



Australian Government

PMAOMIR305 Operate panel during an emergency

Release: 1

PMAOMIR305 Operate panel during an emergency

Modification History

Release 1. Supersedes and is equivalent to PMAOMIR305A Operate panel during an emergency

Application

This unit of competency covers the skills and knowledge required to operate the control panel during a declared emergency. While most PMA units focus on keeping out of trouble, this unit applies once an emergency has been declared or where conditions in the plant or process have escalated to an emergency. This unit of competency deals with applying the relevant technical and plant knowledge to assess, monitor and respond to an emergency and maintain operations as appropriate during an emergency.

This competency applies to an individual working as part of a team or group and working in liaison with other shift and emergency response team members, and the incident commander and control room operator, as appropriate.

This unit is relevant to the National Standard for the Control of Major Hazard Facilities [NOHSC:1014 (2002)] and the National Code of Practice for the Control of Major Hazard Facilities [NOHSC:2016(1996)]. Contextualisation must be undertaken in order to ensure compliance with specific state or territory legislation.

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

Pre-requisite Unit

PMAOPS305 Operate process control systems

Competency Field

Incident readiness and response

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1 **Assess a potential** 1.1 Identify emergency

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| | emergency | 1.2 | Clarify cause of the alarm |
| | | 1.3 | Prepare for response to emergency |
| | | 1.4 | Escalate to emergency response, as required |
| | | 1.5 | Report the critical situation, as required |
| | | 1.6 | Return to normal operations, as appropriate |
| 2 | Respond to emergency according to procedures | 2.1 | Activate all relevant alarms |
| | | 2.2 | Communicate as required to relevant personnel |
| | | 2.3 | Check status of all relevant plant and take appropriate action |
| | | 2.4 | Maintain a record of critical information, as required |
| | | 2.5 | Shut down plant items, as appropriate |
| 3 | Monitor emergency | 3.1 | Monitor any escalation of the emergency |
| | | 3.2 | Monitor critical variables of relevant plant |
| | | 3.3 | Monitor weather and other external conditions |
| | | 3.4 | Clarify and act on information received |
| | | 3.5 | Make changes as requested by incident commander |
| | | 3.6 | Continue to operate any parts of the plant which are still online |
| | | 3.7 | Communicate as required to relevant personnel |
| 4 | Conclude emergency response | 4.1 | Sound all clear when instructed |
| | | 4.2 | Confirm plant systems which are able to be operated |
| | | 4.3 | Bring operational plant back to best available operating conditions |
| | | 4.4 | Review procedures and training |

4.5 Review emergency response

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

All operations to which this unit applies are subject to stringent health, safety and environment (HSE) requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes

- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Hazards

Hazards include one or more of the following:

- smoke, darkness and heat
- heat, smoke, dust or other atmospheric hazards
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- structural collapse
- equipment failures
- industrial (machinery, equipment and product)
- equipment or product mass
- noise, rotational equipment or vibration
- plant services (steam, condensate and cooling water)
- limited head spaces or overhangs
- working at heights, in restricted or confined spaces, or in environments subjected to heat, noise, dusts or vapours
- fire and explosion
- flammability and explosivity
- hazardous products and materials
- unauthorised personnel
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- extreme weather
- other hazards that might arise

Incident commander

The control room operator will act under the direction of a designated incident commander in a declared emergency incident.

While this role may be delegated to another, responsibility for the correct operation of the control room and its operators remains with the commander.

Reports

Reports are as required by the organisation and will include one or more of the following:

- paper or electronic-based logs and reports
- verbal/radio reports

Non-routine problems Non-routine problems must be resolved by applying operational knowledge to develop new solutions, either individually or in collaboration with relevant experts, to:

- determine problems needing action
- determine possible fault causes
- develop solutions to problems which do not have a known solution
- follow through items initiated until final resolution has occurred
- report problems outside area of responsibility to designated person

Non-routine problems are unexpected problems, or variations of previous problems and include one or more of the following:

- loss of control of a process
- unstable process, feed or utilities
- loss of containment
- fire/explosion
- terrorist or similar threat or action

Operational knowledge includes one or more of the following:

- procedures
- training
- technical information such as journals, engineering specifications
- remembered experience
- relevant knowledge obtained from appropriate people

Appropriate action Appropriate action includes, but is not limited to one or more of the following:

- determining priority of actions in response to problems
- accessing and applying relevant technical and plant data
- applying appropriate problem-solving techniques to determine possible fault causes
- rectifying problem using appropriate solution within area of responsibility
- following through items initiated until final resolution has occurred
- reporting problems outside area of responsibility/ability to resolve to designated person

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for PMAOMIR305 Operate panel during an emergency

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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:

- operate a distributed control system (DCS)
- react appropriately under stress
- monitor an emergency situation and take action to minimise risks to personnel, plant and environment
- apply relevant technical and plant data and problem-solving techniques to determine possible fault causes and solutions
- complete paper or electronic-based logs and records
- communicate verbal/radio reports effectively under stress
- follow instructions from incident commander
- report problems outside area of responsibility or ability to resolve to designated person.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- organisational procedures, including those covering:
 - safety, hazards and hazard control
 - incident, fire and accident
 - emergency response plans
 - communication systems
 - reporting
- hazards that may arise in an incident and appropriate risk controls
- accessing and interpreting weather conditions
- alarms, causes of alarms and false alarms
- indicators of developing and existing critical situations
- critical variables of relevant plant
- types of emergencies that can arise and panel operations appropriate to control emergency situations.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of abnormal situations which include emergencies
 - may use industry-based simulation for all of the unit
 - may use a DCS linked to a plant simulator where a suitable simulator is available
 - must simulate emergency situations appropriate to the plant.
- Assessment in a simulated environment should use evidence collected from demonstration of skills in a simulated environment and one or more of:
 - walk-throughs
 - pilot plant operation
 - use of a simulator
 - 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.
- 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 must 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
- Currency can be demonstrated through one or more of:
 - being currently employed undertaking the type of work being assessed
 - being employed by the organisation undertaking the type of work being assessed and having maintained currency in accordance with that organisation’s policies and procedures

- having consulted/had contact with an organisation undertaking the type of work being assessed within the last twelve months, the consultation/contact being related to assessment
- conducting on-the-job training/assessments of the type of work being assessed
- being an active member of a relevant professional body and participating in activities relevant to the assessment of this type of work

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