



Australian Government

MSS014010 Optimise sustainability of a process or work area

Release: 1

MSS014010 Optimise sustainability of a process or work area

Modification History

Release 1. Updated unit code. Changes to performance criteria. Range of conditions removed. Assessment requirements amended. Equivalent outcome.

Application

This unit describes the skills and knowledge to optimise the sustainability performance of a complete work area in a plant or part of the manufacturing value chain. It includes ensuring that production systems comply with sustainability and environmental requirements and that optimal process, plant and equipment utilisation is planned and carried out. It also covers problem solving to fully meet sustainability needs and to ensure that production of finished goods meets customer requirements. The unit applies to products made, services offered, and use of sites by an organisation or manufacturing value chain member (supplier of goods or services or a customer).

This unit applies inside organisations and their value chains and has been developed with manufacturing operations as a focus, especially work areas that process materials or components to manufacture products.

This unit applies to senior operators, technicians, team leaders or frontline managers and other support staff who optimise process systems as part of their work function. The unit includes all items of equipment and unit operations which form part of the process of a complete area and assumes that the required production, technical, science or other operational skills and knowledge necessary to work in the process or work area have already been gained.

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

Sustainable operations

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	Analyse and evaluate current sustainability performance of process or work area	1.1	Identify sustainability goals of the enterprise as they relate to work area
		1.2	Compare actual with possible performance
		1.3	Identify abnormal or sub-optimal sustainability performance
		1.4	Identify hazards associated with process, plant and equipment relevant to work area
		1.5	Collect, read and evaluate records to determine possible causes for sub-optimal sustainability performance
		1.6	Rank possible causes from most to least probable cause
2	Develop plan to optimise sustainable performance of process or work area	2.1	Analyse causes to determine action
		2.2	Predict the impact of a change in one unit or area on other value chain components
		2.3	Predict the impact of a change on sustainability performance
		2.4	Develop measurable objectives and evaluate alternatives
		2.5	Identify requirements to implement change
		2.6	Consult with stakeholders regarding planned changes and impacts
		2.7	Write optimisation plan taking account of hazards identified and sustainability implications and communicate to appropriate personnel
		2.8	Determine measures of effectiveness and how optimisation action will be evaluated
3	Coordinate sustainability optimisation action plan	3.1	Coordinate all appropriate process steps and operations to rectify causes in process, plant and equipment performance
		3.2	Implement all required optimisation actions

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- 3.3 Evaluate optimisation actions
- 3.4 Communicate optimisation outcomes to relevant personnel
- 3.5 Implement procedures and systems to eliminate possible future causes
- 3.6 Record information according to organisation requirements

4 Develop continuous improvement strategies

- 4.1 Review sources of information to identify possible factors causing sub-optimal performance
- 4.2 Identify options for removing or controlling the risk of sub-optimal performance
- 4.3 Assess the adequacy of existing control and quality methods and systems
- 4.4 Identify opportunities to continuously improve performance
- 4.5 Develop recommendations for continual improvement of process, plant and equipment effectiveness
- 4.6 Consult with appropriate personnel and implement continuous improvement strategies
- 4.7 Document implementation of continuous improvement strategies

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.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS014003 Optimise sustainability of a process or plant area.

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 MSS014010 Optimise sustainability of a process or work area

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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:

- developed and implemented a plan to optimise sustainable performance of at least 1 process or work area, including:
 - identifying, analysing and addressing performance issues
 - recommending strategies for continuous improvement.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principles and theory of the process, equipment and systems used in the work area
- support functions needed for effective functioning of the process or work area, including logistics, order processing, warehousing and storage, maintenance and administration
- regulatory requirements related to sustainability, work health and safety (WHS), risk control, and process and work area optimisation
- starting quantity and quality of materials
- efficiency maximisation processes relevant to work area
- throughput maximisation processes relevant to work area
- energy efficiency concepts relevant to work area
- potential ecological impacts of work area processes or products
- building management system
- use of utilities
- air conditioning plant
- basic comfort parameters and psychrometrics
- labour utilisation concepts relevant to work area
- minimisation of waste and rework
- potential of improved workplace layout and workflow.

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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