



Australian Government

**Assessment Requirements for PMAOPS347
Create and conduct isolations in the
workplace**

Release: 1

Assessment Requirements for PMAOPS347 Create and conduct isolations in the workplace

Modification History

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

Performance Evidence

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

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

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- physical plant and equipment including:
 - the equipment/process being isolated
 - energy sources relevant to plant equipment
- policies and procedures including:
 - methods of creating isolations
 - methods of de-energising and isolating energy sources
 - the scope/boundaries of own role when creating and conducting the isolations
 - safety, emergency and hazard control
 - work permit systems
 - risk control measures and procedures
 - hierarchy of control
 - isolation requirements
 - methods of purging, venting, bleeding, draining and flushing
 - isolation chain of custody and handover protocols
 - communications
 - environmental management including controlling releases
 - duty of care requirements
 - standard operating procedures (SOPs)
 - work instructions
 - safe work method statements (SWMS)
 - document control
- operational parameters including:
 - methods and equipment used for draining and purging to attain zero energy

- decontamination methods and requirements for various materials and situations
- significance of time allowed for draining, purging and ventilation
- fluid dynamics relating specifically to draining piping systems, including:
 - the ability of a liquid to ‘hang-up’ in pipework
 - the importance of identifying high-point vents to release gas/vapours and low point drains to release liquids
 - how to determine the amount of liquid drained from a piping section to ascertain/prove that draining process has been effective
- the potential effects of creating a vacuum by not draining correctly (e.g. by pulling a vacuum behind a slug of liquid)
- the ALARP (as low as reasonably practicable) principle
- importance of appropriate rates of change for pressure and temperature for vessels and other plant equipment
- risk management including:
 - the chemical and physical properties of the energy sources being isolated including one or more of the following:
 - electricity (mains, solar and by generator)
 - chemicals and fuels
 - heat and steam
 - pressure, such as compressed air and water, hydraulic oil and other fluids under pressure
 - energy-storing devices such as batteries, springs, flywheels, accumulators and capacitors.
 - trapped pressure
 - site requirements in completion of bleed logs.

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:
 - real industrial equipment and its associated energy sources
 - operating procedures
- paperwork must include:
 - isolation register(s)
 - lock-out/tag-out register(s)
 - appropriate sign-offs
 - any reports, permits/work packs, and documentation required by the job/organisation
 - filing of documentation in accordance with workplace protocols.

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

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=9fc2cf53-e570-4e9f-ad6a-b228ffdb6875>