



Australian Government

MSS404085 Undertake proactive maintenance analyses

Release: 1

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Modification History

Release 1. Unit code changed. Application changed. Performance criteria changed. Range of conditions removed. Assessment requirements changed. Supersedes and is equivalent to MSS404081 Undertake proactive maintenance analyses.

Application

This unit describes the skills and knowledge required to undertake the most common forms of analyses associated with predictive/preventative/reliability centred maintenance strategies.

This unit applies to a technical expert (usually an engineer, technician or tradesperson) who is required to undertake analyses for predictive, preventative and/or reliability centred maintenance of plant/equipment as part of a competitive systems and practices strategy. This includes undertaking a failure effects analysis in accordance with organisation's procedures.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

Nil.

Competency Field

Competitive systems and practices

Unit Sector

Elements and Performance Criteria

Elements	Performance Criteria	
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
1. Liaise with operator	1.1	Establish a relationship with the operator of equipment
	1.2	Check the operator has the required skills and resources to keep the equipment clean
	1.3	Check the operator can monitor the operation of the equipment
	1.4	Communicate with operator about the overall equipment effectiveness (OEE) of equipment

	1.5	Involve operator, team leader and key personnel in identification of skill needs and means of skill acquisition to fill any identified gaps
2. Analyse history	2.1	Read maintenance records and analyse mean time between failures (MTBF)
	2.2	Read and analyse performance data of the equipment
	2.3	Identify causes of changes to historic trends and status
	2.4	Determine methods of ensuring causes of improvements and resolution of deterioration are locked in
3. Undertake failure effects analysis	3.1	Undertake analysis of failure effects and causes and record results
	3.2	Investigate methods of eliminating possibility of failure and minimising probability of failure
	3.3	Investigate methods of minimising the impact when failure cannot be eliminated
	3.4	Liaise with operator, team leader and key personnel regarding solutions
	3.5	Select and implement solutions
4. Undertake condition monitoring analysis	4.1	Obtain data for condition monitoring analysis
	4.2	Read and interpret condition monitoring data
	4.3	Predict required maintenance type and timing from condition monitoring data
	4.4	Liaise with operator, team leader and key personnel regarding implications of condition monitoring report
	4.5	Involve team members in development of changes to maintenance strategy to ensure awareness, learning and commitment

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

Supersedes and is equivalent to MSS404081 Undertake proactive maintenance analyses.

Links

The MSS Sustainability Companion Volume Implementation Guides are available from VETNet: -

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

Assessment Requirements for MSS404085 Undertake proactive maintenance analyses

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- undertaken proactive maintenance analyses of at least 2 items of equipment.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- cleaning requirements and operational principles of equipment in area of responsibility
- methods of assessing operator and maintenance skill gaps and filling them
- techniques for determining mean time between failures (MTBF)
- techniques for undertaking failure effects analysis
- principles of competitive systems and practices strategies being implemented and how to adapt them to maintenance
- root cause analysis
- techniques to analyse condition monitoring data.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions, contingencies, facilities, equipment and resources.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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