



**Australian Government**

# **Assessment Requirements for PMAOPS216 Operate local control system**

**Release: 1**

# Assessment Requirements for PMAOPS216 Operate local control system

## Modification History

Release 1. Supersedes and is equivalent to PMAOPS216B Operate local control system

## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and demonstrate the ability to:

- identify job requirements
- obtain and interpret data from the control system
- monitor and control individual items of equipment to meet specifications
- conduct planned and unplanned start-ups and shutdowns according to procedures
- recognise early warning signs of equipment/processes needing attention or with potential problems
- determine the most likely cause of routine problems
- take appropriate action to ensure a timely return to full performance
- distinguish between causes of problems/alarms/fault indications, such as:
  - instrument failure/malfunction
  - electrical failure/malfunction
  - mechanical failure/malfunction
  - equipment design deficiencies
  - product parameters (temperature, flows, pressure and levels)
- identify hazards and apply hazard control procedures
- complete workplace forms
- communicate with team and supervisors.

## Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- all items on a schematic of the controller and the function of each
- principles of operation and location of the process/production equipment
- specific plant process operations
- product specifications and tolerances
- systems operating parameters
- basis of control for the process
- emergency shutdown procedures
- process-specific science (physics, chemistry and biochemistry) to the level required to recognise and resolve routine problems

- mathematics to the level required to interpret control data, recognise trends and take appropriate action
- process drawings, e.g. piping and instrumentation diagram (P&ID), process flow diagram (PFD) and cause and effect
- instrumentation and control systems, e.g. relevant primary sensing devices, final control elements, transducers/transmitters
- simple control loops, including proportional integral derivative (PID) control, set points, controlled variable and indicated variable
- organisation procedures
- hazards that may arise in the job/work environment, and:
  - their possible causes
  - potential consequences
  - appropriate risk controls.

## Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- It may be appropriate to assess this unit concurrently with units such as:
  - teamwork
  - communication
  - safety
- The collection of performance evidence:
  - should occur over a range of situations which include typical disruptions to normal, smooth operation of an operating plant
  - will typically include a supervisor/third-party report or other evidence, focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
  - may include the use of an appropriate local controller controlling an industrial plant requiring demonstration of operation, start-up and shutdown procedures and responding to problems
  - may use an appropriate local controller linked to a simulator which simulates an industrial plant requiring demonstration of operation, start-up and shutdown procedures and responding to problems
  - may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

- Assessment in a simulated environment should use evidence collected from one or more of:
  - walk-throughs
  - pilot plant operation
  - demonstration of skills
  - industry-based case studies/scenarios
  - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- In addition the assessor or anyone acting in subject matter expert role in assessment must demonstrate both technical competency and currency. If the assessor cannot demonstrate technical competency and currency they shall assess with a subject matter expert who does meet these requirements.
- Technical competence can be demonstrated through one or more of:
  - relevant VET or other qualification/Statement of Attainment
  - appropriate workplace experience undertaking the type of work being assessed under routine and non-routine conditions
  - appropriate workplace experience supervising/evaluating the type of work being assessed under routine and non-routine conditions.
- Current industry skills are the knowledge, skills and experience required by VET trainers and assessors and those who provide training and assessment under supervision to ensure that their training and assessment is based on current industry practices and meets the needs of industry.
- Current industry skills may be informed by consultations with industry and may include, but is not limited to:
  - having knowledge of and/or experience using the latest techniques and processes
  - possessing a high level of product knowledge
  - understanding and knowledge of legislation relevant to the industry and to employment and workplaces
  - being customer/client-oriented

possessing formal industry and training qualifications training content that reflects current industry practice.

## Links

Companion Volume implementation guides are found in VETNet -

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