



Australian Government

MSS405083 Adapt a proactive maintenance strategy for a seasonal or cyclical business

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MSS405083A Adapt a proactive maintenance strategy for a seasonal or cyclical business

Application

This unit of competency applies to an individual responsible for developing a proactive maintenance strategy for an organisation that operates seasonal/cyclical plant and also adopts proactive maintenance strategies. The organisation will also usually be implementing other competitive systems and practices. Typical applications include many food processing enterprises, cotton ginning, sugar refineries, and so on. The unit covers changing the normal priority of some of the choices that need to be made in implementing a proactive maintenance strategy.

The unit applies to the selection of appropriate strategies; initial development and implementation will need to be managed as well as application of the strategies to new areas and the improvement of operation in existing areas. This would typically be done in a team environment and in consultation with all key stakeholders.

This unit requires the application of skills associated with problem solving, initiative, enterprise, planning and organising in order to adapt a proactive maintenance strategy to meet seasonal or cyclical needs of the enterprise. This work is done in the context of using computer technology and also requires aspects of self-management and learning to ensure improvement of own performance.

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

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the

Performance criteria describe the performance needed to

essential outcomes.	demonstrate achievement of the element.
1 Interpret proactive maintenance strategy	1.1 Analyse proactive maintenance strategy. 1.2 Identify areas which may conflict with cyclical requirements. 1.3 Identify critical conditions which must be met in order to maintain plant reliability until season end. 1.4 Compile cycle requirements for proactive maintenance strategy.
2 Identify cyclical requirements of the process	2.1 Establish when the season finishes and the expected cycle duration. 2.2 Identify plant items and maintenance activities which production imperatives dictate can only be completed after season end. 2.3 Identify critical conditions which must be met in order to maintain plant reliability until season end. 2.4 Compile cycle requirements for proactive maintenance strategy.
3 Identify maintenance requirements of ancillary equipment	3.1 Identify proactive maintenance requirements of ancillary equipment. 3.2 Identify maintenance which can only be done at season end. 3.3 Compile ancillary equipment requirements for proactive maintenance strategy.
4 Identify maintenance requirements during season	4.1 Identify critical maintenance activities which must be done during season. 4.2 Negotiate conflicts with seasonal or cyclical processing requirements. 4.3 Compile proactive maintenance strategy requirements during season.

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| 5 | Adapt proactive maintenance strategy | 5.1 | Compare identified requirements to the proactive maintenance strategy. |
| | | 5.2 | Negotiate a proactive maintenance strategy which meets these requirements. |
| | | 5.3 | Involve team members in relating identified problems and opportunities for improvement to the maintenance strategy, and involve them in developing any required changes to ensure awareness, learning and commitment. |
| | | 5.4 | Monitor the implementation of the strategy to ensure the identified requirements are met. |
| | | 5.5 | Make required adjustments and arrange review schedule. |

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.

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| Competitive systems and practices include one or more of: | <ul style="list-style-type: none"> • lean operations • agile operations • preventative and predictive maintenance approaches • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams |
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- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

**Critical conditions
include one or more
of:**

- maximum load factors
- lubrication schedules
- correct operating conditions, e.g. temperatures
- cleaning and waste removal schedules
- equipment inspection and test schedules
- development of standard operating procedures and training of operators.

**Ancillary
equipment includes
one or more of:**

- boilers
- utilities
- plants
- waste treatment and hazard control equipment (e.g. fire ring mains, fire monitors, steam curtains, gas (or other loss of containment) monitors, blast protection and flare stacks).

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS405083 Adapt a proactive maintenance strategy for a seasonal or cyclical business

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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 include the ability, for one (1) or more seasonal/cyclic plants, to:

- analyse the equipment availability requirements of a seasonal or cyclical operation
- consider a variety of proactive maintenance strategies for suitability to a seasonal or cyclical operation
- consult operators, maintenance, management and other stakeholders in decisions on proactive maintenance strategies
- monitor the implementation of selected proactive maintenance strategies and make required adjustments.

Knowledge Evidence

Must provide evidence that demonstrates sufficient knowledge to interact with relevant personnel and be able to adapt a proactive maintenance strategy, including knowledge of:

- processing equipment and products of the organisation
- start-up, shutdown and isolation considerations for the organisation
- skills required by operators and maintenance personnel to achieve effective proactive maintenance strategy implementation
- characteristics and strengths of different types of strategies, techniques and tools
- holistic costs of different strategies combining cost of maintenance with costs of lost production, sales, and so on, as relevant to the organisation
- business goals sufficient to match the strategy to the business needs
- strategic thinking and its application to proactive maintenance
- principles of process equipment and how to improve its reliability
- resources required and how to obtain them.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:

- a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
- multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project where proactive maintenance strategies are being implemented in new areas and/or for the improvement of operation in existing areas of a seasonal/cyclic setting.
- Knowledge evidence may be collected concurrently with performance evidence 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.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

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