PMAOPS348 Operate safety, protection and shutdown systems

Release: 1

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Modification History

Release 1. This version was released with PMA Chemical, Hydrocarbons and Refining Training Package, Release 2.0.

Application

This unit of competency describes the skills and knowledge required to operate safety, protection and shutdown systems. This unit of competency applies to operators who, as part of their duties, are required to operate safety, protection and shutdown systems during startup, normal operation and abnormal situation management.

This unit of competency applies to autonomous operators who may work alone or as part of a team or group, reporting back to a 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.

Pre-requisite Unit

Nil

Competency Field

Operator

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential *outcomes.*	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Operate safety, protection and shutdown systems according to procedures	1.1 Receive and give shift handover
	1.2 Identify the safety, protection and shutdown systems provided on the plant and whether they are activated locally, remotely or both
	1.3 Locate field-based activation points and the safety, protection or shutdown systems they trigger
	1.4 Identify safety, protection and shutdown systems including the various alarms and beacons that annunciate and/or flash
	1.5 Complete controlled valve status registers according to operating procedures
	1.6 Swap over duty of pressure safety valve systems according to

Elements	Performance Criteria
Elements describe the essential *outcomes.*	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
	operating procedures 1.7 Ensure safety, protection and shutdown systems are working within observed process safety guidelines
2. Isolate and maintain safety, protection and shutdown systems	2.1 Confirm scope of work 2.2 Prepare to isolate or override safety, protection and shutdown systems according to operating procedures. 2.3 Identify the risks associated with applying overrides of safety, protection and shutdown systems and equipment. 2.4 Identify the risk mitigation process when applying overrides of safety, protection and shutdown systems and equipment. 2.5 Isolate and reinstate pressure safety valve systems according to workplace procedures 2.6 Perform pressure safety valve systems duty changeover in accordance with operating procedures 2.7 Log and communicate isolation and override status of safety, protection and shutdown systems and equipment according to operating procedures
3. Identify and respond to abnormal situations	3.1 Monitor safety, protection and shutdown systems frequently and critically throughout shift 3.2 Identify the type of hardware or software changes that may affect safety, protection and shutdown systems 3.3 Identify the early warning signs of existing and developing abnormal situations relevant to plant 3.4 Identify situations that warrant local safety, protection and/or shutdown system activation 3.5 Identify the consequences and risks of activating or not activating the safety, protection and shutdown systems 3.6 Demonstrate the field-based actions that should be taken when each of the safety, protection and shutdown systems are activated and re-armed

Foundation Skills

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 and the control-room operator.
- 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. New unit.

Links

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