shutdown checks 3.8 Shut down the pipeline system in accordance with operating procedures 3.9 Administer Permit to Work system and confirm all identified maintenance and work complies with all issued permits
4. Record and report on operations	4.1 Report safety and environmental risks or faulty equipment to designated personnel

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.2 Interpret and maintain field inspection records and reports 4.3 Complete operations and production reports 4.4 Perform shift handover procedures
5. Control hazards	5.1 Identify hazards in work area 5.2 Assess the risks arising from those hazards 5.3 Implement measures to control those risks in line with procedures and duty of care
6. Identify and respond to abnormal situations	6.1 Monitor equipment frequently and critically throughout shift using own senses, and measured and indicated data 6.2 Monitor field data and instrumentation to ensure that product remains on specification 6.3 Identify impacts of changes upstream and downstream 6.4 Identify actual and developing situations that may require action 6.5 Take action to remedy abnormal situations according to operating procedures 6.6 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 monitor and evaluate process and select appropriate action.
- Reading skills to follow written procedures and documentation.
- Writing skills to complete written reports and documentation.
- Oral communication skills to liaise and coordinate with team members, the control-room operator and customers.
- Numeracy skills to monitor field data, instrumentation and process parameters.

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 PMAOPS330 Communicate and monitor pipeline activities.

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 PMAOPS338 Communicate and monitor pipeline activities

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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:

- all items on a schematic of the pipeline system, including:
 - principles of operation of plant and equipment, pipeline system functions within the design parameters and design philosophy
 - interactions between plant items and processes
 - operating parameters and integrity limits, and product specifications and tolerances including temperature, pressure and flow
 - process information schemata of the pipeline system and associated facilities
 - architecture of the pipeline system
 - gas quality and analysis equipment operation
 - safety data sheets (SDS) information
 - emergency shutdown procedures
 - functions of major components and troubleshooting techniques
- abnormal situations and required actions, including:
 - communications disruptions
 - corrosion and hydrate formation
 - variations in flow temperature and/or pressure
 - failures of piping, valves or flanges
 - pipeline leakages
- 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:
 - pipeline control system
 - operating procedures
- abnormal situations must be relevant to pipeline control systems.

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

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