



Australian Government

Assessment Requirements for PMAOPS353 Operate and troubleshoot heating, ventilation and air conditioning 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.

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 HVAC systems including:
 - HVAC system items, functions and troubleshooting techniques
 - principles of operation
 - operating parameters and integrity limits, and product specifications and tolerances
 - operating procedures and correct methods of starting, stopping, operating, controlling and isolating and de-isolating the systems
 - emergency shutdown procedures
 - HVAC system control philosophies and strategies
 - interactions between plant items and HVAC systems
- basic physics, and chemistry to the level of being able to provide an overview of the science of HVAC systems
- HVAC system abnormal situations and required action, including but not limited to:
 - unstable control of pressure, temperature, level and flows
 - control equipment failure
 - system trips
 - change in atmospheric conditions (including rain, temperature, wind, lightning and calm weather)
 - analyser inaccuracy or malfunction
 - hierarchy of control
- HVAC system hazards:
 - possible causes
 - potential consequences
 - appropriate risk controls
 - reporting and escalation procedures.

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 located in either a live plant or a realistic simulated industrial environment
 - routine operating procedures.

Abnormal situations must include:

- industry incidents or events relevant to the operation of HVAC systems
- actions adhering to workplace policies and procedures.

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>