



Australian Government

MEM18098 Prepare to perform work associated with fuel system installation and servicing

Release: 1

MEM18098 Prepare to perform work associated with fuel system installation and servicing

Modification History

Release 1. Supersedes and is equivalent to MEM18098A Prepare to perform work associated with fuel system installation and servicing

Application

This unit of competency defines the skills and knowledge required to prepare for work associated with fuel system installation and servicing.

It applies to personnel who install or service fuel systems and equipment. They will typically undertake this in a service station forecourt which may be operational or be shut down for refurbishment or under construction.

Where the selection and use of engineering measurement is required unit MEM12023 Perform engineering measurements should also be selected.

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

Band: A

Unit weight: 2

Pre-requisite Unit

MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

Competency Field

Maintenance and diagnostics

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
---	---

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1	Determine job requirements	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	Identify job requirements from specifications, drawings, job sheets or work instructions
2	Plan and prepare for installation or servicing task	2.1	Clarify job requirements and variations to work plan and take appropriate action
		2.2	Obtain required work permits
		2.3	Identify and comply with emergency and safety procedures for worksite
3	Confirm location and nature of key fuel system components	3.1	Identify and locate above and below ground storage components
		3.2	Identify and locate fuel conveying, pumps and dispensing systems
		3.3	Confirm location of fuel system components with site plan
		3.4	Identify and report any hazards and/or inconsistencies with site plan, equipment drawings and regulatory requirements
4	Assess and manage risks associated with the work	4.1	Identify fuels and other hazardous materials and other hazards on site
		4.2	Identify and confirm shut-off procedures, details of evacuation plan and location of emergency equipment
		4.3	Assess hazards and determine risks and apply appropriate control measures to control risks

Elements describe the essential outcomes.

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

- 4.4 Select appropriate tools and equipment to be used on the job
- 4.5 Identify nature and location of required isolations
- 4.6 Determine the type of, and appropriate locations for, barriers to prevent unauthorised access to the work location and put them in place before job commencement

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

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.

Work permits include one (1) or more of the following:

- permits issued by client
- permits using the Australian Institute of Petroleum (AIP) form
- other work documents required for the job
- hot work
- cold work
- confined space
- excavation
- working at heights

Emergency and safety procedures for worksite include one (1) or more of the following:

- specific procedures for that site
- location of emergency shut-off and procedures for re-setting emergency shut-off
- dealing with spills or other losses in containment
- fire response
- other incident response procedures for that site
- other site-specific hazards and procedures

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.

Storage components include one (1) or more of the following:

- single wall tanks
- jacketed steel tanks
- double-walled tanks (dry and liquid filled interstitial space)
- fibre composite (FRP) tanks
- high density polyethylene (HDPE) tanks

Fuel conveying systems include one (1) or more of the following:

- steel pipes
- HDPE pipes
- vapour recovery systems and pipes
- pipe joining

Pumps and pump systems include one (1) or more of the following:

- centrifugal pumps
- positive displacement pumps
- pressure and suction systems
- pumping problems
- multiproduct pumps

Dispensing systems include one (1) or more of the following:

- fuel metering
- hoses and nozzles
- stage two vapour recovery
- flow control valves
- discharge control
- multiproduct dispensers

Corrosion protection systems and components include one (1) or more of the following:

- cathodic protection, including:
 - impressed current
 - sacrificial anode
- wrapping
- coating

Fuels include one (1) or more of the following:

- petrol
- ethanol blend fuels (of various concentrations)
- diesel and biodiesel
- liquefied petroleum gas (LPG)

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.

Hazardous materials include one (1) or more of the following:

- ‘solid’ pool chlorine (calcium hypochlorite)
- ‘liquid’ pool chlorine (sodium hypochlorite solutions)
- lubricants
- cleaning agents
- gas bottles
- workshop materials

Appropriate tools include:

- tools that are:
 - intrinsically safe
 - ergonomically appropriate to the job
 - safe and in good condition

Required isolations include one (1) or more of the following:

- lock out/tag out
- double block and bleed
- use of blanks, blinds and goggles
- removal of spool piece
- removal of mechanical drives

Barriers include one (1) or more of the following:

- temporary fencing
- bollards
- witches hats
- tapes
- signage

Problems include one (1) or more of the following:

- variations to the work schedule
- variations to the work scope
- issues with the public or site personnel
- failure of equipment
- inappropriate/incomplete permit or work instructions

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM18098A Prepare to perform work associated with fuel system installation and servicing

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>