



Australian Government

PMBPROD343 Shut down plant area

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to PMBPROD343C Shut down plant area

Application

This unit of competency covers the skills and knowledge required to shut down a plant area or line. Shutdown of a plant area/line is typically performed at the end of a production run or when maintenance is required.

This unit of competency applies to advanced operators who are required to identify the impact of the shutdown; plan the shutdown activities; supervise personnel; ensure tags, isolations, guards, locks (etc) are in place; ensure adjustments and maintenance are carried out and solve problems within area of responsibility.

This unit of competency applies to an advanced operator demonstrating theoretical and technical knowledge and well developed skills in situations that require some discretion and judgement. The advanced operator may work alone or as a member of a team or group and will work in liaison with other shift team members, team leader and supervisor, as appropriate.

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

Pre-requisite Unit

Nil

Competency Field

Production

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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|---|---|--|
| 1 | Respond to requests for equipment shutdown | 1.1 Identify the nature of the shutdown required and the circumstances leading to the decision |
| | | 1.2 Establish the impact of the shutdown on production capabilities and where necessary reassign work |
| | | 1.3 Advise appropriate personnel of shutdown |
| | | 1.4 Plan the level of shutdown activity required |
| 2 | Confirm shutdown of equipment or work area to procedures | 2.1 Identify specific plant and equipment affected by the shutdown and ensure that no further raw materials are provided |
| | | 2.2 Ensure equipment and site is cleaned up with all waste removed for recycling or disposal |
| | | 2.3 Tag or isolate equipment, and appropriate personnel are advised that the equipment and/or area are off-line |
| | | 2.4 Supervise personnel in equipment shutdown procedures |
| 3 | Prepare equipment for idle period to procedures | 3.1 Ensure that suitable guards, locks, tags or notices are placed on equipment in clear view to prevent inadvertent start-up |
| | | 3.2 Ensure that any adjustments, control alterations, lubrication or application of corrosion inhibitors are undertaken by appropriate personnel in accordance with workplace procedures |
| | | 3.3 Arrange for appropriate coverage of equipment and security of area in the case of prolonged idleness |
| 4 | Complete workplace documentation | 4.1 Complete relevant documentation, detailing the nature of the shutdown activity, dates and the equipment which has been taken out of service |
| | | 4.2 Advise management of shutdown procedure outcomes |

- 4.3 Complete required regulatory documentation and obtain any external certification that may be necessary

- 5 **Anticipate and solve problems**
 - 5.1 Recognise a problem or a potential problem
 - 5.2 Determine problems needing priority action
 - 5.3 Refer problems outside area of responsibility to appropriate person, with possible causes
 - 5.4 Seek information and assistance as required to solve problems
 - 5.5 Solve problems within area of responsibility
 - 5.6 Follow through items initiated until final resolution has occurred

Foundation Skills

This section describes those required skills (language, literacy and numeracy) 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.

Applicable legislation, regulations, standards and codes of practice include:

- health, safety and environmental (HSE) legislation, regulations and codes of practice relevant to the workplace, manual handling and hazardous materials
- Australian/international standards relevant to the materials being used and products being made
- any relevant licence and certification requirements.

All operations to which this unit applies are subject to stringent 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 such requirements the legislative 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 any combination of:

- 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.

Tools and equipment Tools and equipment include:

- production plant/equipment
- machine control systems

- safety interlocks and systems
- measuring instruments
- ancillary equipment that is integral to the process.

Additional tools and equipment will be selected as required from:

- hand tools used in the process
- hoists/lifting equipment not requiring any special permits or licences
- manual handling aids, such as hand carts and trolleys
- relevant personal protective equipment (PPE).

Hazards

Hazards must be identified and controlled. Identifying hazards requires consideration of:

- weight, shape, volume of materials to be handled
- hazardous products and materials
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- smoke, dust, vapours or other atmospheric hazards
- high temperatures
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- equipment failures
- machinery, equipment and product mass
- other hazards that might arise.

Problems

Routine and non-routine problems must be resolved.

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:

- unstable process variables
- sub-optimal operation
- variations in feed rates
- variations in quality
- emergency situations
- inappropriate isolation practices
- site contamination.

Operational knowledge includes one or more of:

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

Routine problems are predictable and have known solutions and include one or more of:

- cycle interruptions
- degradation of materials
- cooling and solidification of compounds
- damage to equipment.

Unit Mapping Information

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Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>