



Australian Government

Department of Education, Employment and Workplace Relations

PMAOPS505A Control the process during abnormal situations

Revision Number: 1

PMAOPS505A Control the process during abnormal situations

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the responses required by a senior technician to make decisions and control a process during abnormal or declared incident situations to prevent or avoid an emergency.
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Application of the Unit

Application of the unit	In a typical scenario, a senior technician takes control of the process and makes decisions in order to manage an abnormal situation. This could be in response to a declared situation or the plant condition leading to an emergency situation. The senior technician would operate from the control center or panel and may have an Emergency Shutdown (ESD) capability available. The senior technician will be part of a team and would be expected to lead the team and direct others to respond to the situation appropriately, with a view to recovery of the situation and restoring the plant/process to a stable condition. The technician would: • clarify the situation • prioritise the responses and actions • organise and direct the operations team • review the situation and respond to any changes • communicate with all relevant personnel. Generally the senior technician would work as part of an operations team for this unit, the ability to communicate with all internal and external stakeholders is vital.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
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Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify the abnormal situation	1.1. Identify the state of the plant/process 1.2. Gather available information on the plant/process with particular focus on trends and rates of change 1.3. Verify and confirm situation with other technicians in the area and any upstream or downstream units.
2. Respond appropriately.	2.1. Apply immediate actions to respond to the abnormal situation to bring the plant/process to a safer state 2.2. Decide whether to continue operations, shutdown or abandon 2.3. Keep in contact with other technicians in the area
3. Review and respond to changes.	3.1. Review the situation, gather data on the state of the plant/process and the trends and rates of change 3.2. Make appropriate changes to the state of the plant/process to keep parameters within limits 3.3. Rectify or initiate procedures to rectify any faults or adjustments to secure the safe operation of the plant/process 3.4. Review the state of the recovery, making adjustments as required 3.5. Keep all other stakeholders informed of progress 3.6. When plant is restored to stable conditions, continue to monitor the situation.
4. Document abnormal situation and response.	4.1. Complete all logs and workplace documentation relating to the abnormal situation, ensuring all details, actions and responses are accurately recorded 4.2. Record any further ongoing production problems and report to appropriate persons or authority.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills

This unit requires skills of:

- analysis of rapidly changing and possibly confusing data
- problem solving
- communication under stress
- leadership of the operational team

Required knowledge

Competence includes a deep understanding of:

- plant equipment, its characteristics and limitations
- impact of variations in plant/process and the distinctive signs of each variation
- process chemistry, physics and biochemistry as relevant
- problem isolation techniques
- problem analysis techniques
- organisation approval processes

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment of this unit should include demonstrated competence on actual plant and equipment in a work environment. The unit will be assessed in as holistic a manner as is practical and may be integrated with the assessment of other relevant units of competency. Assessment will occur over a range of situations which will include a range of problems, problem causes and environments.

Simulation may be required to allow for assessment of parts of this unit. Simulation should be based on the actual problems and should include the use of case studies/scenarios and role plays.

This unit of competency requires a significant body of knowledge which will be assessed through questioning and the use of what-if scenarios.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Competence must be demonstrated in the ability to define and analyse the problem as well as deal with the stakeholders. The stakeholders should be satisfied with the solution, as well as the solution being technically sound.

Consistent performance should be demonstrated. In particular look to see that:

- different types of abnormal situations can be analysed and resolved
- different types of stakeholders can be satisfied
- the range of possible causes can be identified and analysed and the most likely cause determined
- appropriate action is taken.

These aspects may be best assessed using a range of scenarios/case studies/what-ifs. These assessment activities should include a range of abnormal situations, including new, unusual and improbable situations which may have been generated from the past history and similar sources.

Context of and specific resources for

Assessment will require a suitable method of

EVIDENCE GUIDE	
assessment	gathering evidence of problem solving ability over a range of situations. A bank of scenarios/case studies/what-ifs will be required as will a bank of questions which will be used to probe the reasoning behind the observable actions.
Method of assessment	In all plants it may be appropriate to assess this unit concurrently with relevant teamwork and communication units.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

Range Statement

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Codes of practice/ standards	Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.
Context	This unit of competency includes abnormal situations, declared situations or emergency conditions in the plant or process, where recovery of the situation is possible.
Health, safety and environment (HSE)	All operations to which this unit applies are subject to stringent health, safety and environment requirements, which may be imposed through State 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.

Unit Sector(s)

Unit sector	Operational/technical
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		
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