



Australian Government

MSMSUP404 Coordinate maintenance

Release: 1

MSMSUP404 Coordinate maintenance

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS404A Co-ordinate maintenance

Application

This unit of competency covers the skills and knowledge required to coordinate maintenance of a manufacturing facility.

It applies to experienced technicians, supervisors, maintenance coordinators or team leaders, working either independently or as part of a team. They will be required to apply knowledge of equipment operating principles, service requirements and workplace production operations to the coordination of maintenance activities to meet the objectives of restoring the plant/equipment condition, consistent with production requirements. They will not be required to actually do the maintenance.

This unit of competency applies to all work environments and sectors within the manufacturing industry. It applies to coordination of one or more of:

- predictive and preventative operational maintenance
- proactive maintenance
- reactive maintenance.

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

Pre-requisite Unit

Nil

Competency Field

Support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

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

1	Plan maintenance	1.1	Develop work plans for scheduled routine maintenance
---	------------------	-----	--

		activities
		1.2 Develop contingency plans for unscheduled maintenance activities
		1.3 Source maintenance providers (internal/external)
		1.4 Develop costings for maintenance work
		1.5 Identify and control hazards
		1.6 Document and record required production interruptions, processes and procedures
		1.7 Obtain required authorisations for the maintenance work
2	Organise maintenance	2.1 Schedule maintenance activities, with reference to production requirements and availability of resources
		2.2 Review available maintenance expertise and arrange appropriate training and assessment where necessary
		2.3 Obtain approvals for maintenance schedule as necessary to coordinate with production requirements
3	Assemble maintenance requirements	3.1 Determine resources required (equipment, personnel and consumables) to meet maintenance schedule
		3.2 Locate and coordinate supply of consumables, equipment and expertise to meet maintenance schedule
		3.3 Purchase equipment, consumables and expertise as required
4	Complete maintenance	4.1 Complete maintenance schedule
		4.2 Make appropriate readings, measurements and recordings and compare to equipment, product and other relevant specifications
		4.3 Identify areas requiring further testing of plant, which has been subject to maintenance, and recommend appropriate procedures to supervisory staff

- 4.4 Make appropriate adjustments to the maintenance schedule
- 4.5 Complete records as required, noting areas where changes to equipment operation or routine maintenance are required

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.

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, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

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 more of the following:

- 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 one or more of the following:

- hand tools specific for the task
- testing equipment
- measuring and aligning equipment
- computer equipment
- relevant personal protective equipment (PPE)

Hazards

Hazards include one or more of the following:

- ineffective isolations of energy sources, motive power and process materials
- manual handling of machinery components
- hot, cold or components containing dangerous materials
- external hazards (e.g. traffic into a maintenance area)
- smoke, darkness and heat
- heat, smoke, dust or other atmospheric hazards
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- structural collapse
- equipment failures
- industrial (machinery, equipment and product)
- equipment or product mass
- noise, rotational equipment or vibration
- limited head spaces or overhangs
- working at heights, in restricted or confined spaces, or in environments subjected to heat, noise, dusts or vapours
- fire and explosion
- flammability and explosivity
- hazardous products and materials
- unauthorised personnel
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- extreme weather
- other hazards that might arise

Data and plant records

Data and plant records include one or more of the following:

- plant data

- log sheets
- operational and performance reports
- equipment performance (e.g. speed, output and variations)
- equipment component performance
- sequences and timing of operations
- materials changes (desired and not desired)
- physical aspects, such as noise, smell, feel and pressure condition monitoring information
- planned maintenance schedules
- procedures
- manufacturer specifications, instructions, service manuals and other information

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMOPS404A Co-ordinate maintenance

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMSUP404 Coordinate maintenance

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS404A Co-ordinate maintenance

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 must include the ability to:

- plan for maintenance requirements in standard and non-standard situations and determine appropriate action consistent with operation guidelines and regulatory framework
- identify and interpret information from a range of internal and external sources
- develop and adjust work plans for the maintenance activities
- coordinate resources to meet maintenance work plans
- communicate effectively with team/work group, supervisors and other personnel
- monitor work plans for maintenance activities.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- characteristics and capabilities of relevant equipment, materials and processes
- functions and troubleshooting of internal components and their problems
- routine and non-routine causes of equipment failures and processes to develop solutions
- service conditions which may increase maintenance
- urgency and timeliness factors in planning maintenance activities in relation to production requirements
- proactive, predictive, preventative and reactive maintenance principles.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of an operating plant
 - will typically include a supervisor/third-party report or other evidence, focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include the coordination of maintenance in an appropriate industrial context

- may use industry-based simulation for part only of the unit where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - pilot plant operation
 - demonstration of skills
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) 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.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>