



Australian Government

Department of Education, Employment and Workplace Relations

RIISAM501A Implement and maintain the site plant, equipment and infrastructure maintenance plan

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the implementation and maintaining of site plant, equipment and infrastructure maintenance plans in resources and infrastructure industries. It includes: planning and preparation of a site maintenance programs; implementation of those programs; and the monitoring, adjusting and reporting on maintenance programs.

Application of the Unit

This unit is appropriate for those working in management or technical specialist roles in organisations or on sites, within:

- Civil construction
- Coal mining
- Drilling
- Extractive industries
- Metalliferous mining

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</p>
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<p>1. Plan and prepare a maintenance program</p>	<p>1.1. Access, interpret and apply compliance documentation relevant to implementation and maintaining of site plant, equipment and infrastructure maintenance plans</p> <p>1.2. Identify and determine maintenance needs of site plant, equipment and infrastructure in compliance with organisation's plant, equipment and infrastructure maintenance requirements</p> <p>1.3. Obtain manufacturers and supplier's advice on maintenance needs of plant, equipment and infrastructure</p> <p>1.4. Prepare a maintenance program, in consultation with other stakeholders, which meets the organisation's requirements</p> <p>1.5. Apply risk, statutory compliance, health, safety and environmental management principles when developing the maintenance program</p> <p>1.6. Identify and gain approval for resources required to support the maintenance program</p> <p>1.7. Obtain any approvals required for the implementation of the maintenance program</p>
<p>2. Implement maintenance program</p>	<p>2.1. Advise site supervisors and staff of the need for and objectives of the maintenance program and seek their input into its implementation</p> <p>2.2. Ensure maintenance instructions are in place for each activity and appropriate permitting processes are in place for isolating plant and systems prior to maintenance</p> <p>2.3. Ensure return to service commissioning and hand over system is in place with operating section</p> <p>2.4. Arrange identified training requirements for maintenance and any necessary operation/commissioning activities to support the implementation of the program</p> <p>2.5. Allocate responsibilities and provide clear</p>

	<p>instructions to supervisors and other appropriate personnel in sufficient detail for them to fulfil their role in the implementation of the program</p> <p>2.6. Arrange for the timely availability of financial and other resources necessary for the implementation of the program</p> <p>2.7. Arrange on-line maintenance and outage schedules to minimise impact on mining operations</p>
<p>3. Monitor, adjust and report on program</p>	<p>3.1. Monitor plant performance and use information to predict failure events and need for maintenance</p> <p>3.2. Ensure procedures are in place to review plant or component failures to assess if redesign of components is required or warranted</p> <p>3.3. Ensure records of maintenance, monitoring, breakdown, major plant modifications, programmed activities and costs are maintained in sufficient detail to allow later analysis</p> <p>3.4. Monitor and report on any environmental, safety or other event outside acceptable standards</p> <p>3.5. Analyse maintenance program performance and identify improvements</p> <p>3.6. Implement improvements to program having gained approval where necessary</p> <p>3.7. Complete and submit reports on plant, equipment and infrastructure maintenance in accordance with organisational requirements</p>

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to implement and maintain the site plant, equipment and infrastructure maintenance plan:

- apply legislative, organisation and site requirements and procedures
- apply statutory and organisational requirements
- apply procedures for identifying maintenance needs
- apply maintenance programs planning techniques
- apply techniques to link maintenance requirements with operational availability opportunities
- apply the organisation plant, equipment and infrastructure maintenance requirements
- apply risk, statutory compliance, health, safety and environmental management principles
- apply financial and other resource estimates and budgets preparation procedures
- provide leadership in the workplace

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to implement and maintain the site plant, equipment and infrastructure maintenance plan:

- statutory and organisational requirements
- maintenance needs of site plant, equipment and infrastructure
- organisation plant, equipment and infrastructure maintenance requirements
- risk, statutory compliance, health, safety and environmental management principles
- financial and other resources
- analysis techniques
- approval processes
- reporting requirements
- training systems

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following:</p> <ul style="list-style-type: none"> • knowledge of the requirements, procedures and instructions for the implementation and maintaining of site plant, equipment and infrastructure maintenance plans • implementation of procedures and techniques for the safe, effective and efficient implementation and maintaining of the site plant, equipment and infrastructure maintenance plan • the identification of the relevant information and scope of the work required to meet the required outcomes • the identification of viable options and the selection of maintenance plan options that best meet the required outcomes • working with others to undertake and complete the implementation and maintenance of the site plant, equipment and infrastructure maintenance plan • consistent successful implementation and maintenance of the site plant, equipment and infrastructure maintenance plan
Context of and specific resources for assessment	<ul style="list-style-type: none"> • This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • The assessment environment should not

	<p>disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.</p> <ul style="list-style-type: none"> • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second language issues. • Assessment of this competency requires typical resources normally used in a civil works environment. Selection and use of resources for particular worksites may differ due to site circumstances. • Where applicable, physical resources should include equipment modified for people with disabilities. • Access must be provided to appropriate learning and/or assessment support when required.
<p>Method of assessment</p>	<p>This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods:</p> <ul style="list-style-type: none"> • written and/or oral assessment of the candidate's required knowledge to apply in undertaking of the implementation and maintaining of the site plant, equipment and infrastructure maintenance plans • observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> • implementation of appropriate procedures and techniques for the safe, effective and efficient achievement of the required outcomes • identification of the relevant information and scope of the work required to meet the required outcomes • identification of viable options and the selection of maintenance plan options that best meet the required outcomes • consistently achieving the required

	<p>outcomes</p> <ul style="list-style-type: none">• first hand testimonial and documentary evidence of the candidate's:<ul style="list-style-type: none">• working with others to undertake and complete the implementation and maintenance of the site plant, equipment and infrastructure maintenance plan• provision of clear and timely required support and advice on the implementation and maintenance of the site plant, equipment and infrastructure maintenance plan
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Relevant compliance documentation may include:</p>	<ul style="list-style-type: none"> • legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • code of practice • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
<p>Plant, equipment and infrastructure maintenance may include:</p>	<ul style="list-style-type: none"> • preserving the value of assets • breakdown maintenance or scheduled maintenance • maintenance or serviceability design of plant
<p>Maintenance program may include:</p>	<ul style="list-style-type: none"> • scheduling requirements • development approval, mining licences, (or equivalent), constraints • limitation on tasks to be performed by site personnel • nominated suppliers • purchasing procedures • contract management requirements • oil sampling requirements • housekeeping requirements • cleaning requirements • waste disposal requirements • workshop and field maintenance facilities • stores • supply of spares, equipment or personnel to meet peak/specialised requirements • maintenance equipment • records and reports requirements • inspection requirements • stock take techniques and requirements • risk, statutory compliance, health, safety, environmental, quality and communication

	requirements
Risk is defined as:	<ul style="list-style-type: none">• "the chance of something happening that will have an impact upon objectives. It is measured in terms of consequences and likelihood"

Unit Sector(s)

Service and Maintenance

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.