



Australian Government

Department of Education, Employment and Workplace Relations

RIIBEF202A Identify and rectify site operating problems

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the identification and rectification of site operating problems in the resources and infrastructure industries. It includes identifying operational processes, plant and equipment, and monitoring and maintaining plant performance. Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Relevant information must be sourced prior to application of the unit.

Application of the Unit

This unit is appropriate for those working in an assistant role at worksites 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
1. Identify operational processes, plant and equipment	1.1. Access, interpret and apply <i>compliance documentation</i> relevant to the work activity 1.2. Identify the <i>links and effects</i> on associated <i>worksite processes</i> , outputs, plant and equipment 1.3. Identify the operating characteristics and limitations of worksite processes and associated plant and equipment 1.4. Identify the process flow and interaction between processes and <i>plant and equipment</i> 1.5. Locate process routes and associated plant and equipment 1.6. Identify process control systems or centres and their function and location in the worksite 1.7. Identify <i>health and safety requirements and controls</i> 1.8. Identify environmental requirements for site processes and plant and equipment
2. Monitor plant performance	2.1. Obtain and interpret the worksite process plant monitoring program and schedule 2.2. Confirm monitoring program and schedule with <i>other worksite personnel</i> 2.3. Interpret <i>indicators, operations/shift reports and records</i> and verbal information to identify faults/malfunctions in process or plant 2.4. Visually and aurally inspect plant and equipment to identify operating problems/malfunctions 2.5. Monitor effectiveness of health and safety controls 2.6. Monitor effectiveness of <i>environmental controls</i> for site processes, plant and equipment
3. Maintain plant performance	3.1. Make minor adjustments to controls, plant and equipment to maintain efficient operations 3.2. Rectify, or refer process, plant and equipment faults/malfunctions to relevant

	<p>personnel for action</p> <p>3.3. Identify major process, plant or equipment malfunctions and implement emergency shutdown procedures</p> <p>3.4. Maintain effectiveness of health and safety controls</p> <p>3.5. Maintain effectiveness of environmental controls for site processes, plant and equipment</p> <p>3.6. Report problems/malfunctions and actions taken</p>
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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 of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes the ability to carry out the following as required to identify and rectify site operating problems:

- apply legislative, organisation and site requirements and procedures for identification and rectification of site operating problems
- access, interpret and apply technical and safety information
- operate plant and machinery
- communicate and coordinate activities with others
- maintain plant and equipment records
- apply diagnostic/fault finding techniques
- comply with environmental requirements

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes knowledge of the following as required to identify and rectify site operating problems:

- operational safety procedures
- operator responsibilities
- plant layouts
- operational procedures related to processes, plant and equipment carried out by the operator
- site communication procedures and systems
- process, plant and equipment type purpose, application, characteristics and limitations
- process, plant and equipment monitoring systems, programs and interpretation
- plant and equipment maintenance systems and procedures
- emergency shutdown procedures
- environmental requirements and controls related to processes, plant and equipment
- health and safety requirements and controls related to processes, plant and equipment

Evidence Guide

<p>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.</p>	
<p>Overview of assessment</p>	
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<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 includes evidence of the following:</p> <ul style="list-style-type: none"> • knowledge of the requirements, procedures and instructions for identifying and rectifying site operating problems • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of the identification and rectification of site operating problems • working with others to undertake and complete the identification and rectification of site operating problems that meet all of the required outcomes • consistent timely completion of identification and rectification of site operating problems that safely, effectively and efficiently meet the required outcomes
<p>Context of and specific resources for assessment</p>	<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. • Assessment of this competency requires typical resources normally used in a resources and infrastructure sector environment. Selection and use of resources for particular worksites may differ due to the site circumstances. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of

	<p>assessment should not be greater than those required on the job.</p> <ul style="list-style-type: none"> • Customisation of assessment and delivery environment should sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second language issues. • 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.
Method of assessment	<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 • observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> • implementation of appropriate requirements, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistent achievement of required outcomes • first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> • working with others to undertake and complete the identification and rectification of site operating problems
Guidance information for assessment	<p>Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.</p>

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>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 • safety information • management plans • OHS policy • code of practice • safe working procedures (or equivalent) • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
<p>Links and effects may include:</p>	<ul style="list-style-type: none"> • proficiency • efficiency • productivity • impacts • quality
<p>Worksite processes may include:</p>	<ul style="list-style-type: none"> • materials extrication • loading and hauling • blasting and ground control • drilling • dredging • road construction • stockpiling • ancillary plant/equipment operation • rehabilitation
<p>Plant and equipment may include:</p>	<ul style="list-style-type: none"> • fluid power systems • internal combustion plant and systems • product preparation • open-cut/underground mining processes • cranes, mobile and fixed • sizing systems, screens, breakers, crushers etc • pumping and dewatering systems

	<ul style="list-style-type: none"> • bins and storage • mobile and transportable equipment • workshops and associated equipment • structures • product processing plants • dozers • conveyors • reclaim tunnels • service vehicles • large dump trucks • hydraulic excavators/shovels • rope shovels • draglines • large rotary blast hole drills • graders, loaders and water trucks • scrapers • lighting plants • continuous miners • road headers • shuttle or ram cars • fans • bolting rigs • underground transport systems • winders • longwall/breaker line supports • lubrication systems • mine reticulation systems
<p>Health and safety requirements and controls may include those concerned with:</p>	<ul style="list-style-type: none"> • sanitation and hygiene, including: • potable water • cleanliness and sanitation • vermin control and eradication • chemical and hazardous materials, including: <ul style="list-style-type: none"> • industrial chemicals • diesel, oils, hydraulic oils • asbestos • explosives • dust control methods, including: <ul style="list-style-type: none"> • monitoring and analysis of dust • filters, isolation, personal protective equipment • mine transport networks and rules, including:

	<ul style="list-style-type: none"> • route • traffic rules • signage and barriers • personal equipment to protect: <ul style="list-style-type: none"> • hearing • eyes (industrial, radiation, ultra-violet, infra-red radiation, dust) • respiration • hands, head, hair, feet • safety belts and harnesses • safety signs • stress and stressors • drugs, including: <ul style="list-style-type: none"> • alcohol, nicotine • prescription drugs • illicit drugs and substances • impact of drugs on fitness for work • vibration hazards resulting from: <ul style="list-style-type: none"> • hand operated equipment • drilling equipment • corrugated roads • springs and seating etc • noise management controls • heat/cold exposure protection
Other worksite personnel may include:	<ul style="list-style-type: none"> • supervisors • tradespersons • technicians • contractors • transport • plant attendants • OHS personnel • plant/equipment operators
Indicators may include:	<ul style="list-style-type: none"> • flow • current • density • levels • restrictions • air flows • pressure • speed

	<ul style="list-style-type: none"> • temperature • unusual noises • vibrations • power • temperature • corrosion
Operations/shift reports and records may include:	<ul style="list-style-type: none"> • shift operation reports • maintenance reports and records • operational log books • handover information • instrument records • test results • inspections • quality reports and records
Environmental requirements may include those relating to:	<ul style="list-style-type: none"> • culturally-sensitive sites and artefacts • drainage • dust and fumes • emissions • flora and fauna • hazardous chemicals • heritage legislation • noise • runoff • spills • water quality • hazardous chemicals • waste management and disposal
Environmental controls may include those concerned with:	<ul style="list-style-type: none"> • liquid waste • solid waste • hazardous materials • excessive energy and water use • air emissions and contaminants • excessive noise • excessive waste • excessive water consumption • excessive energy consumption

Unit Sector(s)

Business Effectiveness

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.