



Manufacturing Learning Australia

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# **PMB 01**

## **Volume 2 – Competency Standards: Core and Support Competencies**

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for the

plastics, rubber and cabling industry

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**Volume 2 of a three volume set which comprises the Endorsed Component of the Training Package.**

**Volume 1 – Structure & Guidance**

**Volume 2 – Competency Standards: Core & Support Competencies**

**Volume 3 – Competency Standards: Production Competencies**

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<b>MODIFICATION HISTORY – ENDORSED MATERIALS</b>			
Please refer to the National Training Information Service for the latest version of Units of Competency and Qualification information ( <a href="http://www.ntis.gov.au">http://www.ntis.gov.au</a> ).			
<b>PMB01 Plastics, Rubber &amp; Cablemaking Training Package</b>			<b>Sheet: 1 of 1</b>
<b>Version</b>	<b>Date of Release</b>	<b>Authorisation:</b>	<b>Comments</b>
1.00	21/03/2002	NTQC	Primary Release (note Fully revised version of PMB98)
1.01	22/10/2002	NTQC	Inclusion of omitted details in the packaging rules of two qualifications (PMB20401 and PMB30401) to ensure that the selection of units is made at or above the appropriate level.
			Correction of typographical errors in the codes of the following units throughout the Qualifications Framework: PMBENV100A PMBENV200A PMBENV300A TDTD1097A
			Inclusion of omitted details in the performance criteria and range of variables in PMBPROD305B.
			Correction to the list of competencies available for PMB60101. During the review, the unit PMBSUP480A was removed (on the basis that it unnecessary with the unit BSXFMI404A) and had been deleted elsewhere in the Training Package.

**Forms control:** All endorsed training packages will have a version number displayed on the imprint page of every volume constituting that training package. Every training package will display an up-to-date copy of this modification history form, to be placed immediately after the contents page of the first volume of the training package. Comments on changes will only show sufficient detail to enable a user to identify the nature and location of the change. Changes to training packages will generally be batched at quarterly intervals. This modification history form will be included within any displayed sample of that training package and will constitute all detail available to identify changes.



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## ***Core Competencies***





**UNIT TITLE****PMBCOMM102B - Complete workplace documents****UNIT DESCRIPTOR**

This unit applies to employees who are required to apply basic knowledge and skills to enable the completion of basic workplace documents. It applies to all sectors of the industry.

This competency is typically performed by all operators working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify required information.	1.1. Identify purpose of recording information 1.2. Establish sources of information 1.3. Collect appropriate information.
2. Select appropriate workplace document.	2.1. Access workplace documents 2.2. Select appropriate form/document for the required report 2.3. Provide copies of form/document as per workplace procedures.
3. Complete forms/reports.	3.1. Collect and assemble relevant workplace information in logical order and sequence 3.2. Complete workplace related form/reports as per workplace procedures 3.3. Check form is completed as appropriate.
4. Present workplace documentation.	4.1. Submit forms/reports to relevant personnel 4.2. Explain workplace information to others so that the information contributes to the workplace operations 4.3. Answer questions and clarify where appropriate 4.4. Submit final copy of forms/report and store in accordance with workplace procedures.

### **RANGE OF VARIABLES:**

This competency unit includes the following indicative information sources and documentation:

- v procedures/work instructions
- v safety data sheets
- v job cards
- v time sheets
- v absence forms
- v incident reports
- v maintenance logs
- v enterprise policies
- v computer filed workplace documents.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

All operations are performed in accordance with standard procedures and work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain:
  - use of spell checkers, dictionaries and other forms of writing aids
  - purpose of workplace forms and reports
  - conventions for sentence construction, grammar, style and punctuation
  - requirements of organisation for information
- v ensure documents are completed in accordance with workplace requirements
- v ensure workplace documents are completed accurately.

#### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that:

- forms/reports are accurately completed, recorded and/or relayed each time
- forms/reports are checked for errors and compliance with workplace procedures
- appropriate action is taken where necessary.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical workplace forms as provided to operators.

Writing is required to the level of completing workplace forms and documents.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant, allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent they form part of the assessment method.

Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	2	1	1	1



## UNIT TITLE

### PMBHAN103B - Shift materials safely by hand

## UNIT DESCRIPTOR

This competency covers the shifting of materials by hand in a safe manner. It applies to all sectors of the industry.

This competency is typically performed by all operators working either independently or as part of a work team.

### This competency in practice

This competency applies to operators who move packages, loose goods, materials and products by lifting, pushing and pulling without injury to themselves or damage to the materials being moved. The key factors are planning and executing the move in a safe and efficient manner. It includes:

- v identifying the type of material to be moved
- v identifying the route to be used
- v identifying and using the most appropriate piece of equipment
- v following OH&S State regulations to complete the operation.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Plan operations.	1.1. Correctly identify type and quantity of product or material to be moved 1.2. Identify the safest, most efficient and appropriate movement route 1.3. Identify the safest, most efficient and appropriate piece of equipment to be used.
2. Manually transfer products or materials.	2.1. Manually shift products or materials to and from production processes according to procedures and OH&S State regulations 2.2. Manually load specified products or materials at specific points during the manufacturing process, according to procedures and OH&S state regulations.
3. Store, stack and/or relocate products or materials.	3.1. Manually stack products or materials according to procedures and OH&S State regulations 3.2. Manually store products or materials in correct locations 3.3. Document and/or report material movements as required.

### **RANGE OF VARIABLES:**

This competency unit includes the use of manual handling aids such as handcarts. It does NOT include the use of powered equipment/aids or licensed load shifting equipment.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry. It includes the operation of all relevant ancillary equipment.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The processes covered by this unit include, but are not limited to:

- v movement of materials
- v stacking/storing/relocating of materials.

Loads to be shifted may be, but are not limited to:

- v irregularly shaped
- v packaged/unpackaged
- v labeled/unlabeled

This competency includes tools and equipment such as:

- v hand carts
- v self-propelled trolleys
- v wheelbarrows
- v block and tackle
- v relevant personal protective equipment.

Typical hazards include:

- v spills
- v dusts/vapours
- v hazardous materials
- v manual handling hazards.

Typical problems include:

- v load too heavy or large for safe, easy moving
- v load in awkward position for safe, easy moving
- v clash of work priorities
- v correct equipment not available.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of good manual handling practice including organisation procedures and relevant State OH&S regulations for manual handling and lift techniques sufficient to recognise potential problems and to take the appropriate action.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or describe:
  - correct OH&S procedures
  - appropriate manual handling lifting/moving equipment
  - relevant inventory systems
- v distinguish between jobs which:
  - may be easily and safely done with a single person
  - require assistance from other people
  - require manual handling equipment
  - need mechanical lifting aids.

### **Critical aspects:**

It is essential that the manual handling principles be applied and that the importance of safe manual handling techniques are known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate action.

Consistent performance should be demonstrated. In particular look to see that:

- v good OH&S practice is followed
- v correct manual handling and lifting techniques are used
- v appropriate lifting/moving equipment is used
- v products are correctly identified
- v locations are correctly identified.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent they form part of the assessment method.

Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
1	1	1	1	1	1	1



## UNIT TITLE

### PMBOHS101B - Follow OH&S policies and procedures

## UNIT DESCRIPTOR

This competency relates to the following defined occupational health and safety (OH&S) policies and procedures. Procedures relate to the work being undertaken in order to ensure own safety and that of others in the workplace, within the scope of responsibilities.

This competency is typically applicable to all employees of the enterprise.

### This competency in practice

This competency applies to operators whose work involves the use of workplace policies and procedures to maintain a safe work environment for themselves and others. The key factors are following directions provided and being involved in a consultative process with occupational health and safety representatives and committee members. It includes:

- v identifying hazards in the workplace
- v accurately following safe workplace procedures
- v raising occupational health and safety issues
- v contributing to the consultative process within the scope of responsibilities and competencies.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Follow workplace procedures for hazard identification, risk assessment and control.	1.1. Identify hazards in the work area and report to designated personnel according to workplace procedures 1.2. Accurately follow safe workplace procedures and safe work instructions for controlling risks, including the use of personal protective equipment 1.3. Follow safe workplace procedures for dealing with accidents, fires and emergencies within scope of responsibilities and competencies.
2. Raise occupational health and safety issues.	2.1. Raise occupational health and safety issues with designated personnel in accordance with workplace procedures and relevant requirements of occupational health and safety legislation 2.2. Contribute to consultative arrangements for occupational health and safety management in the workplace within organisational procedures and scope of responsibilities and competencies.
3. Complete any required safety documentation	3.1. Complete, personally or with assistance, hazard, accident or incident reports as required by procedures.

## **RANGE OF VARIABLES:**

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry.

Within this competency unit it is expected that employees will be provided with clear directions, information, instruction, training and appropriate supervision regarding the relevant State/Territory OH&S legislation, codes of practice, workplace procedures and work instructions.

OH&S issues which may need to be raised by employees with designated personnel may include:

- v identification of hazards
- v assessment of risk
- v decisions on measures to control risk
- v implementation of controls
- v injury and incident investigation
- v the development of OH&S policies and procedures.

Any completing of documentation may be undertaken directly by seeking assistance of appropriate personnel.

This unit includes the following of emergency procedures, recognising and taking the first action on an emergency (as specified in the emergency procedures), moving to assembly points and the carrying out of emergency roles as specified in the emergency procedures.

This competency covers enterprises which may involve:

- v workplace hazards such as:
  - stationary and moving machinery, parts or components
  - hazardous substances or dangerous materials
  - working at height or in confined spaces
  - working in environments subjected to noise, light, different energy sources, high humidity and air temperatures, radiant heat, dust and vapours
  - materials handling
  - waste management and disposal
  - traffic flows, vehicle and equipment operation
- v hazardous events such as:
  - chemical spills
  - accidents
  - fires
  - bomb scares.

Enterprise policies include those which directly or indirectly cover OH&S issues such as:

- v hazard policies and procedures
- v standard operating procedures
- v safety procedures
- v work instructions
- v emergency, fire and accident procedures
- v personal protective clothing and equipment procedures.

Designated personnel for OH&S referral may include:

- v employer
- v supervisor
- v employees elected as OH&S representatives
- v other personnel with OH&S responsibilities.

Consultative arrangements for management of OH&S issues may involve:

- v following OH&S procedures
- v information sessions on existing or new issues
- v meetings between employer and employees or representatives
- v access to relevant workplace information
- v use of clear and understandable language.

Typical problems include:

- v identifying hazardous situations
- v dealing with the situation appropriately
- v communication in OH&S matters.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the OH&S system sufficient to plan own safety needs, within the scope of responsibilities and competencies, including predicting consequences and identifying improvements.

The duty of care responsibilities need to be exercised, not only within the general OH&S Acts and regulations, but also within those applying to hazardous substances, dangerous goods and major hazards.

Competence includes the ability for the practical completion of the job to:

- v apply and describe procedures for:
  - identifying hazards in the workplace
  - reporting hazards identified to the designated person
  - locating, understanding and following workplace OH&S procedures
- v communicate OH&S issues
- v locate and follow OH&S procedures.

### **Critical aspects:**

It is essential that the OH&S system be applied and that the importance of critical procedures are known. Competence must be demonstrated in the ability to recognise potential situations requiring action and then in implementing appropriate corrective action.

Consistent performance should be demonstrated. In particular look for evidence of:

- v knowledge of all relevant workplace procedures including:
  - hazard policies and procedures
  - emergency, fire and accident procedures
  - procedures for the use of personal protective clothing and equipment
  - hazard identification and issue resolution procedures
  - job procedures and work instructions
- v knowledge of significant hazards in the workplace (short and long term)
- v knowledge of symbols used for occupational health and safety signs
- v awareness that OH&S issues are regulated by State/Territory Acts and regulations.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret OH&S policies and procedures as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

### **Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

### **Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent they form part of the assessment method.

Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

### **KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
1	1	1	1	1	1	1

**UNIT TITLE****PMBQUAL101A - Apply quality processes****UNIT DESCRIPTOR**

This competency covers the application of the principles of quality to work.

This competency is performed by all operators and may be an introductory competency to learning the plant.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify plant structure and processes.	1.1. Explain role of individual and/or team in organisational structure 1.2. Outline the production process of materials in and product out within the individual's work area.
2. Follow work instructions or specification requirements.	2.1. Identify and locate existing sources of work instructions relevant to the job role 2.2. Identify and complete required quality records 2.3. Follow work instructions to complete tasks.
3. Recognise quality requirements.	3.1. Identify instances of variation in quality from specifications or work instructions 3.2. Identify basic quality concepts to work activities 3.3. Follow enterprise procedures for reporting and managing variations 3.4. Report problems with materials/product quality to supervisors 3.5. Explain enterprise procedures for identifying and suggesting improvements to improve product quality 3.6. Work within the enterprise quality system.

**RANGE OF VARIABLES:****Context:**

The competency unit applies to a range of processes and equipment.

It is applied within the limits of work instructions and workplace requirements for occupational health and safety.

This unit requires the operator to apply the principles of quality to own work and participate in the work team/group quality processes.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the structure of the plant and organisational structure is required. A basic knowledge about the production process - what the plant produces, for whom and how, - is required.

Knowledge of relevant OH&S and environmental requirements and work instructions relevant to the job role is required.

### **Critical aspects:**

Evidence of satisfactory performance in this unit will be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria. In addition, look to see that:

- the operator can identify own role to meet work requirements
- the operator follows work instructions and performs tasks in accordance with the quality requirements
- quality requirements are identified and followed in all aspects of job function and operations.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to interpret job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Numeracy is required to the extent required by work instructions and procedures.

### **Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

### **Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

<b>KEY COMPETENCIES</b>						
<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
1	1	1	1	1	1	1





**UNIT TITLE****PMBWKOPS101B - Apply work procedures and practices****UNIT DESCRIPTOR**

This unit involves the application of workplace procedures to the conduct of work and self management within a workplace environment. It applies to all sectors of the industry.

This competency is typically performed by all operators working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify major areas of the workplace, in terms of functions, organisational structures and occupation.	<ul style="list-style-type: none"><li>1.1. Identify layout of the workplace, the production process and the work activities conducted in each area</li><li>1.2. Outline organisational structure of the workplace and the relationship of structure to work roles and classification grouping</li><li>1.3. Identify the types and purpose of production and storage facilities in the workplace, and (any) risk factors attached to them</li><li>1.4. Identify the function and physical characteristics of equipment and technology used in the workplace.</li></ul>
2. Organise and accept responsibility for own workload.	<ul style="list-style-type: none"><li>2.1 Identify and act on individual responsibilities under industrial agreements in the conduct of assigned duties</li><li>2.2 Establish and record priorities and deadlines in consultation with others (as appropriate)</li><li>2.3 Plan work activities and communicate progress of work to others whose personal work plans and timelines may be affected</li><li>2.4 Complete work to the standard expected in the workplace and in accordance with any guidelines, directions or instructions</li><li>2.5 Identify variations and difficulties affecting work requirements and take action to report these issues to supervisory staff</li><li>2.6 Communicate additional support required to improve work clearly to appropriate personnel.</li></ul>
3. Follow acceptable workplace practices.	<ul style="list-style-type: none"><li>3.1 Follow workplace procedures, regulations and legislation appropriate to the position</li><li>3.2 Meet commitments and undertakings to customers (internal/external) and supervisors</li><li>3.3 Maintain required confidentiality</li><li>3.4 Apply appropriate codes of acceptable and ethical work practices</li><li>3.5 Follow workplace security policies including explaining the relationship of security procedures to personal job role</li><li>3.6 Follow equal opportunity and sexual harassment requirements for self and others.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
4. Identify and follow emergency procedures.	4.1 Identify and follow safety and emergency procedures relevant to the workplace 4.2 Go to assembly point in emergencies 4.3 Complete simulated emergency exercises to the standard expected in the workplace and in accordance with any guidelines, directions or instructions.
5. Receive and act constructively on personal feedback.	5.1 Seek suggestions on ways to improve work from appropriate personnel 5.2 Act upon feedback as required to improve work performance.
6. Participate in identifying and meeting own learning needs as appropriate to job role.	6.1 Identify operations of the workplace, workplace equipment and focus of endeavour 6.2 Follow organisational structure, career paths and training opportunities appropriate to the enterprise 6.3 Take steps, in consultation with appropriate personnel, to identify own learning needs through assessment and planning for future work requirements 6.4 Undertake appropriate opportunities to learn and develop required competencies including establishing networks and working relationships with others.
7. Plan and organise a personal daily routine.	7.1 Plan daily routine to take into account rosters, industrial agreements and workplace procedures 7.2 Seek clarification of requirements of tasks when appropriate 7.3 Agree achievable time and other performance measures 7.4 Complete tasks and identify and report variations to plan.

### RANGE OF VARIABLES:

This competency unit typically applies to new starters in all sectors of the industry. It covers the basic knowledge and skills such as might be learned during an induction session and the initial period on the job.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The situations covered by this unit include, but are not limited to:

- v working as part of a team
- v helping an experienced operator
- v working under close supervision on simple tasks/operations.

This competency includes tools and equipment such as:

- v relevant personal protective equipment.

Typical hazards include:

- v basic workplace hazards
- v dusts/vapours
- v hazardous materials
- v manual handling hazards
- v knife hazards.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the enterprise's standard procedures and work instructions and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and in a manner relevant to the job.

Competence includes the ability for the practical completion of the job to:

- v provide customer/client service and work effectively with others
- v convey information in written and oral form
- v describe the purpose and requirements of the customer's needs and the impact of that relationship to industry, company structure, business systems, environment, legal and government requirements
- v describe enterprise operating principles and requirements for workplace documentation
- v identify workplace structure and roles and responsibilities of the individuals, authority systems and contacts
- v follow emergency and workplace procedures relevant to the position
- v describe employee and employer obligations under award, employment contract, occupational health and other legislation in relation to engagement, working times and conditions, dismissal and discipline
- v identify enterprise products and services
- v locate, interpret and apply relevant information
- v identify and safely handle products and materials
- v apply safety precautions appropriate to the task
- v identify and explain relevant emergency procedures

v apply and/or explain:

- focus of operation of work systems, equipment, management and site operating systems
- relationships and requirements of work and operating systems in respect of related systems
- potential career paths and opportunities for training and advancement
- impact of trends in employment and business in general on the individual and the company
- sources of information on laws impacting the industry and economic and social trends

which will impact on the enterprise and individual

- workflow within the enterprise and within the scope of the individuals position
- focus of operation of work systems and equipment
- identification and correct use of equipment, processes and procedures
- planning own work including predicting consequences and identifying improvements
- effective response to an emergency situation.

**Critical aspects:**

It is essential that the procedures be understood and that the importance of critical material properties and quantities is known. Competence must be demonstrated in the ability to recognise potential situations requiring action and then in implementing appropriate action.

Consistent performance should be demonstrated. In particular look to see that production standards are met consistently.

**Language, literacy and numeracy requirements:**

This unit requires the ability to interpret typical work information and job sheets as provided to operators and the completing of workplace forms.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

<b>KEY COMPETENCIES</b>						
<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
1	1	1	1	1	1	1



## ***Support Competencies***





## UNIT TITLE

### PMBMAINT101B - Conduct housekeeping activities

## UNIT DESCRIPTOR

This competency covers general housekeeping duties, as well as the cleaning of plant and equipment. It applies to all sectors of the industry.

This competency is typically performed by all operators working either independently or as part of a work team.

### This competency in practice

This competency applies to operators who are required to keep the work area, plant and equipment clean and tidy. The key factors are the identification, scheduling and performance of housekeeping requirements. It includes:

- v knowing site safety and housekeeping standards
- v scheduling housekeeping duties
- v handling chemicals and solvents safely
- v moving work and waste materials to designated locations
- v keeping assigned plant and equipment clean.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify housekeeping requirements.	1.1. Explain and understand site safety and housekeeping standards 1.2. Undertake housekeeping inspection in accordance with procedures/work instructions 1.3. Identify and schedule housekeeping requirements as appropriate.
2. Perform general housekeeping duties.	2.1. Keep designated work areas clean to enterprise specific standards 2.2. Keep designated work areas clear of obstructions 2.3. Handle and use chemicals and solvents following workplace procedures 2.4. Ensure work area is ready for next user 2.5. Remove work materials to designated locations.
3. Clean plant and equipment.	3.1. Keep assigned plant and equipment clean following established enterprise procedures 3.2. Ensure that appropriate personal protective equipment is used as required.
4. Dispose of waste materials.	4.1. Correctly identify waste materials 4.2. Remove waste materials to designated location.

### **RANGE OF VARIABLES:**

This competency unit may vary between enterprises depending upon a range of practices and procedures, with consideration given to plant configuration and process.

This competency applies to all work environments and sectors within the plastics, rubber and cabling industry.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

This competency in practice may vary due to:

- v cleaning methods and procedures
- v the types of tools and equipment used in special situations
- v the use of personal protective equipment.

This competency may vary depending upon the use of a variety of equipment and supplies such as:

- v cleaning equipment and materials
- v brooms
- v shovels
- v solvents
- v waste containers
- v safety equipment.

Typical problems include:

- v correct equipment not immediately available
- v safety issues associated with cleaning
- v ensuring housekeeping aids rather than interferes with production.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the process sufficient to recognise non-standard situations and then determine an appropriate action which is consistent with operating guidelines.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v      apply and describe:
  - duty of care
  - requirements for housekeeping process
  - procedures for plant maintenance
  - safe handling procedures
  - the standard of cleanliness required
- v      plan own work including predicting consequences and identifying improvements
- v      use PPE, safely handle products and materials, read relevant safety information and apply safety precautions appropriate to the task
- v      distinguish between :
  - reusable materials and waste
  - routine and special cleaning needs.

### **Critical aspects:**

It is essential that the procedures be applied and that the importance of good housekeeping principles are known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate action.

Consistent performance should be demonstrated. In particular look to see that :

- v      early warning signs of areas in need of cleaning are recognised
- v      work areas are kept tidy and clean
- v      equipment is neatly stored, in a safe manner, in the correct location at all times when not in use
- v      equipment is always used safely.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
1	1	1	1	1	1	1

**UNIT TITLE****PMBOHS204B - Apply emergency/incident procedures****UNIT DESCRIPTOR**

This unit covers the response of employees to incidents which result in accidents, near miss or emergencies in the workplace. It applies to all sectors of the industry.

This competency is typically performed by all operators working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Respond to the incident.	1.1. Identify and report type of incident or emergency 1.2. Follow workplace procedures for the emergency 1.3. Identify and report details of the cause(s) and effects of the incident 1.4. Clarify and report assistance requirements for accidents and emergencies immediately to the appropriate parties 1.5. Request assistance from relevant personnel and emergency services.
2. Control and assist at accident or emergency site.	2.1. Control and protect site until the arrival of authorised personnel 2.2. Provide assistance to injured persons, within the limitations of duty of care and workplace procedures 2.3. Manage risks within hierarchy of control procedures 2.4. Cooperate with and assist relevant authorities at the site within enterprise policies.
3. Finalise emergency/ accident process and complete records.	3.1. Exchange relevant information in accordance with State/ Territory law and enterprise procedures 3.2. Provide information to assist in completion of documentation and reports 3.3. Complete workplace documentation and process in accordance with workplace or regulatory requirements.

### **RANGE OF VARIABLES:**

This competency unit applies to all incidents within the plastics, rubber and cablemaking sectors.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

Action is taken within organisational policies and procedures to minimise risks to self, colleagues, customers, the workplace and the environment.

Sources of information/documents may include:

- v Australian Standard AS1885.1
- v first aid requirements in relevant legislation.

All operations are performed in accordance with standard procedures and work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Display of the following knowledge and skills in terms of job role or function:

- v application of relevant agreements, codes of practice and other legislative requirements in relation to incidents and accidents
- v identification and correct use of equipment, processes and procedures
- v planning own work within the scope of responsibilities and competencies including predicting consequences and identifying improvements.

Contributes effectively to workplace consultative relationships.

Modifies activities to cater for variations in workplace contexts and environment.

Shows evidence of application of relevant workplace procedures including:

- v procedures to access to first aid and emergency response employees
- v reporting requirements for incidents and emergency situations.

Action taken promptly to report accidents and incidents within regulatory requirements and following workplace procedures.

Work completed systematically in accordance with safe operating procedures to minimise the risk of injury to self or others or damage to goods, equipment or products in production.

**Critical aspects:**

Assessment must confirm appropriate knowledge and skills to:

- v identify appropriate action to access the situation and provide assistance
- v provide customer/client service and work effectively with others
- v convey information in written and oral form
- v use appropriate workplace language and communication technologies
- v locate, interpret and apply relevant information
- v maintain workplace records
- v identify and safely handle products and materials
- v apply safety precautions appropriate to the task.

**Language, literacy and numeracy requirements:**

Writing is required to the level of completing workplace forms.

**Assessment method and context:**

Competence in this unit may be assessed:

- v in the work situation allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	1	1	1	1	1





## UNIT TITLE

### PMBOHS207B - Implement and monitor OH&S policies and procedures

## UNIT DESCRIPTOR

This competency covers the implementation and monitoring of defined enterprise occupational health and safety (OH&S) policies and procedures for a work group or area, within the scope of responsibilities.

This competency is typically performed by an experienced operator, leading hand, supervisor or employee with OH&S responsibility.

### This competency in practice

This competency applies to employees who are responsible for the organisation of occupational health and safety arrangements, including staff training. The key factors are the implementation and monitoring of a number of issues relating to OH&S. They include:

- v providing information regarding OH&S, including enterprise specific policies, procedures and programs
- v the management of enterprise specific OH&S participative arrangements
- v the identification and assessment of hazards and risks
- v controlling risks
- v dealing with hazardous events
- v identifying and providing OH&S training
- v maintaining OH&S records.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Provide information to the work group about occupational health and safety legislation and the enterprise occupational health and safety policies, procedures and programs.	<ul style="list-style-type: none"><li>1.1. Accurately and clearly explain to the work group relevant provisions of occupational health and safety legislation and codes of practice</li><li>1.2. Provide in a readily accessible manner, information on the enterprise occupational health and safety policies, procedures and programs and accurately and clearly explain them to the work group</li><li>1.3. Regularly provide information about identified hazards and the outcomes of risk assessment and risk control procedures, and accurately and clearly explain them to the work group.</li></ul>
2. Implement and monitor participative arrangements for the conducting of occupational health and safety as appropriate to job role.	<ul style="list-style-type: none"><li>2.1. Implement and monitor enterprise procedures for consultation over occupational health and safety issues to ensure that all members of the work group have the opportunity to contribute</li><li>2.2. Deal with and promptly resolve issues raised through consultation or refer to the appropriate personnel for resolution in accordance with workplace procedures</li><li>2.3. Promptly inform the work group of the outcomes of consultation over occupational health and safety issues.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
3. Implement and monitor the enterprise procedures for identifying hazards and assessing risk.	<p>3.1. Identify and report existing and potential hazards in the work area so that risk assessment and risk control procedures can be applied</p> <p>3.2. Involve the work group in a consultative approach to risk identification where appropriate.</p>
4. Implement and monitor the enterprise procedures for controlling risk.	<p>4.1. Implement and monitor adherence to work procedures to control risk in accordance with workplace procedures</p> <p>4.2. Monitor existing risk control measures and report results regularly in accordance with workplace procedures</p> <p>4.3. Identify inadequacies in existing risk control measures in accordance with the <u>hierarchy of control</u> and report to designated personnel</p> <p>4.4. Identify inadequacies in resource allocation for implementation of risk control measures and report to designated personnel.</p>
5. Implement the enterprise procedures for dealing with hazardous events.	<p>5.1. Implement workplace procedures for dealing with hazardous incidents whenever necessary to ensure that prompt control action is taken</p> <p>5.2. Investigate hazardous events to identify the cause in accordance with investigation procedures</p> <p>5.3. Implement control measures to prevent recurrence and minimisation of risk of hazardous events, based on the <u>hierarchy of control</u>, within scope of responsibilities and competence or alternatively refer to designated personnel for implementation.</p>
6. Implement and monitor the enterprise procedures for providing occupational health and safety training.	<p>6.1. Identify occupational health and safety training needs, specifying gaps between occupational health and safety competencies required and those held by work group members</p> <p>6.2. Make arrangements for fulfilling identified occupational health and safety training needs in both on and off-the-job training programs, in consultation with relevant parties if appropriate.</p>
7. Implement and monitor the enterprise procedure for maintaining occupational health and safety records.	<p>7.1. Accurately and legibly complete occupational health and safety records for work area, in accordance with workplace requirements for occupational health and safety records and legal requirements for the maintenance of records</p> <p>7.2. Use aggregated information from the area's occupational health and safety records to identify hazards and monitor risk control procedures within work area according to procedures and within scope of responsibilities and competencies.</p>

### **RANGE OF VARIABLES:**

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry.

Within this competency unit competence is demonstrated in the context of an established enterprise OH&S system with related policies, procedures and programs.

‘Implement’ means the carrying out of the procedure as is relevant to the job role.

Enterprise policies and procedures include those which directly or indirectly cover OH&S issues, such as:

- v hazard policies and procedures
- v standard operating procedures
- v safety procedures
- v work instructions
- v emergency, fire and accident procedures
- v personal protective clothing and equipment procedures.

This competency covers enterprises and activities which may involve:

- v workplace hazards such as:
  - stationary and moving machinery, parts or components
  - hazardous substances or dangerous materials
  - working at height or in confined spaces
  - working in environments subjected to noise, light, different energy sources, high humidity and air temperatures, radiant heat, dust and vapours
  - materials handling
  - waste management and disposal
  - traffic flows, vehicle and equipment operation
- v hazardous events such as:
  - chemical spills
  - accidents
  - fires
  - bomb scares.

Consultation with employees should occur on OH&S issues such as:

- v identification of hazards
- v assessment of risk
- v decisions on measures to control risk
- v implementation of controls
- v injury and incident investigation
- v the development of OH&S policies and procedures.

Typical problems include:

- v provide information and training on OH&S issues, policies and procedures
- v be involved in consultation in OH&S issues, including establishment of policy and procedures, identification of hazards, assessment of risk, establishment of risk controls
- v keep OH&S records complete, current and confidential.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the workplace OH&S system and State OH&S regulations sufficient to implement and monitor OH&S activities within the scope of their responsibilities and competencies.

The duty of care responsibilities need to be exercised, not only within the general OH&S acts and regulations, but also within those applying to hazardous substances, dangerous goods and major hazards.

Competence includes the ability for the practical completion of the job to:

- v identify hazards in the workplace
- v report hazards identified to the designated person
- v locate, understand and follow workplace OH&S procedures
- v apply and explain:
  - EEO principles and practices for OH&S
  - other management systems and procedures for occupational health and safety
  - literacy levels and communication skills of employees in the area of managerial responsibility and consequently suitable communication techniques (this may involve use of languages other than English)
  - the hierarchy of control (the preferred order of risk control measures from most to least preferred), that is:
    1. elimination
    2. substitution
    3. engineering controls
    4. administrative controls
    5. personal protective equipment.

**Critical aspects:**

It is essential that the workplace OH&S system and State OH&S regulations be understood and that the importance of critical procedures is known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate action.

Consistent performance should be demonstrated. In particular look to see that this includes a working knowledge of all relevant workplace procedures, such as:

- v consultation processes, either general or specific to occupational health and safety
- v training and assessment
- v specific hazard policies and procedures (including housekeeping and inspections)
- v occupational health and safety information
- v occupational health and safety record keeping
- v maintenance of plant and equipment
- v purchasing of supplies and equipment
- v counselling/disciplinary/issue resolution processes.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret OH&S policies, procedures and legislation requirements.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	2	2	1	2	1

**UNIT TITLE****PMBOHS409A - Establish, maintain & evaluate an OH&S system****UNIT DESCRIPTOR**

This competency covers the establishment, maintenance and evaluation of the occupational health and safety (OH&S) system for the enterprise, in order to ensure that the workplace is, so far as is practicable, safe and without risks to the health of employees.

This competency is applicable for those with managerial responsibilities.

**This competency in practice**

This competency applies to those with managerial responsibilities for organising occupational health and safety within the enterprise. The key factors are the establishment, maintenance and evaluation of a number of areas relating to the management of OH&S. It includes:

- v the framework of the OH&S system
- v enterprise specific OH&S participative arrangements
- v the identification and assessment of hazards and risks
- v assessing and controlling risks
- v dealing with hazardous events
- v identifying OH&S training programs
- v systems for OH&S records
- v evaluating the OH&S system, policies, procedures and programs.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Establish and maintain the framework for the occupational health and safety system in the area of responsibility.	<ul style="list-style-type: none"><li>1.1. Develop occupational health and safety policies which clearly express the commitment of the enterprise with respect to occupational health and safety within the area of managerial responsibility and indicate how relevant occupational health and safety legislation will be implemented</li><li>1.2. Clearly define and allocate occupational health and safety responsibilities and duties which will allow implementation and integration of the occupational health and safety system, and are included in job descriptions and duty statements for all relevant positions</li><li>1.3. Identify, seek and provide financial and human resources for the operation of occupational health and safety in a timely and consistent manner</li><li>1.4. Provide and explain information on the occupational health and safety system and procedures for the area of responsibility, in a form which is readily accessible to employees.</li></ul>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
2. Establish and maintain participative arrangements for the management of occupational health and safety.	<ul style="list-style-type: none"><li>2.1. Establish and maintain appropriate consultative processes, with employees and their representatives in accordance with relevant occupational health and safety legislation and consistent with enterprise procedures</li><li>2.2. Deal with and resolve issues raised through participation and consultation, promptly and effectively in accordance with procedures for issue resolution</li><li>2.3. Provide information about the outcomes of participation and consultation in a manner accessible to employees.</li></ul>
3. Establish and maintain procedures for identifying hazards.	<ul style="list-style-type: none"><li>3.1. Correctly identify existing and potential hazards within the area of managerial responsibility, and identification confirmed in accordance with occupational health and safety legislation</li><li>3.2. Develop procedures for ongoing identification of hazards and integrate within systems of work and procedures</li><li>3.3. Appropriately monitor activities to ensure that this procedure is adopted effectively throughout area of managerial responsibility</li><li>3.4. Identify hazards at the planning, design and evaluation stages of any change in the workplace to ensure that new hazards are not created.</li></ul>
4. Establish and maintain procedures for assessing risk.	<ul style="list-style-type: none"><li>4.1. Correctly assess the risk presented by identified hazards in accordance with occupational health and safety legislation and codes of practice</li><li>4.2. Develop procedures for ongoing assessment of risk and integrate within systems of work and procedures</li><li>4.3. Monitor activities to ensure that this procedure is adopted effectively throughout the area of managerial responsibility</li><li>4.4. Assess risks at the planning, design and evaluation stages of any change within the area of managerial responsibility to ensure that the risk from hazards is not increased.</li></ul>



ELEMENT	PERFORMANCE CRITERIA
5. Establish and maintain procedures for assessing risk.	5.1. Develop and implement measures to control risks in accordance with the hierarchy of control, relevant occupational health and safety legislation, codes of practice and trends identified from the occupational health and safety record system 5.2. Implement interim solutions when measures to control risk at its source are not immediately practicable, until a permanent control measure is developed 5.3. Develop procedures for ongoing control of risk, based on the hierarchy of control, and integrate within general systems of work and procedures 5.4. Monitor activities to ensure that the risk control procedure is adopted effectively throughout the area of managerial responsibility 5.5. Address risk control at the planning, design and evaluation stages of any change within the area of managerial responsibility 5.6. Identify inadequacies in existing risk control measures in accordance with the hierarchy of control, and ensure provision of resources enabling implementation of new measures according to appropriate procedures.
6. Establish and maintain organisational procedures for dealing with hazardous events.	6.1. Correctly identify potential hazardous events 6.2. Develop procedures which will control the risks associated with hazardous events and meet any legislative requirements as a minimum, in consultation with appropriate emergency services 6.3. Ensure provision of appropriate information and training to all employees to enable implementation of the correct procedures in all relevant circumstances.
7. Establish and maintain an occupational health and safety training program.	7.1. Develop and implement an occupational health and safety training program to identify and fulfil employees' occupational health and safety training needs as part of the enterprise general training program.
8. Establish and maintain a system for occupational health and safety records.	8.1. Establish and monitor systems for keeping occupational health and safety records to allow identification of patterns of occupational injury and disease within the area of managerial responsibility.
9. Evaluate the occupational health and safety system and related policies, procedures and programs of the enterprise.	9.1. Assess the effectiveness of the occupational health and safety system and related policies, procedures and programs according to the enterprise aims with respect to occupational health and safety 9.2. Develop and implement improvements to the occupational health and safety system to ensure more effective achievement of the aims of the enterprise with respect to occupational health and safety 9.3. Assess compliance with occupational health and safety legislation and codes of practice to ensure that legal occupational health and safety standards are maintained as a minimum.

## RANGE OF VARIABLES:

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry.

This competency describes occupational health and safety requirements applicable for those with managerial responsibilities. This may be an employee or as an owner of a business.

The competency is to be exhibited within the area of managerial responsibility, which may be an entire enterprise or department of an enterprise. Roles and responsibilities will vary from enterprise to enterprise.

Relevant positions for implementing the occupational health and safety system will include managers, supervisors, occupational health and safety officer/manager and first aid officers.

Monitoring of activities may include review of written reports, performance appraisal or auditing procedures.

Competence is demonstrated in the context of an enterprise where the OH&S system with related policies, procedures and programs may or may not be established. Where the OH&S system is established, the role will relate to the maintenance and upkeep of the system.

Enterprise policies and procedures include those which directly or indirectly cover OH&S issues, such as:

- v hazard policies and procedures
- v standard operating procedures
- v safety procedures
- v work instructions
- v emergency, fire and accident procedures
- v personal protective clothing and equipment procedures.

This competency covers enterprises which may involve:

- v workplace hazards such as:
  - stationary and moving machinery, parts or components
  - hazardous substances or dangerous materials
  - working at height or in confined spaces
  - working in environments subjected to noise, light, different energy sources, high humidity and air temperatures, radiant heat, dust and vapours
  - materials handling
  - waste management and disposal
  - traffic flows, vehicle and equipment operation
- v hazardous events such as:
  - chemical spills
  - accidents
  - fires
  - bomb scares.

Consultation with employees should occur on OH&S issues such as:

- v identification of hazards
- v assessment of risk
- v decisions on measures to control risk
- v implementation of controls
- v injury and incident investigation
- v the development of OH&S policies and procedures.

Typical problems include:

- v provide information and training on OH&S issues, policies and procedures
- v be involved in consultation in OH&S issues, including establishment of policy and procedures, identification of hazards, assessment of risk, establishment of risk controls
- v keep OH&S records complete, current and confidential.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Detailed knowledge and understanding of all relevant occupational health and safety legislation and codes of practice and how they will be implemented within the area of responsibility.

Evidence will be required that the policies and procedures are being implemented, that sufficient resources, training, systems, explanation and consultation is being applied to deliver the OH&S policy and comply with the legislation.

Competence includes the ability for the practical completion of the job to:

v apply a:

- working knowledge of all relevant State/Territory acts, regulations and codes of practice, to enable enterprise policies, procedures and systems to be established in compliance, within role responsibilities
- knowledge of consultative processes, establishment, ongoing arrangements and obligations to those involved

v apply and explain:

- equal employment opportunity principles and practices for occupational health and safety
- other management systems and procedures for occupational health and safety
- literacy levels and communication skills of employees in the area of managerial responsibility and consequently suitable communication techniques (this may involve use of language other than English)
- the hierarchy of control (the preferred order of risk control measures from most to least preferred), that is:
  1. elimination
  2. substitution
  3. engineering controls
  4. administrative controls
  5. personal protective equipment.

### Critical aspects:

It is essential that the OH&S system be understood and that the importance of critical procedures are known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate action.

Consistent performance should be demonstrated. In particular look to see that the required level includes a working knowledge of all relevant workplace procedures, such as:

- v consultation processes, either general or specific to occupational health and safety
- v training and assessment
- v specific hazard policies and procedures (including housekeeping and inspections)
- v occupational health and safety information
- v occupational health and safety record keeping
- v maintenance of plant and equipment
- v purchasing of supplies and equipment
- v counselling/disciplinary/issue resolution processes.

### Language, literacy and numeracy requirements:

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

### Assessment method and context:

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

### Resource implications:

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

### KEY COMPETENCIES

1 Collect, analyse & organise information	2 Communicate ideas and information	3 Plan and organise activities	4 Work with others & in teams	5 Use mathematical ideas and techniques	6 Solve problems	7 Use technology
3	3	3	3	2	2	2

**UNIT TITLE:**

**PMPER200A - Work in accordance with an issued permit**

**UNIT DESCRIPTOR:**

This competency unit aims to ensure that people working under a permit to work understand the system, know the limitations of the permit under which they are working and comply with all the requirements of the permit.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify the scope of the permit.	1.1. Identify the need for a work permit(s) 1.2. Identify the type of work permit required 1.3. Check that work to be done complies with the permit type 1.4. Check that the scope and location of work complies with the permit issued.
2. Work in accordance with the permit.	2.1. Use required hazard reduction/control measures (including personal protective equipment) 2.2. Comply with requirements of the permit including stand-by personnel 2.3. Keep within the scope, location and timeframe specified in the permit.
3. Complete permit to work.	3.1. Formally seek and receive extensions to the permit when required 3.2. Have permit closed when work ceases for an extended period 3.3. Obtain new permits before work is recommenced 3.4. Permit is completed when job is completed.

## **RANGE OF VARIABLES:**

### **Context:**

This unit typically applies to all work done by maintenance staff and contractors and also to any other non-process work performed on the plant.

To be competent, the person should be able to distinguish between situations requiring the major types of permit and to list the major requirements of each type of permit. The types of permit are to include:

- v permit to work/cold work
- v hot work
- v confined space
- v other special permits.

All operations are performed in accordance with standard procedures.

### **OH&S:**

All operations are subject to stringent OH&S requirements and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and OH&S requirements, the OH&S requirements take precedence.

### **Knowledge and enterprise requirements:**

Knowledge of the relevant OH&S and environmental requirements is required along with an ability to implement them in a manner which is relevant to the job.

Thorough knowledge of enterprise standard procedures is required.

### **Assessment focus:**

Assessment should establish the ability to follow procedures, recognise situations requiring action, and then take appropriate action such as immediately ceasing work and reporting the situation.

### **Updating information:**

This competency is not expected to need rapid updating, however, learning resources supporting this competency will need to be updated with changes in technology, procedures and government regulations.

## **EVIDENCE GUIDE:**

### **Critical aspects:**

The competent person should be aware of the types of tests which might be required for that type of permit, and explain changes to conditions may lead to the permit being revoked before the job is completed. Types of tests/conditions to include:

- v atmospheric/oxygen/breathability
- v flammability/explosability
- v toxicity/TWA
- v temperature
- v humidity.

### **Concurrent assessment and prerequisites:**

This unit has **no** prerequisite competencies.

### **Essential knowledge:**

The competent person should also be aware of the regulatory framework (both internal and external) under which the permit system operates. They should be able to describe the impact of this framework on the particular job(s) they will be doing, and on themselves individually. The regulatory framework to include:

- v OH&S
- v EPA
- v Worksafe
- v licence requirements
- v company policy and permit control systems.

### **Assessment method, context and resource implications:**

Answers given to a theory test (written or oral) will be regarded as sufficient evidence in the first instance for a person to be regarded as competent. Any practical evidence from on the job observation which indicates a lack of competence will be sufficient to withdraw the assessment of competency. Evidence from a skills passport may be taken as prima facie evidence of generic competence and company/plant specific issues only need to be further trained in and/or assessed.

In all cases where practical assessment is used it will be combined with targeted questioning to assess the underpinning knowledge. Questioning will be undertaken in such a manner as is appropriate to the required language and literacy levels of the person.

Consistent on-the-job performance at the required standard should be demonstrated. In particular look to see that:

- v standard procedures are followed
- v deviations from permit conditions are recognised
- v action specified in the permit/standard procedures is carried out

<b>KEY COMPETENCIES</b>						
<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	2	1	1	1



**UNIT TITLE:**

**PMAPER300A – Issue work permits**

**UNIT DESCRIPTOR**

This competency unit aims to ensure that personnel who issue work permits understand the permit system, know the limitations of each permit and can make decisions regarding the need for and correct use of each permit.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify need for work permit.	1.1. Understand work permit system 1.2. Identify and confirm with appropriate personnel the need for work permit 1.3. Identify the correct permit for each situation.
2. Prepare work site.	2.1. Undertake an inspection of the work site 2.2. Identify OH&S and environmental requirements 2.3. Prepare work site in accordance with SOPs/specified work permit conditions 2.4. Check permit status conditions and report to appropriate personnel 2.5. Identify need for and carry out testing in accordance with SOPs 2.6. Complete appropriate documentation to standard.
3. Raise and issue work permits.	3.1. Specify testing and safety requirements 3.2. Check that work procedures are accessed and followed 3.3. Complete and sign off all relevant documentation.
4. Monitor work for compliance.	4.1. Undertake site inspections 4.2. Monitor conditions and respond to changing conditions/circumstances 4.3. Identify and act on incidences of non-compliance.
5. Sign off work permit.	5.1. Inspect job status 5.2. Check that work undertaken satisfies permit conditions 5.3. Ensure that work site is ready for normal working conditions 5.4. Sign off documentation in accordance with SOPs 5.5. Communicate work site status to relevant personnel.

## **RANGE STATEMENT:**

### **Context:**

This unit is typically performed by experienced operators.

To be competent, the person should be able to distinguish between situations requiring the major types of permit and to list the major requirements of each type of permit. The types of permit are to include:

- v permit to work/cold work
- v hot work
- v confined space/confined space entry
- v other special permits
- v evacuation
- v vehicle entry.

Indicative functions include:

- v supervision/monitoring of contractors
- v different types of testing, including:
  - atmospheric
  - temperature
  - humidity
  - toxicity
  - combustibles
  - oxygen
- v compliance with legislation/codes, including:
  - OH&S
  - EPA
  - Worksafe
  - licence requirements
- v internal permit control system.

### **OH&S:**

All operations are subject to stringent OH&S requirements and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and OH&S requirements, the OH&S requirements take precedence.

### **Knowledge and enterprise requirements:**

Knowledge of the relevant OH&S and environmental requirements is required along with an ability to implement them, in a manner which is relevant to the job.

Thorough knowledge of enterprise standard procedures and legislative requirements is assumed.

**Assessment focus:**

Assessment should establish the ability to follow procedures, recognise situations requiring action, and then take appropriate action.

**Updating information:**

This competency is not expected to need rapid updating, however, learning resources supporting this competency will need to be updated with changes in technology, procedures and government regulations.

**Essential knowledge:**

The competent person should be aware of the regulatory framework (both internal and external) under which permit systems operate.

The regulatory framework to include:

- v OH&S
- v EPA
- v Worksafe
- v licence requirements
- v company policy and permit control systems.

**Assessment method, context and resource implications:**

A practical assessment is required under several different circumstances. In all cases it will be combined with targeted questioning to assess the underpinning knowledge. Questioning will be undertaken in such a manner as is appropriate to the required language and literacy levels of the person.

Consistent on-the-job performance at the required standard should be demonstrated. In particular look to see that:

- v standard procedures are followed
- v deviations from permit conditions are recognised
- v action specified in the permit/standard procedures is carried out.

KEY COMPETENCIES						
1	2	3	4	5	6	7
Collect, analyse & organise information	Communicate ideas and information	Plan and organise activities	Work with others & in teams	Use mathematical ideas and techniques	Solve problems	Use technology
3	2	2	2	2	2	2



**UNIT TITLE:**

**PMAPER301A - Monitor and control work permits**

**UNIT DESCRIPTOR**

This competency unit aims to ensure that personnel who monitor and control work permits understand the permit system and know the limitations of each permit.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA:</b>
1. Maintain knowledge of current permit status.	1.1. Check permit status 1.2. Inform supervisors of permit status when appropriate 1.3. Check permit conditions for all active permits 1.4. Undertake site inspections 1.5. Comply with permit audits.
2. Identify non-compliance.	2.1. Understand conditions of active permits 2.2. Report and record incidents of non-compliance 2.3. Take corrective action.
3. Perform permit audits.	3.1. Understand permit system 3.2. Complete checklists in accordance with standard procedures 3.3. Communicate audit findings to appropriate personnel 3.4. Complete documentation in accordance with standard procedures.

## **RANGE OF VARIABLES:**

### **Context:**

This unit is typically performed by experienced operators.

To be competent, the person should be able to distinguish between situations requiring the major types of permit and to list the major requirements of each type of permit. The types of permit are to include:

- v permit to work/cold work
- v hot work
- v confined space
- v other special permits.

Indicative functions include:

- v supervision/monitoring of contractors
- v verification of:
  - permits
  - licences
  - tests
- v document control
- v compliance with legislation/codes.

### **OH&S:**

All operations are subject to stringent OH&S requirements and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and OH&S requirements, the OH&S requirements take precedence.

### **Knowledge and enterprise requirements:**

Knowledge of the relevant OH&S and environmental requirements is required along with an ability to implement them, in a manner which is relevant to the job.

Thorough knowledge of enterprise standard procedures and legislative requirements is required.

### **Assessment focus:**

Assessment should establish the ability to follow procedures, recognise situations requiring action, and then take appropriate action.

### **Updating information:**

This competency is not expected to need rapid updating, however, learning resources supporting this competency will need to be updated with changes in technology, procedures and government regulations.

### EVIDENCE GUIDE:

This unit is typically performed by experienced operators.

#### Critical aspects:

Consistent performance at the required standard should be demonstrated. In particular look to see that:

- v conditions requiring permits are understood
- v differences between permits are understood
- v deviations from desired conditions are recognised
- v action specified in the standard procedures is carried out.

#### Concurrent assessment and prerequisites:

This unit has **no** prerequisite competencies.

Individual enterprises may choose to add prerequisites and co-requisites relevant to their process.

#### Essential knowledge:

The competent person should be aware of the regulatory framework (both internal and external) under which permit systems operate.

The regulatory framework to include:

- v OH&S
- v EPA
- v Worksafe
- v permit requirements
- v company policy and permit control systems.

#### Assessment method, context and resource implications:

Answers given to a theory test (written or oral) will be regarded as sufficient evidence in the first instance for a person to be regarded as competent. Any practical evidence from on the job observation which indicates a lack of competence will be sufficient to withdraw the assessment of competency. Evidence from a skills passport may be taken as prima facie evidence of generic competence and company/plant specific issues only need to be further trained in and/or assessed.

In all cases where practical assessment is used it will be combined with targeted questioning to assess the underpinning knowledge. Questioning will be undertaken in such a manner as is appropriate to the required language and literacy levels of the person.

### KEY COMPETENCIES

1 Collect, analyse & organise information	2 Communicate ideas and information	3 Plan and organise activities	4 Work with others & in teams	5 Use mathematical ideas and techniques	6 Solve problems	7 Use technology
3	2	2	2	2	2	2





**UNIT TITLE****PMBSUP272A – Identify and act upon hazards in the workplace****UNIT DESCRIPTOR**

This competency covers all operations related to the handling of industrial chemicals and materials in accordance with enterprise procedures.

This competency is typically performed by an operator working independently or in a team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Use personal protective equipment.	1.1. Outline the functions for each type of personal protective equipment (PPE) used on site and identify the situations in which specific types of PPE would be used 1.2. Correctly use personal protective equipment.
2. Work safely with industrial chemicals/materials.	2.1. Identify and explain all safety signs, symbols and labels used in work area 2.2. Identify emergency procedures for the handling of industrial chemicals/materials 2.3. Identify hazardous areas, chemicals and materials, and outline any special handling procedures 2.4. Demonstrate correct use of equipment for handling hazardous materials/chemicals 2.5. Explain consequences of inappropriate handling of hazardous materials 2.6. Follow requirements of material safety data sheets 2.7. Complete all appropriate paperwork.
3. Implement the enterprise procedures for identifying hazards and assessing risk.	3.1. Identify existing and potential hazards in the work area in accordance with enterprise procedures 3.2. Report existing and potential hazards in the work area in accordance with enterprise procedures.
4. Implement the enterprise procedures for controlling risk and dealing with hazardous events.	4.1. Implement enterprise procedures to control risk as required 4.2. Implement enterprise procedures for dealing with hazardous events whenever necessary to ensure that prompt control action is taken 4.3. Monitor existing risk control measures and report results regularly in accordance with enterprise procedures 4.4. Identify inadequacies in existing risk control measures in accordance with the <u>hierarchy of control</u> and report to designated personnel.

ELEMENT	PERFORMANCE CRITERIA
5. Follow workplace procedures for handling and storage of dangerous goods.	<ul style="list-style-type: none"><li>5.1. Identify and apply storage requirements for the dangerous goods in the work area</li><li>5.2. Monitor storage quantities and check storage areas for conformity to regulations and workplace procedures</li><li>5.3. Check storage areas for conformity to regulations and workplace procedures</li><li>5.4. Check emergency equipment for compliance with requirements</li><li>5.5. Implement co-storage precautions in accordance with regulations and workplace procedures</li><li>5.6. Follow handling procedures for different classes and characteristics of goods</li><li>5.7. Select load handling and shifting procedures in accordance with requirements for particular goods</li><li>5.8. Use handling equipment consistent with workplace approved procedures.</li></ul>

#### RANGE OF VARIABLES:

This competency covers process manufacturing plants which may involve:

- v workplace hazards such as:
  - dangerous goods
  - other chemicals and hazardous materials (short term and long term effects)
  - gases and liquids under pressure
  - moving machinery
  - materials handling
  - working at heights, in confined spaces or in environments subjected to heat, noise, dust or vapours
- v hazardous events such as:
  - accidents
  - fires
  - chemical spills
  - bomb scares.

Competence is demonstrated in the context of an established enterprise OH&S system with related policies, procedures and programs. Enterprise procedures include those which directly or indirectly cover OH&S issues, such as:

- v hazard policies and procedures
- v standard operating procedures
- v materials handling procedures, particularly for dangerous and other hazardous goods
- v material storage and co-storage procedures, particularly for dangerous and other hazardous goods
- v safety procedures
- v work instructions
- v industry codes of practice and regulations
- v emergency, fire and accident procedures
- v personal protective clothing and equipment procedures.

This competency unit includes personal protective equipment (PPE) such as:

- hard hats
- goggles/glasses/face shields
- dusk masks/canister masks/ SCBA/ long range breathers
- gloves/gauntlets
- safety boots
- antistatic equipment
- overalls/aprons/acid jackets/pants.

Typical requirements include:

- v identify hazardous situations
- v deal with the situation appropriately
- v communicate in OH&S matters.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

In these industries, which are characterised by high potential hazards, employees need to exercise their duty of care responsibilities not only within the general OH&S acts and regulations, but also within those applying to hazardous substances, dangerous goods and major hazards.

Competence includes the ability for the practical completion of the job to:

- v identify hazards in the workplace
- v identify and assess risk in the workplace
- v report hazards identified to the designated person
- v locate, understand and follow workplace OH&S procedures.

### **Critical aspects:**

It is essential that the OH&S system be understood and that the importance of critical procedures is known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate corrective action.

Consistent performance at the required level includes a working knowledge of all relevant workplace procedures, such as:

- v consultation processes, either general or specific to occupational health and safety
- v specific hazard policies and procedures (including housekeeping and inspections)
- v occupational health and safety information
- v occupational health and safety record keeping
- v maintenance of plant and equipment.

Competence to include the ability to apply and explain:

- v Legislative requirements for dangerous goods
- v OH&S and legislative requirements relating to safe handling of chemicals/materials and dangerous goods
- v HAZCHEM and labelling requirements
- v use of material safety data sheets (MSDS)
- v effect of temperature and pressure on properties of relevant substances
- v principles of operation of equipment
- v hazard policies and procedures
- v enterprise processes for risk assessment
- v emergency, fire and accident procedures
- v procedures for the use of personal protective clothing and equipment
- v deviations from desired conditions
- v hierarchy of control.

### Language, literacy and numeracy requirements:

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

### Assessment method and context:

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

### Resource implications:

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

### KEY COMPETENCIES

1 Collect, analyse & organise information	2 Communicate ideas and information	3 Plan and organise activities	4 Work with others & in teams	5 Use mathematical ideas and techniques	6 Solve problems	7 Use technology
2	1	1	1	1	1	1

**UNIT TITLE****BSXFMI401A – Manage personal work priorities and professional development****UNIT DESCRIPTOR**

This competency applies to those personnel responsible for managing their own performance and taking responsibility for their professional development within the context of the organisation.

The competency would typically apply to front line managers who are typically involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Manage self.	<ul style="list-style-type: none"><li>1.1. Personal qualities and performance serve as a role model in the workplace</li><li>1.2. Personal goals and plans reflect the organisation's plans, and personal roles, responsibilities and accountabilities</li><li>1.3. Action is taken to achieve and extend personal goals beyond those planned</li><li>1.4. Consistent personal performance is maintained in varying work conditions and work contexts.</li></ul>
2. Set and meet own work priorities.	<ul style="list-style-type: none"><li>2.1. Competing demands are prioritised to achieve personal, team and the organisation's goals and objectives</li><li>2.2. Technology is used efficiently and effectively to manage work priorities and commitments.</li></ul>
3. Develop and maintain professional competence.	<ul style="list-style-type: none"><li>3.1. Personal knowledge and skills are assessed against competency standards to determine development needs and priorities</li><li>3.2. Feedback from clients and colleagues is used to identify and develop ways to improve competence</li><li>3.3. Management development opportunities suitable to personal learning style(s) are selected and used to develop competence</li><li>3.4. Participation in professional networks and associations enhances personal knowledge, skills and relationships</li><li>3.5. New skills are identified and developed to achieve and maintain a competitive edge.</li></ul>

### **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities may be used, for example:

- v mentoring
- v action learning
- v coaching
- v shadowing
- v exchange/rotation
- v structured training programs.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v operate in diverse work environments and contexts
- v acquire and use information appropriate to work responsibility
- v manage competing priorities to achieve personal and organisational goals and results
- v make decisions within responsibility and authority
- v develop a clear set of work goals
- v monitor and introduce practices to improve own performance
- v develop competencies which enable increased participation in the planning and development of the organisation
- v assess own performance
- v plan learning activities and negotiate priorities
- v seek feedback and act on constructive advice
- v select and use available learning methods to maintain current competence
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see following table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v effective working relationships are established with colleagues
- v activities are modified to cater for variations in workplace contexts and environment
- v opportunities for competency development are evaluated that results in cost and time effective personal professional development
- v work is consistently monitored and compared with organisational and personal goals and priorities
- v feedback on work quality and performance is sought and suggestions enacted and evaluated
- v shows evidence of application of relevant workplace procedures including:
  - training and assessment policies
  - issue resolution procedures.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	2	3	2



## UNIT TITLE

### BSXFMI402A – Provide leadership in the workplace

## UNIT DESCRIPTOR

This competency applies to those personnel responsible for providing leadership in the development of the organisation through leading by example, influencing others and managing their responsibilities within the context of the organisation.

The competency would typically apply to front line managers who are involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Model high standards of management performance.	1.1. Performance meets the organisation's requirements 1.2. Performance serves as positive role model for others 1.3. Performance plans are developed and implemented in accordance with organisation's goals and objectives 1.4. Key performance indicators are developed within the team's/organisations's business plans.
2. Enhance the organisation's image.	2.1. The organisation's standards and values are used in conducting business 2.2. Standards and values considered to be damaging to the organisation are questioned through established communication channels 2.3. Personal performance contributes to developing an organisation which has integrity and credibility.
3. Influence teams and individuals positively.	3.1. Expectations, roles and responsibilities are communicated in a way which encourages individuals/teams to take responsibility for their work 3.2. Individual's/team's efforts and contributions are encouraged, valued and rewarded 3.3. Ideas and information receive the acceptance and support of colleagues.
4. Make informed decisions.	4.1. Information relevant to the issue(s) under consideration is gathered and organised 4.2. Individuals/teams participate actively in the decisionmaking processes 4.3. Options are examined and their associated risks assessed to determine preferred course(s) of action 4.4. Decisions are timely and communicated clearly to individuals/teams 4.5. Plans to implement decision are prepared and agreed to by relevant individuals/teams 4.6. Feedback processes are used effectively to monitor the implementation and impact of decisions.

### **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities may be used, for example:

- v mentoring
- v action learning
- v coaching
- v shadowing
- v exchange/rotation
- v structured training programs.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v achieve planned results
- v acquire and use information appropriate to work responsibility
- v manage work effectively to achieve goals and results
- v make decisions within responsibility and authority
- v explain the organisation's goals, values and objectives
- v establish and monitor key performance indicators for individuals/teams
- v monitor and introduce practices to improve performance
- v operate in diverse work environments and contexts
- v use modern management techniques in work performance
- v use effective consultative processes
- v communicate routine and non-routine information clearly to senior managers, peers and subordinates
- v promote available learning methods to support colleagues' competence
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v effective working relationships are established with colleagues, subordinates and managers
- v activities are modified to cater for variations in workplace contexts and environment
- v organisation's standards and values are modelled in working with others
- v work is consistently monitored and compared with organisational and personal goals and priorities
- v feedback on work quality and performance is sought and suggestions enacted and evaluated
- v communication and consultation is sought and encouraged
- v evidence is shown of application of relevant workplace procedures including:
  - issue resolution procedures
  - business planning/setting and measuring performance objectives.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	2	3	2	2	3	2

**UNIT TITLE****BSXFMI403A – Establish and manage effective workplace relationships****UNIT DESCRIPTOR**

This competency applies to employees required to develop and maintain positive relationships in internal and external environments so that customers, suppliers and the organisation achieve planned outputs/outcomes.

The competency would typically apply to front line managers who are typically involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Gather, convey and receive information and ideas.	<ul style="list-style-type: none"><li>1.1. Information to achieve work responsibilities is collected from appropriate sources</li><li>1.2. The method(s) used to communicate ideas and information are appropriate to the audience</li><li>1.3. Communication takes into account social and cultural diversity</li><li>1.4. Input from internal and external sources is sought and valued in developing and refining new ideas and approaches.</li></ul>
2. Develop trust and confidence.	<ul style="list-style-type: none"><li>2.1. People are treated with integrity, respect and empathy</li><li>2.2. The organisation's social, ethical and business standards are used to develop and maintain positive relationships</li><li>2.3. Trust and confidence of colleagues, customers and suppliers is gained and maintained through competent performance</li><li>2.4. Appropriate tasks and responsibilities are delegated to employees and appropriate reporting systems established for the delegations</li><li>2.5. Interpersonal styles and methods are adjusted to the social and cultural environment.</li></ul>
3. Build and maintain networks and relationships.	<ul style="list-style-type: none"><li>3.1. Networking is used to identify and build relationships</li><li>3.2. Networks and other work relationships provide identifiable benefits for the team and organisation.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
4. Manage difficulties to achieve positive outcomes.	<ul style="list-style-type: none"><li>4.1. Problems are identified and analysed, and action is taken to rectify the situation with minimal disruption to performance</li><li>4.2. Colleagues receive guidance and support to resolve their work difficulties</li><li>4.3. Continued poor performance is managed within the organisation's processes</li><li>4.4. Conflict is managed constructively within the organisation's processes</li><li>4.5. Difficult situations are negotiated to achieve results acceptable to the participants, and which meet organisation and legislative requirements.</li></ul>

**RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities maybe used, for example:

- v mentoring
- v action learning
- v coaching
- v shadowing
- v exchange/rotation
- v structured training programs.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v use information appropriate to work responsibility
- v manage work effectively to achieve goals/results
- v monitor and introduce ways to improve work relationships
- v perform in a way which strengthens and reinforces relationships
- v develop effective relationships in internal and external environments
- v communicate clearly and concisely
- v respond effectively to unexpected demands from a range of sources
- v provide honest and productive feedback
- v encourage contrary views to be submitted and discussed
- v treat people openly and fairly
- v develop constructive responses when confronted with problems and difficulties
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v relationships are managed with internal and external personnel to effectively achieve goals/results
- v work relationships are improved through constructive and appropriate efforts
- v consultative methods and forums are utilised to improve work effectiveness
- v relevant information is located and utilised effectively
- v workplace records are maintained
- v safety precautions appropriate to the task are applied.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.



**Assessment method and context:**

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	2	3	2



## UNIT TITLE

### **BSXFMI404A – Participate in, lead and facilitate work teams**

## UNIT DESCRIPTOR

This unit of competency is for those with a role in leading, participating in and facilitating the empowerment of work teams/groups, motivating, mentoring, coaching and developing team members and achieving team cohesion.

The competency would typically apply to front line managers who are involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Participate in team planning.	1.1. The team establishes clearly defined goals, purpose, roles, responsibilities and accountabilities within the organisation's goals and objectives 1.2. The team performance plan contributes to the organisation's business plan, policies and practices 1.3. The team agrees to processes to monitor and adjust its performance within the organisation's continuous improvement policies 1.4. The team includes in its plans ways in which it can benefit from the diversity of its membership.
2. Develop team commitment and cooperation.	2.1. The team uses open communication processes to obtain and share information 2.2. The team encourages and exploits innovation and initiative 2.3. Support is provided to the team to develop mutual concern and camaraderie.
3. Manage and develop team performance.	3.1. The team is supported in making decisions within agreed roles and responsibilities 3.2. The results achieved by the team contribute positively to the organisation's business plans 3.3. Team and individual competencies are monitored regularly to confirm that the team is able to achieve goals 3.4. Mentoring and coaching supports team members to enhance personal and collective knowledge and skills 3.5. Delegates' performance is monitored to confirm that they have completed the relevant delegation(s)/assignment(s).
4. Participate in and facilitate the work team.	4.1. Team effectiveness is encouraged and enhanced through active participation in team activities and communication processes 4.2. Individuals and teams are actively encouraged to take individual and joint responsibility for actions 4.3. The team receives support to identify and resolve problems which impede performance.

## **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities may be used, for example:

- v mentoring
- v action learning
- v coaching
- v shadowing
- v exchange/rotation
- v structured training programs.

Teams may be one or a mixture of :

- v ongoing
- v work based
- v project based
- v cross-functional.

Teams may include :

- v full time employees
- v contractors
- v part time employees.

Front line management roles in teams may include :

- v leader
- v facilitator
- v participant
- v mentor.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v acquire and use information appropriate to work responsibility
- v establish among teams a commitment to the organisation's goals, values and plans
- v manage work effectively to achieve goals/results
- v make decisions within responsibility and authority
- v provide clear direction in devolving responsibility and authority
- v provide constructive feedback to delegates
- v work effectively with team members who have diverse work styles, aspirations, cultures and perspectives
- v use effective consultative processes
- v monitor and introduce ways to improve team performance
- v encourage teams to openly propose, discuss and resolve issues
- v treat people openly and fairly
- v support team to share knowledge and skills
- v deal with conflict before it adversely affects team performance
- v promote available learning methods to support team
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v leadership skills are applied to the completion of work team projects including the allocation and delegation of tasks, taking into account task requirements, development needs and organisational policy
- v issues are mediated and resolved maximising positive outcomes
- v techniques to encourage appropriate participation of team/group members are applied
- v requirements of tasks and organising, planning, job completion and evaluation stages are identified
- v relevant information is located and appropriately applied
- v provision of customer/client service is effective and responsive
- v work is completed effectively with others.

### Language, literacy and numeracy requirements:

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

### Assessment method and context:

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

### Resource implications:

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

### KEY COMPETENCIES

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	2	3	2

**UNIT TITLE****BSXFMI405A - Manage operations to achieve planned outcomes****UNIT DESCRIPTOR**

This unit applies to those employees required to plan, implement, monitor and record performance to achieve the business plans of the team/organisation. This pivotal role is carried out to create safe, efficient and effective products and services to customer satisfaction within the organisation's productivity and profitability plans.

The competency would typically apply to front line managers who are involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Plan resource use to achieve profit/productivity targets.	<ul style="list-style-type: none"><li>1.1. Resource information for use in operational plans is collected, analysed and organised in consultation with colleagues and specialist resource managers</li><li>1.2. Operational plans contribute to the achievement of the organisation's performance/business plan</li><li>1.3. Operational plans identify available resources, taking into account customer needs and the organisation's plans</li><li>1.4. Contingency plans are prepared in the event that initial plans need to be varied.</li></ul>
2. Acquire resources to achieve operational plan.	<ul style="list-style-type: none"><li>2.1. Employees are recruited, inducted and deployed within the organisation's human resource management policies and practices</li><li>2.2. Physical resources and services are acquired and deployed in accord with the organisation's practices and procedures.</li></ul>
3. Monitor operational performance.	<ul style="list-style-type: none"><li>3.1. Performance systems and processes are monitored to assess progress in achieving profit/productivity plans and targets</li><li>3.2. Budget and actual financial information is analysed and interpreted to monitor profit/productivity performance</li><li>3.3. Unsatisfactory performance is identified and prompt action is taken to rectify the situation</li><li>3.4. Recommendations for variation to operational plans are negotiated and approved by the designated persons/groups.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
4. Monitor resource usage.	<p>4.1. Systems and processes are monitored to establish whether resources are being used as planned</p> <p>4.2. Problems with resource usage are investigated and rectified and/or reported to designated persons/groups</p> <p>4.3. Mentoring and coaching is provided to support individuals/teams who have difficulties in using resources to the required standard</p> <p>4.4. Systems, procedures and records associated with documenting resource acquisition and usage are managed in accordance with the organisation's requirements.</p>

#### **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities maybe used, for example:

- v mentoring
- v action learning
- v coaching
- v shadowing
- v exchange/rotation
- v structured training programs.



Resources may include :

- v people
- v power/energy
- v information
- v finance
- v buildings/facilities
- v time
- v equipment
- v technology.

All operations are performed in accordance with standard procedures and work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v manage work effectively to achieve goals/results
- v acquire and use information appropriate to work responsibility
- v make decisions within responsibility and authority
- v participate effectively in wider organisational processes which have an effect on organisational performance
- v organise and use resources to achieve business plans
- v provide input to the organisation's planning processes
- v eliminate/minimise resource inefficiencies and waste
- v create products/services which are safe for customer use
- v develop alternative approaches to improve resource use
- v ensure that legislative requirements are met in work operations
- v prepare and negotiate recommendations to change operations
- v use effective consultative processes
- v seek feedback and constructive advice
- v promote available learning methods to assist colleagues
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

#### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v work is managed effectively to achieve goals and results
- v contributions are made to the organisation's planning processes
- v improvements are suggested to operation plans and changes negotiated
- v operational performance/budgets are monitored and improvements recommended in resource usage
- v appropriate workplace language and communication technologies are utilised
- v all relevant information is located, interpreted and applied

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	2

**UNIT TITLE****BSXFMI406A - Manage workplace information****UNIT DESCRIPTOR**

This unit of competency is for those employees participating in the planning processes in organisations incorporating information gathering, planning and resourcing within the organisation.

The competency would typically apply to front line managers who are involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify and source information needs.	1.1. The information needs of individuals/teams is determined and the potential sources of information are identified 1.2. Information held by the organisation is reviewed to determine suitability and accessibility 1.3. Arrangements are made to obtain information which is not available/accessible within the organisation.
2. Collect, analyse and report information.	2.1. Collection of information is timely and relevant to the needs of individuals/teams 2.2. Information is in a format suitable for analysis, interpretation and dissemination 2.3. Information is analysed to identify and report relevant trends and developments in terms of the needs for which it was acquired.
3. Use management information systems.	3.1. Management information systems are used effectively to store and retrieve data for decisionmaking 3.2. Technology available in the work area/organisation is used to manage information efficiently and effectively 3.3. Recommendations for improving the information system are submitted to designated persons/groups.
4. Prepare business plans/budgets.	4.1. Individuals/teams are involved in business plan/budget preparation in a way which uses their contribution effectively and gains their support for the outcomes 4.2. Business plans/budgets are prepared and presented in accordance with the organisation's guidelines and requirements 4.3. Contingency plans are prepared in the event that alternative action is required.

ELEMENT	PERFORMANCE CRITERIA
5. Prepare resource proposals.	<p>5.1. Resource planning data is collected in consultation with colleagues including those who have a specialist role in resource management</p> <p>5.2. Estimates of resource needs and utilisation reflects the organisation's business plans, customer and supplier requirements</p> <p>5.3. Proposals to secure resources are supported by clearly presented submissions describing realistic options, benefits, costs and outcomes.</p>

#### **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities maybe used, for example:

- v mentoring
- v action learning
- v coaching
- v shadowing
- v exchange/rotation
- v structured training programs.

Resources may include :

- v people
- v power/energy
- v information
- v finance
- v buildings/facilities
- v time
- v equipment
- v technology.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v manage work effectively to achieve goals/results
- v acquire and use information appropriate to work responsibility
- v make decisions within responsibility and authority
- v monitor and improve ways to manage workplace information
- v explain basic financial concepts in business plans/budgets
- v prepare basic financial information in standard format
- v prepare resource proposals within budget constraints
- v prepare and negotiate recommendations to improve the organisation's information systems
- v ensure that legislative requirements are met in plans
- v promote available learning methods to assist colleagues
- v use effective consultative processes
- v communicate with colleagues who have specialist responsibilities in financial and resource management
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v work is managed to achieve the organisation's goals and business plans
- v workplace products, materials used, production and work processes utilised are appropriate to the workplace
- v basic financial information is prepared in accordance with workplace requirements
- v financial concepts are explained clearly, concisely and effectively in relation to budgets and business plans
- v resource proposals are prepared within budget
- v requirements to safely handle workplace equipment, substances, products and materials and safety precautions are identified and appropriate to workplace within budgets.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	2

**UNIT TITLE****BSXFMI407A - Manage quality customer service****UNIT DESCRIPTOR**

This unit applies to employees who are required to ensure that products and services are delivered and maintained to standards agreed by the organisation and the customer. This will be carried out in the context of the organisation's policies and practices as well as legislation, conventions and codes of practice.

The competency would typically apply to front line managers who are involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Plan to meet internal and external customer requirements.	1.1. The needs of customers are researched, implications for the organisation are assessed 1.2. Information on customer requirements is included in the planning process 1.3. Provision is made in plans to achieve the quality, time and cost specifications agreed with customers.
2. Ensure delivery of quality products/services.	2.1. Products/services are delivered to customer specifications within the team's/organisation's business plan 2.2. Individual/team performance consistently meets quality, safety, resource and delivery standards 2.3. Coaching and mentoring assists colleagues overcome difficulty in meeting customer service standards.
3. Monitor, adjust and report customer service.	3.1. The organisation's systems and technology are used to monitor progress in achieving product/service targets and standards 3.2. Customer feedback is sought and used to improve the provision of products/services 3.3. Resources are used effectively and efficiently to provide quality products/services to customers 3.4. Decisions to overcome problems with products/services are taken in consultation with designated individuals/groups 3.5. Adjustments are made to products/services, and those who have a role in their planning and delivery are informed of changes 3.6. Records, reports and recommendations are managed within the organisation's systems and processes.

## **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities may be used, for example:

- |                   |                                |
|-------------------|--------------------------------|
| v mentoring       | v exchange/rotation            |
| v action learning | v structured training programs |
| v coaching        | v shadowing.                   |

Resources may include :

- |                |                        |
|----------------|------------------------|
| v people       | v buildings/facilities |
| v power/energy | v time                 |
| v information  | v equipment            |
| v finance      | v technology.          |

All operations are performed in accordance with standard procedures and work instructions.



## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v manage work effectively to achieve goals/results
- v manage products/services within budget constraints
- v make decisions within responsibility and authority
- v acquire and use information appropriate to work responsibility
- v monitor and introduce ways to improve products/services
- v use effective consultative processes
- v ensure that legislation and standards are met
- v develop and maintain effective communication with customers
- v seek customer feedback and act on constructive advice
- v treat people fairly and openly
- v promote available learning methods to assist colleagues to maintain current competence
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v work is managed to achieve desired required outcomes
- v the area or team operates within budget(s)
- v means to improve service to customers are identified
- v area or team introduces (any) required improvements to customer service provision
- v information management systems are effectively utilised
- v there is effective provision of customer/client service and the assessee works effectively with colleagues
- v customer service implementation systems are adapted to particular purposes
- v group/team members are supported to implement improved customer service
- v information is conveyed clearly and concisely in written and oral form.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

### Assessment method and context:

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

### Resource implications:

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

### KEY COMPETENCIES

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	2

**UNIT TITLE****BSXFMI408A - Develop and maintain a safe workplace and environment****UNIT DESCRIPTOR**

This unit applies to employees whose key role is in promoting and monitoring a safe work environment, ensuring that the workplace meets safety standards set down in legislation, standards and the organisation's policies and practices.

The competency would typically apply to front line managers who are involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Access and share legislation, codes and standards.	<ul style="list-style-type: none"><li>1.1. Legislation, standards and the organisation's policies and practices relevant to the creation and maintenance of a safe workplace and environment are made available to individuals/teams</li><li>1.2. Arrangements are made to provide information in a language, style and format which is understood by colleagues</li><li>1.3. Individuals/teams know their legal responsibility for maintaining a safe workplace and environment</li><li>1.4. The implications of an unsafe workplace and environment is clear to all within the workplace.</li></ul>
2. Plan and implement safety requirements.	<ul style="list-style-type: none"><li>2.1. Health and safety risk assessments are made as part of all production planning exercises</li><li>2.2. Policy and procedures are developed to implement requirements for a safe workplace</li><li>2.3. Work practices are planned with colleagues to ensure compliance with workplace and environmental legislation and standards</li><li>2.4. Safe operating procedures are documented and communicated</li><li>2.5. Work practices are implemented in accordance with requirements specified in legislation and standards for safe workplaces and environments</li><li>2.6. Coaching and mentoring supports colleagues in managing their rights and responsibilities</li><li>2.7. Purchasing policy provides mechanisms to monitor potential hazards from substances and equipment.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
3. Monitor, adjust and report safety performance.	<p>3.1. Actual and potential problems are identified, rectified and reported promptly and decisively to ensure workplace and environmental safety</p> <p>3.2. Hazards are managed so that risks are minimised</p> <p>3.3. Waste recycling, reduction and disposal is carried out within legislative and organisational requirements</p> <p>3.4. Recommendations to make improvements to comply with legislation and associated standards are submitted to designated persons/groups</p> <p>3.5. Individuals/teams are informed of improvements and alterations to occupational health and safety procedures in the workplace</p> <p>3.6. Systems, records and reporting procedures are maintained according to legislative requirements.</p>
4. Investigate and report non-conformance.	<p>4.1. Non-conformance is investigated and dealt with according to legislative requirements</p> <p>4.2. Coaching and mentoring supports colleagues to acquire and apply competencies to meet legislative requirements and the associated standards</p> <p>4.3. Workplace practices are implemented to ensure that non-conformance is not repeated.</p>

#### **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities maybe used, for example:

- |   |                 |   |                              |
|---|-----------------|---|------------------------------|
| v | mentoring       | v | exchange/rotation            |
| v | action learning | v | structured training programs |
| v | coaching        | v | shadowing.                   |

Resources may include :

- |   |              |   |                      |
|---|--------------|---|----------------------|
| v | people       | v | buildings/facilities |
| v | power/energy | v | time                 |
| v | information  | v | equipment            |
| v | finance      | v | technology.          |

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v develop and promote a safety conscious culture in the workplace
- v provide a model to others in working safely
- v acquire and use information appropriate to work responsibility
- v explain safety legislation, standards and procedures
- v maintain a safe workplace
- v take prompt action to rectify/report non-compliance
- v prepare and negotiate recommendations to improve safety
- v monitor and introduce practices to ensure safety compliance
- v promote available learning methods to assist colleagues
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v work is managed to achieve desired required outcomes
- v the effectiveness of the occupational health and safety system and related policies, procedures and programs is assessed
- v improvements to the occupational health and safety system are identified and reported to appropriate personnel
- v risk management processes are applied to improve workplace procedures
- v appropriate workplace records are maintained
- v workplace consultative processes are utilised to improve health and safety
- v safety performance standards are modelled
- v safety legislation, standards and procedures are clearly and concisely explained
- v appropriate personnel are negotiated with to improve workplace health, safety and

welfare.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Collect, analyse & organise information	Communicate ideas and information	Plan and organise activities	Work with others & in teams	Use mathematical ideas and techniques	Solve problems	Use technology
3	3	3	3	3	3	2

**UNIT TITLE****BSXFMI409A - Implement and monitor continuous improvement systems and processes****UNIT DESCRIPTOR**

This unit applies to those required to manage the continuous improvement process to achieve the organisation's quality objectives through influencing the ongoing development of the organisation.

The competency would typically apply to front line managers who are involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Implement continuous improvement systems and processes.	<ul style="list-style-type: none"><li>1.1. Team members are actively encouraged and supported to participate in decision making processes and to assume responsibility and authority</li><li>1.2. The organisation's continuous improvement processes are communicated to individuals/teams</li><li>1.3. Mentoring and coaching support ensures that individuals/teams are able to implement the organisation's continuous improvement processes.</li></ul>
2. Monitor, adjust and report performance.	<ul style="list-style-type: none"><li>2.1. The organisation's systems and technology are used to monitor progress and to identify ways in which planning and operations could be improved</li><li>2.2. Customer service is strengthened through the use of continuous improvement techniques and processes</li><li>2.3. Plans are adjusted and communicated to those who have a role in their development and implementation.</li></ul>
3. Consolidate opportunities for further improvement.	<ul style="list-style-type: none"><li>3.1. Individuals/teams are informed of savings and productivity improvements in achieving the business plan</li><li>3.2. Work performance is documented and the information is used to identify opportunities for further improvement</li><li>3.3. Records, reports and recommendations for improvement are managed within the organisation's systems and processes.</li></ul>

## **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities may be used, for example:

- |                   |                                |
|-------------------|--------------------------------|
| v mentoring       | v exchange/rotation            |
| v action learning | v structured training programs |
| v coaching        | v shadowing.                   |

Resources may include :

- |                |                        |
|----------------|------------------------|
| v people       | v buildings/facilities |
| v power/energy | v time                 |
| v information  | v equipment            |
| v finance      | v technology.          |

All operations are performed in accordance with standard procedures and work instructions.



## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v manage work effectively to achieve goals and results
- v explain the organisation's continuous improvement methods
- v acquire and use information appropriate to work responsibility
- v provide leadership to colleagues in continuous improvement processes
- v encourage ideas and feedback to improve processes
- v prepare and negotiate recommendations to improve the continuous improvement processes
- v gain the commitment of individuals/teams to continuous improvement practices and principles
- v use effective consultative processes
- v promote available learning methods
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v work is managed to achieve desired required outcomes
- v the organisation's continuous improvement processes are explained to others
- v recommendations to improve products and work processes are prepared and promoted
- v appropriate consultative processes to effect change are utilised
- v workplace records and appropriate statistical data are maintained
- v provision of leadership to colleagues in implementation of continuous improvement processes
- v methods and approaches to monitor and introduce improved performance are implemented.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	2

**UNIT TITLE****BSXFMI410A - Facilitate and capitalise on change and innovation****UNIT DESCRIPTOR**

This unit applies to those required to foster change and act as a catalyst in the implementation of change and innovation ensuring that individuals, the team and the organisation gain from change; and that the customer benefits through improved products and services.

The competency would typically apply to front line managers who are involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Participate in planning the introduction of change.	1.1. The manager contributes effectively in the organisation's planning processes to introduce change 1.2. Plans to introduce change are made in consultation with designated individuals/groups 1.3. The organisation's objectives and plans to introduce change are explained clearly to individuals/teams.
2. Develop creative and flexible approaches and solutions.	2.1. Alternative approaches to managing workplace issues and problems are identified and analysed 2.2. Risks are assessed and action is taken to achieve a recognised benefit or advantage to the organisation 2.3. The workplace is managed in a way which promotes the development of innovative approaches and outcomes 2.4. Creative and responsive approaches to resource management improves productivity and/or reduces costs in a competitive environment.
3. Manage emerging challenges and opportunities.	3.1. Individuals/teams respond effectively and efficiently to changes in the organisation's goals, plans and priorities 3.2. Coaching and mentoring assists individuals/teams develop competencies to handle change efficiently and effectively 3.3. The manager uses opportunities within area of responsibility and authority to make adjustments to respond to the changing needs of customers and the organisation 3.4. Individuals/teams are kept informed of progress in the implementation of change 3.5. Recommendations for improving the methods/techniques to manage change are negotiated with designated persons/groups.

## **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities maybe used, for example:

- |                   |                                |
|-------------------|--------------------------------|
| v mentoring       | v exchange/rotation            |
| v action learning | v structured training programs |
| v coaching        | v shadowing.                   |

Resources may include :

- |                |                        |
|----------------|------------------------|
| v people       | v buildings/facilities |
| v power/energy | v time                 |
| v information  | v equipment            |
| v finance      | v technology.          |

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v manage work effectively to achieve goals and results
- v explain the organisation's methods to introduce change
- v acquire and use information appropriate to work responsibility
- v identify opportunities to introduce change within area of responsibility and authority
- v draw on the diversity of workplace to assist the organisation to benefit from change
- v monitor trends in the external environment to develop and maintain a competitive edge
- v monitor and introduce practices to improve performance
- v use effective consultative processes
- v seek feedback and act on constructive advice
- v promote available learning methods to support colleagues
- v provide leadership to colleagues in continuous improvement processes
- v encourage ideas and feedback to improve processes
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v work is managed to achieve desired required outcomes
- v the context and extent of organisational change is understood and promoted
- v trends in the external environment are monitored to develop and maintain a competitive edge
- v appropriate consultative processes to effect change are utilised
- v workplace records and appropriate statistical data are maintained
- v provision of leadership to colleagues in implementation of change processes
- v methods and approaches to monitor and introduce practices to improve performance are implemented.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	3

## UNIT TITLE

### **BSXFMI411A - Contribute to the development of a workplace learning environment**

## UNIT DESCRIPTOR

This unit applies to those who play a prominent role in encouraging and supporting the development of a learning organisation.

The competency would typically apply to front line managers who are involved in organisations as coordinators, team leaders, supervisors, forepersons or project managers. They are not usually responsible for managing other managers, but on a daily basis they play a crucial role in coordinating and influencing employees.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Create learning opportunities.	1.1. Workplace environments which facilitate learning are developed and supported 1.2. Learning plans are developed as an integral part of individual/team performance plans 1.3. Learning plans reflect the diversity of needs and learning opportunities 1.4. Individual/team access to, and participation in, learning opportunities is facilitated 1.5. Negotiation with training and development specialists results in the planning and provision of learning which enhances individual, team, and organisational performance.
2. Facilitate and promote learning.	2.1. Workplace activities are used as opportunities for learning 2.2. Coaching and mentoring contributes effectively to development of workplace knowledge, skills and attitudes 2.3. The benefits of learning are shared with others in the team/organisation 2.4. Workplace achievement is recognised by timely and appropriate recognition, feedback and rewards.
3. Monitor and improve learning effectiveness.	3.1. Performance of individuals/teams is monitored to determine the type and extent of additional work-based support 3.2. Feedback from individuals/teams is used to identify and introduce improvements in future learning arrangements 3.3. Adjustments negotiated with training and development specialists results in improvements to the efficiency and effectiveness of learning 3.4. Records and reports of competency are documented and maintained within the organisation's systems and procedures.

### **RANGE OF VARIABLES:**

At AQF 4, front line managers will normally be engaged in a workplace context in which they:

- v are autonomous, working under general guidance on progress and outcomes
- v may supervise others
- v may guide or facilitate teams
- v have responsibility for, and limited organisation of, work of others
- v apply knowledge with depth in some areas
- v apply a broad range of skills to a range of workplace contexts
- v are involved in some complexity in the choice of actions
- v use competencies within routines, methods and procedures
- v use some discretion and judgement for self and others in planning and using resources, services and processes to achieve outcomes within time constraints.

Front line managers at AQF 4 will normally operate in a relatively diverse workplace environment in which they use the organisation's:

- v goals, objectives, plans, systems and processes
- v quality and continuous improvement processes and standards
- v processes and standards
- v business and performance standards
- v defined resource parameters
- v ethical standards.

They use legislation, codes and national standards relevant to the workplace. A range of learning opportunities may be used, for example:

- |                   |                                 |
|-------------------|---------------------------------|
| v mentoring       | v exchange/rotation             |
| v action learning | v structured training programs. |
| v coaching        |                                 |

All operations are performed in accordance with standard procedures and work instructions.



## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

This guideline is to assist the development of assessment instruments/tools to assess the competence of frontline management. At AQF 4, frontline managers must provide evidence of consistent achievement of this unit's workplace outcomes, by showing evidence that they:

- v promote a learning culture
- v manage work effectively to achieve goals and results
- v explain principles of adult learning
- v develop links between work and learning
- v use coaching and mentoring to assist knowledge/skill formation
- v monitor and introduce ways for people to develop knowledge and skills
- v facilitate opportunities for learning
- v encourage colleagues to share their knowledge and skills
- v create opportunities for individuals/teams to learn from workplace performance
- v negotiate with training and development specialists individual/team learning needs
- v provide the opportunity for off the job learning to be applied in the workplace
- v promote available learning methods to support colleagues
- v use information management systems
- v select and use available technology appropriate to the task
- v use the key competencies to achieve results (see table).

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that :

- v work is managed to achieve desired required outcomes
- v the context and extent of workplace learning is understood and promoted
- v trends in workplace learning and development are monitored to develop and maintain a competitive edge
- v learning opportunities for individuals/team are identified and promoted
- v workplace records and appropriate statistical data are maintained
- v provision of leadership to colleagues in implementation of workplace learning processes
- v methods and approaches to monitor and introduce practices to improve performance are implemented.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret company policies, procedures and business documentation. Writing is required to the level of completing workplace reports and documents.

Numeracy is also required, eg, to analyse business data in the form of tables and charts and analyse budgetary information relevant to the workplace.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on the job allowing for the demonstration of the competency under all normal and a range of abnormal circumstances
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. Access should be provided to industry competency standards and assessment systems and particular workplace development opportunities. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	3

**UNIT TITLE****LMTEMGN07A - Manage installation and commissioning of equipment and systems****UNIT DESCRIPTOR**

This unit covers the skills and knowledge required to manage the installation and commissioning of equipment and systems used in an enterprise.

This competency is typically performed by senior technicians/technologists/team leaders or engineers working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare work plan and specification document.	1.1. Items to be included in work plan and specification document are identified and confirmed 1.2. Work plan for installation and commissioning of equipment/systems is drawn up, including management and reporting procedures 1.3. Specification document is prepared according to enterprise and/or manufacturer's procedures.
2. Coordinate and monitor contract arrangements.	2.1. Contract arrangements for the installation and commissioning of equipment/systems, including all legal, insurance and safety requirements, are coordinated in accordance with enterprise and/or legislative procedures 2.2. Contract arrangements are monitored to ensure compliance with requirements and variations dealt with according to agreed strategy.
3. Manage schedules and budgets.	3.1. Information is gathered to establish adherence to schedule and budget forecasts 3.2. Deviation from performance targets is monitored and corrective action taken, if and where necessary 3.3. Scheduling and budgeting processes are assessed to determine whether variations or alternative plans are indicated.
4. Administer legal, environmental and OH&S requirements.	4.1. Legal, environmental and OH&S requirements related to installation and commissioning of equipment/systems are defined 4.2. Monitoring of the process is assessed to ensure compliance.
5. Assess and report on work completion.	5.1. Completed work is assessed to confirm that all specifications have been incorporated 5.2. Report on work completed is prepared in accordance with enterprise procedures.
6. Maintain records.	6.1. Records are maintained of installation and commissioning activities in accordance with enterprise procedures.

## **RANGE OF VARIABLES:**

### **General context:**

Competence must be demonstrated in the management of the installation and commissioning of equipment and systems used in an enterprise.

Significant judgement is required in planning, design, technical or supervisory activities related to operations or processes.

Work is assessed in accordance with statutory requirements, organisation insurance requirements, OH&S legislation, manual handling procedures and relevant health regulations.

### **Worksite environment may include:**

Work may be conducted in a large scale production or small business situation.

The competencies apply to workplace activities associated with management of the installation and commissioning of equipment and systems used in the enterprise.

The competency can relate to on-shore or off-shore applications; it would include all local requirements and may include establishing a new production line.

Work may involve individual and team related activities, and can include liaison with specialist technicians or contractors.

Equipment and systems may include:

- v microprocessor or computer control
- v production and facility equipment used within the enterprise.

The competency is applied under limited guidance in line with a broad plan, budget or strategy.

Knowledge and skills are applied:

- v as part of major functional area
- v in highly specialised situations requiring a range of skills.

The competency is used within substantially non-routine situations.

Sources of information/documents may include

- v work instructions
- v manufacturer's specifications and instructions
- v organisation work procedures and specifications
- v organisational or external personnel
- v quality and Australian standards and procedures.

**Workplace context may include:**

Work organisation procedures and practices relating to the design of equipment and system modifications for applications within an enterprise.

Conditions of service, legislation and industrial agreements including:

- v workplace agreements and awards
- v federal or State/Territory legislation
- v standard work practices.

Reporting actions include verbal and written communication in accordance with organisational policies and procedures.

Communication may be oral, written or visual and can include simple data.

Being responsible for the maintenance of own work quality and being required to contribute to the quality improvement of team or section output, where necessary.

Safety, environmental, housekeeping and quality are as specified by machine/equipment manufacturers, regulatory authorities and the enterprise.

Applicable regulations and legislation may include:

- v occupational health and safety legislation relevant to the workplace activities
- v relevant Australian design standards
- v workers' compensation legislation
- v environmental legislation and regulations.

**EVIDENCE GUIDE:**

**Critical aspects of evidence to be considered:**

Assessment must confirm appropriate knowledge and skills to:

- v develop and prepare work plan and specification documents
- v organise and monitor contract arrangements
- v assess scheduling and budgeting procedures
- v implement legal, environmental and OH&S obligations/requirements
- v ensure completed work meets specifications
- v maintain accurate records.

**Interdependent assessment of units:**

This unit does not necessarily need to be assessed in conjunction with other units and can be assessed independently.

**Required knowledge and skills:**

Underpinning knowledge of:

- v appropriate installation and commissioning procedures
- v OH&S considerations and environmental factors
- v contract requirements
- v safety and environmental aspects of relevant enterprise activities
- v workplace procedures and reporting/recording processes
- v relevant regulatory requirements and codes of practice
- v relevant OH&S legislation, regulatory requirements and codes of practice.

Underpinning skills to:

- v monitor contract arrangements, scheduling and budgets
- v manage the application of technical skills by other personnel
- v communicate effectively within the workplace, including liaising with other departments
- v establish or interpret procedures, where required
- v determine report requirements and present information in appropriate formats.

**Resource implications:**

Access to real or appropriately simulated situations involving the design of equipment and system modifications for applications within a plastics, rubber or cablemaking context.

This includes real or simulated work areas, materials, equipment, and information on work specifications, manufacturer's instructions, relevant safety procedures and regulations, quality standards, organisation procedures and customer requirements.

**Consistency in performance:**

Applies underpinning knowledge and skills when:

- v organising work
- v managing activities and personnel
- v completing tasks
- v identifying improvements
- v applying safety precautions relevant to the task
- v assessing operational capability of specified equipment used and work processes.

Shows evidence of application of relevant workplace procedures including:

- v hazard policies and procedures including codes of practice
- v job procedures and work instructions
- v quality procedures (where existing)
- v waste, pollution and recycling management processes.

Action taken promptly, accidents and incidents reported in accordance with statutory requirements and enterprise procedures.

Recognises and adapts appropriately to cultural differences in the workplace, including modes of behaviour and interactions among staff and others.

Work completed systematically with attention to detail without damage to goods, equipment or personnel.

**Context for assessment:**

Assessment may occur on the job or in an appropriately simulated environment.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	3





## UNIT TITLE

### LMTPDHL06A - Manage product development projects

## UNIT DESCRIPTOR

This unit covers the range of skills required to monitor and manage product development projects within the enterprise. It includes assessing and evaluating the final product.

This competency is typically performed by senior technicians/technologists working either independently or as part of a work team.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Define project parameters.	1.1. Product requirements, time-lines and budget are identified and confirmed 1.2. Project parameters are clarified 1.3. Details are documented in accordance with enterprise procedures.
2. Prepare timeline/critical path.	2.1. Project steps for achievement of outcome are determined 2.2. Time constraints/key completion dates are identified and correlated with project steps 2.3. Documentation is prepared in accordance with enterprise procedures.
3. Select and brief team.	3.1. Appropriate personnel are selected for the product development project team 3.2. Tasks are appropriately allocated according to the available expertise and requirements of the project 3.3. Information relating to standards, constraints, preferred processes, designs and techniques is conveyed to the team 3.4. Relevant technical, monitoring and reporting procedures are established.
4. Monitor progress.	4.1. Communication occurs with all parties to ensure obligations, quality, timelines, budget and technical constraints are met 4.2. Any problems or revisions are identified and action taken as required, in accordance with enterprise procedures 4.3. Records or reports are reviewed or prepared in accordance with enterprise procedures.
5. Evaluate final product.	5.1. Information on the development process is assembled and evaluated 5.2. Product outcome is assessed against development/preliminary specifications, in consultation with others 5.3. Significant results are identified, in consultation with others where necessary, and used to draft plans for future action.
6. Cost outcome.	6.1. Development costs are monitored in accordance with enterprise requirements 6.2. Product costs are determined in consultation with others.

ELEMENT	PERFORMANCE CRITERIA
7. Liaise with production team.	7.1. Liaison is maintained with production team to facilitate product development and confirm feasibility of outcome.

### **RANGE OF VARIABLES:**

#### **General context:**

Work is performed under limited guidance in line with a broad plan or strategy.

Significant judgement is required in planning, design, technical or supervisory activities related to operations or processes.

Work is assessed in accordance with statutory requirements, organisation insurance requirements, OH&S legislation, manual handling procedures and relevant health regulations.

#### **Worksite environment may include:**

Product development projects may be ideas or requests initiated by:

- v client
- v enterprise.

Project parameters include:

- v product requirements
- v timelines
- v budget
- v constraints (technical and budgetary)
- v standards
- v preferred processes.

Development may involve application associated with:

- v original ideas
- v adaption of concepts
- v analysis of products.

Contexts may be related to:

- v small production runs
- v large production runs.

Activities may include:

- v project team selection
- v work allocation
- v monitoring development
- v reviewing/evaluating process
- v costing procedures.

Liaison could include:

- v relevant personnel
- v client
- v other functional areas.

Data recording may include:

- v keyboard
- v manual recording applications.

Sources of information/documents may include

- v market research data/information/sources
- v product/process specifications
- v machine/equipment manufacturers specifications and instructions
- v production schedules
- v financial and budgetary documentation
- v organisation work orders
- v regulatory and enterprise safety procedures
- v organisational or external personnel
- v quality and Australian standards and procedures
- v customer(s).

**Workplace context may include:**

Work organisation procedures and practices relating to product development.

Conditions of service, legislation and industrial agreements including:

- v workplace agreements and awards
- v federal or State/Territory legislation
- v standard work practices.

Reporting actions include verbal and written communication in accordance with organisational policies and procedures.

Communication may be oral, written or visual and can include simple data.

Being responsible for the maintenance of own work quality and being required to contribute to the quality improvement of team or section output, where necessary.

Safety, environmental, housekeeping and quality are as specified by machine/equipment manufacturers, regulatory authorities and the enterprise.

Applicable regulations and legislation may include

- v occupational health and safety legislation relevant to workplace activities
- v workers' compensation legislation
- v environmental legislation and regulations.

## **EVIDENCE GUIDE:**

### **Critical aspects of evidence to be considered:**

Assessment must confirm appropriate knowledge and skills to:

- v clarify parameters of project and establish project steps
- v select appropriate personnel and allocate work
- v ensure progress meets requirements
- v assess final outcome against specifications
- v establish costs.

### **Interdependent assessment of units:**

This unit does not necessarily need to be assessed in conjunction with other units and can be assessed independently.

### **Required knowledge and skills:**

Underpinning knowledge of:

- v relevant OH&S legislation, codes of practice, copyright obligations, policies and procedures
- v production processes and industry products/processes
- v links across the industry; the industry, global and local trends; research sources
- v raw materials and their properties, characteristics and finishes
- v machine/equipment, resource and skill capabilities within the enterprise
- v costing, recording and reporting processes as they apply in the enterprise
- v safety and environmental aspects of relevant enterprise activities
- v workplace procedures and reporting processes.

Underpinning skills to:

- v perform the tasks and responsibility requirements of product development management
- v monitor progress and deal with problems/revisions
- v assess raw material and product for their properties/characteristics in relation to problems or design options
- v identify constraints
- v determine/recommend options
- v communicate effectively within the workplace
- v establish, analyse and/or interpret procedures, where required
- v determine report requirements and present information.

### **Resource implications:**

Access to real or appropriately simulated work situation, product development requirements, relevant information, quality standards, procedures or information associated with organisation or customer requirements.

**Consistency in performance:**

Applies underpinning knowledge and skills when:

- v applying significant judgement in planning technical or supervisory activities related to products, services and operations
- v dealing with contingencies
- v monitoring and completing tasks
- v establishing procedures for improvements
- v managing a safe workplace
- v assessing capability of equipment used, where relevant, and work processes selected.

Shows evidence of application of relevant workplace procedures including:

- v hazard policies and procedures, including codes of practice
- v issue resolution procedures
- v job procedures and work instructions
- v relevant guidelines relating to safe use of equipment, where applicable
- v quality procedures (where existing)
- v security procedures
- v waste, pollution and recycling management processes.

Action taken promptly, accidents and incidents reported in accordance with statutory requirements and enterprise procedures.

Recognises and adapts appropriately to cultural differences in the workplace, including modes of behaviour and interactions among staff and others.

Work completed systematically with attention to detail without damage to goods, equipment or personnel.

**Context for assessment:**

Assessment may occur on the job or in an appropriately simulated environment.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	3



**UNIT TITLE****LMTPRGN15A - Coordinate work of team/section****UNIT DESCRIPTOR**

This unit encompasses the coordination and monitoring of work within a work team or section.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Plan and coordinate work schedules.	<ul style="list-style-type: none"><li>1.1. Tasks, jobs, and work priorities are confirmed with supervisor/manager, as required</li><li>1.2. Tasks are assigned to team/section or individuals, in accordance with workplace procedures</li><li>1.3. Priority of tasks is communicated to team/section or individuals</li><li>1.4. Material requirements are organised to meet work requirements.</li></ul>
2. Monitor performance and quality.	<ul style="list-style-type: none"><li>2.1. Required work standard is communicated to team/section or individuals to ensure understanding of task requirement</li><li>2.2. Standard of performance, including quality standards, of team/section and/or individuals is monitored to ensure achievement of outcomes and is reported in accordance with enterprise procedures</li><li>2.3. Instruction and/or support are provided, as required, in order to achieve standards and outcomes</li><li>2.4. Proposals for improvements to work processes, efficiency and organisation are communicated/reported as required to appropriate personnel, in accordance with enterprise procedures.</li></ul>
3. Monitor application of OH&S in the work area.	<ul style="list-style-type: none"><li>3.1. Implementation of OH&amp;S and environmental standards and procedures is monitored to achieve safety standards and requirements in the workplace</li><li>3.2. Proposals for prevention or correction of problems are identified and communicated/reported to appropriate personnel, in accordance with enterprise procedures.</li></ul>
4. Communicate with work team/section and individuals.	<ul style="list-style-type: none"><li>4.1. All information affecting work, including OH&amp;S and quality standards, is explained logically in an easily understood manner to individuals and teams, as required</li><li>4.2. Feedback from team/section members and individuals is sought to assist in the effective operation of the team/section.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
5. Report work of team/section.	<p>5.1. Reports and documentation on section/team performance and outcomes are provided to line supervisor/management, as required, in accordance with enterprise procedures</p> <p>5.2. Section/team performance and outcomes which impact on operations of other sections are communicated effectively and promptly, as required, to appropriate personnel, in accordance with enterprise procedures.</p>

## RANGE OF VARIABLES:

### Context:

Work involves activities associated with the coordination and monitoring of the work of a section or team. Discretion, initiative, judgement must be demonstrated on the job in own work, either individually or in a team environment. Work is assessed in accordance with statutory requirements, organisation insurance requirements, OH&S legislation, manual handling procedures and relevant health regulations.

Worksite environment may include:

v work conducted in a variety of environments, such as:

- operational workplace activities
- restricted space
- hazardous, controlled or exposed conditions
- appropriate personnel to report and/or liaise may include line supervisor/manager, team/section leaders/supervisors/managers in other sections within the enterprise, and technical specialists
- exposure to chemicals, dangerous or other hazardous substances
- data recording, using either keyboard or manual recording applications
- interaction/interface with other departments.

Sources of information/documents may include

- v organisation work orders
- v product change program and policies
- v organisational or external personnel
- v work scheduling documentation
- v job procedures
- v machine/equipment manufacturers' specifications and instructions
- v quality standards
- v OH&S and environmental standards.

Workplace context may include:

- v work organisation procedures and practices relating to the coordination and monitoring of the work of a section or team.



Conditions of service, legislation and industrial agreements including:

- v workplace agreements and award
- v federal or State/Territory legislation
- v standard work practice including the storage, safe handling and disposal of chemicals
- v reporting actions include verbal and written communication in accordance with organisational policies and procedures
- v communication, which may be oral, written or visual and can include simple data
- v being responsible for the maintenance of own work quality and being required to contribute to the quality improvement of team or section output, where necessary
- v safety, environmental, housekeeping and quality as specified by machine/equipment manufacturers, regulatory authorities and the enterprise.

Applicable regulations and legislation may include:

- v occupational health and safety legislation relevant to workplace activities
- v workers' compensation legislation
- v environment protection legislation.

This competency includes sources of documentation such as:

- v machine readouts
- v production reports
- v job specifications
- v production capability statements/specifications
- v relevant workplace procedures and policies
- v machine or equipment instructions and readouts
- v manufacturer's specifications
- v materials safety data sheets
- v relevant agreements, codes of practice and other legislative requirements.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of enterprise's standard procedures and work instructions and relevant regulatory requirements along with the ability to implement them within appropriate time constraints relevant to the job.

Underpinning knowledge of:

- v production and workflow system in the section/team
- v factors/constraints that impact on effective workflow
- v effective work methods to achieve production objectives and timelines
- v methods for monitoring and coordinating the use of resources
- v quality assurance standards and procedures
- v relevant OH&S legislation, codes of practice, policies and procedures.

Underpinning skills to:

- v prioritise resources (machines, staff, materials and production processes)
- v clarify and communicate tasks, roles and responsibilities
- v allocate work to team/section members
- v identify and report problems with workflow
- v maintain and update monitoring procedures
- v analyse and record results in accordance with enterprise procedures
- v carry out work in accordance with OH&S policies and procedures
- v planning own work including predicting consequences and identifying improvements.

**Critical aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements and performance criteria of the competency.

Assessment must confirm appropriate knowledge and skills to:

- v organise work tasks, work processes and staff
- v meet work processes efficiency standards
- v advise appropriate ways of correcting non-compliance and inefficiencies
- v apply techniques to monitor work
- v apply workplace health and safety policies in work operations
- v maintain accurate records
- v apply underpinning knowledge and skills when:
  - coordinating work processes and resources
  - interpreting work specifications
  - describing consequences
  - completing tasks
  - identifying improvements
  - applying safety precautions relevant to the task
  - assessing operational capacity of equipment/machines used in production processes
- v show evidence of application of relevant workplace procedures including:
  - hazard policies and procedures including codes of practice
  - job procedures and work instructions
  - quality procedures
  - security procedures
  - waste, pollution and recycling management processes
- v take action promptly, and report accidents and incidents in accordance with statutory requirements and enterprise procedures
- v recognise and adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions among staff and others
- v complete work systematically with attention to detail without damage to goods, equipment or personnel.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets work instructions and material labels as provided to operators.

Writing is required to the level of completing workplace forms and reports.

Numeracy is also required to the extent required by production data, work instructions and procedures.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

Access is required to real or appropriately simulated situations involving the monitoring and coordination of the work of a team or section, including work areas, materials, machines/equipment, and information on manufacturers' specifications and instructions, program scheduling documentation, relevant safety procedures and regulations, quality standards, and organisation procedures.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	3	1	2	2

**UNIT TITLE****PMACOM300A - Contribute to the development of plant documentation****UNIT DESCRIPTOR**

This unit of competency covers the development of relevant plant documentation and systems in response to identified information requirements including the development and/or amendment of workplace documents, procedures and record keeping systems.

This competency is typically performed by an experienced operator, leading hand or supervisor.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify information need/deficiency.	1.1. Determine the information requirements of the organisation 1.2. Evaluate current documentation 1.3. Recognise information need/deficiency 1.4. Discuss information requirements with appropriate personnel.
2. Develop/revise plant documentation.	2.1. Specify information need and set/prioritise objectives 2.2. Analyse existing documentation/records in accordance with specified requirements 2.3. Develop/amend documentation as a draft in accordance with specifications to standard format 2.4. Issue documentation to appropriate personnel for review 2.5. Edit documentation and amend in accordance with review requirements 2.6. Complete documentation to satisfy the initial identified need/deficiency.
3. Communicate changes to plant documentation.	3.1. Explain and communicate documentation to all relevant personnel 3.2. Distribute documentation to all appropriate personnel 3.3. Evaluate implementation of documentation 3.4. Amend documents if required.

### **RANGE OF VARIABLES:**

This competency includes the following indicative plant documentation :

- |  |                                 |
|--|---------------------------------|
| v maintenance logs                                   | v standard operating procedures |
| v non-compliance reports                             | v work instructions             |
| v incidence and accident reports                     | v operating manuals             |
| v permits  | v quality procedures            |
| v schematics/process flows/<br>engineering drawings. | v training program contents     |
| v job cards  | v materials safety data sheets. |

This competency includes the ability to use items of equipment such as computer equipment.

All operations are performed in accordance with standard procedures and work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Application of knowledge of the organisation's information systems, procedures, equipment and relevant documentation sufficient to be able to develop or amend company documentation.

Knowledge of the relevant OH&S and environmental requirements is required along with an ability to implement them in a manner which is relevant to the drafting of all relevant documentation.

Thorough knowledge of enterprise standard operating procedures/work instructions.

#### **Critical aspects:**

Competence must be demonstrated in the ability to draft and amend company documentation in accordance with specifications. Documentation is completed in a clear and concise manner, that is easily understood by others and in accordance with workplace requirements/specifications.

Consistent performance should be demonstrated. In particular look to see that:

- information required is researched and intended use is taken into account
- documentation is completed accurately, concisely and in accordance with requirements
- completed documentation is easily understood by the recipient
- information is communicated in the appropriate manner

- v communication distinguishes between relevant and peripheral issues.

#### **Language, literacy and numeracy requirements:**

This unit requires the ability to write workplace documentation such as procedures, work instructions, processes and other workplace documentation.

Numeracy is also required, eg, to interpret data in the form of tables and graphs.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	2	2	2	2	2	2





**UNIT TITLE****PMBSUP383A - Facilitate a team****UNIT DESCRIPTOR**

This competency covers the facilitation of a team to achieve team goals, working in a team to achieve them and the monitoring of team performance. It is based on FDF OPTTW3 - Facilitate teams from FDF98 the Food Processing Industry Training Package.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify tasks for team.	1.1. Identify and clarify team goals and standards with team members 1.2. Identify tasks required to achieve goals and performance standards 1.3. Allocate responsibilities of individuals within the team, in discussion with the team 1.4. Ensure designated team goals are met.
2. Organise individual daily work plan for team members.	2.1. Allocate individual work tasks and roles to ensure team goals and performance standards are met 2.2. Correctly estimate time and resources needed to complete tasks 2.3. Negotiate work targets and timelines to achieve team goals and performance standards 2.4. Re-negotiate responsibilities to meet changes in the workplace 2.5. Seek assistance from other team members when needed to meet team goals.
3. Identify resources to support team performance.	3.1. Identify and negotiate resources and support needed to complete tasks 3.2. Identify and check competency requirements of tasks against competencies held by team members 3.3. Identify and report workplace learning requirements.
4. Monitor progress towards achieving team goals.	4.1. Monitor work progress against team goals, timelines and performance standards 4.2. Inform team members of progress towards achieving team performance indicators 4.3. Provide support to colleagues to ensure designated team goals are met 4.4. Identify potential barriers to achieving team goals and take corrective action.

## **RANGE OF VARIABLES:**

### **Context:**

Work involves activities associated with the facilitation and monitoring of the work of a section or team. Discretion, initiative and judgement must be demonstrated on the job in own work, within a team environment.

This competency unit may vary depending upon :

- v type of communication used within each enterprise
- v established work practices
- v size and structure of the teams
- v team goals – individual, section, enterprise.

Sources of information and documentation may include:

- v procedures/work instructions
- v safety data sheets
- v job cards
- v maintenance logs
- v plant drawings
- v work scheduling documentation
- v machine/manufacture's specifications and instructions
- v quality standards
- v OH&S and environmental standards
- v personnel documents.

Typical problems include:

- v required information/materials not available
- v required tool/equipment not available
- v required materials not available
- v conflicting priorities
- v obtaining assistance with required training
- v equipment and process problems
- v short timeframe.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of the organisation's information systems, procedures and equipment sufficient to participate in the allocation and completion of team tasks.

Knowledge of the enterprise's standard procedures and work instructions and relevant regulatory requirements. The ability to work within time constraints and support the safe and efficient operation of the team is required.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain :
  - characteristics for effective teamwork
  - effective use of workplace documentation
  - facilitation and motivational techniques
  - production workflow systems
  - factors/constraints on effective workflow and ramifications to meeting goals and standards
  - methods of monitoring and coordinating resources
- v distinguish between:
  - team and individual goals
  - goals and performance standards
- v identify necessary skills within team to complete team tasks
- v analyse and interpret results in accordance with enterprise standards
- v recognise and adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions amongst staff and others
- v modify activities to cater for variations in workplace contexts and environment.

Work is completed systematically with safe operating procedures to minimise the risk of injury to self or others or damage to goods, equipment or products in production.

### **Critical aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria. Competence must be demonstrated in the ability to recognise potential situations requiring action and with team support in implementing appropriate action.

Consistent performance should be demonstrated. In particular look to see that:

- v team goals and enterprise standards are met consistently
- v team tasks are allocated effectively
- v work processes meet efficiency and quality standards
- v appropriate ways of correcting non-compliance and inefficiencies are applied
- v techniques to monitor work are demonstrated
- v team complies with workplace health and safety policies in work operations
- v accurate records are maintained
- v resources are co-ordinated effectively.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators and interpret and explain enterprise policies and procedures.

Writing is required to the level of completing workplace forms.

Numeracy to organise daily work plan is required.

**Assessment method and context:**

Competence in this unit may be assessed:

- v in the work situation allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	1	2	2

**UNIT TITLE****PMBTRAIN201A - Assist in the provision of on the job training****UNIT DESCRIPTOR**

This competency applies where the employee provides guidance and instruction to others in on the job training. It does not apply where the employee is solely responsible for the assessment or reporting of a trainee's performance. It applies to all sectors of the industry.

This competency is typically performed by all operators working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Determine role of on the job training.	1.1. Explain the role of the operator in assisting with on job training 1.2. Identify all training related procedures 1.3. Identify and discuss the objectives of the training program with appropriate personnel 1.4. Identify and obtain all relevant information.
2. Provide on job training.	2.1. Identify locations where training is to be provided 2.2. Identify and prepare all tools, equipment, procedures, materials and This section should be read in conjunction with the range of variables for this unit of competency. Resources required to achieve training objectives 2.3. Explain and discuss objectives of training session with employee 2.4. Conduct training using suitable methods such as explanation, demonstration using standard operating procedures, feedback 2.5. Provide employee with opportunities for practice according to specific learning situation and training objectives 2.6. Monitor employee progress providing appropriate constructive feedback using standard operating procedures.
3. Report on trainee performance.	3.1. Identify skills/knowledge satisfactorily achieved by the trainee 3.2. Report trainee performance according to procedures.

### **RANGE OF VARIABLES:**

This competency applies where the employee assists in on the job training of others whilst undertaking their normal duties. This may involve the replacement of normal duties with training duties for limited periods of time. The employee would not be expected to be solely responsible for the assessment or reporting of a trainee's progress.

Typical applications would include:

- v on the job guidance or instruction by an experienced operator to another operator
- v revising existing skills and knowledge on the job
- v imparting new skills and knowledge on the job
- v coaching/mentoring another worker.

The coaching/mentoring/guidance/instruction should be within some structured framework, but does not need to be 'formal' training.

Equipment and materials may include as is relevant to the provision of on the job training:

- v equipment, components and auxiliary equipment
- v relevant tools
- v training materials, competency standards, work instructions, procedures, manuals, company records and reports
- v PPE.

All operations are performed in accordance with standard procedures and work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Knowledge of the enterprise's standard procedures and work instructions and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and in a manner relevant to the job.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain:
  - objectives of training
  - coaching and mentoring techniques for on job training
  - giving and receiving constructive feedback
  - procedures for reporting trainee's progress
- v use correct resources and equipment for training on job
- v train employees effectively and efficiently in accordance with workplace procedures
- v recognise when employee has achieved the standard required
- v complete documents/records where appropriate.

**Critical aspects:**

Competence must be demonstrated in the ability to provide on the job training in area of expertise.

Consistent performance should be demonstrated. In particular look to see that employees are trained to the standard required.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	2	1	2	2





**UNIT TITLE****PMBWKOPS106B - Work with others in a team****UNIT DESCRIPTOR**

This competency covers the organisation of team activities to fit in with the scheduling of production to meet operational guidelines.

This competency is typically performed by operators who work within a team structure with limited discretionary powers.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify work activities.	1.1. Identify task requirements and work roles of the team 1.2. Identify individual tasks that are part of the team requirement 1.3. Prioritise team and individual activities as directed.
2. Contribute to the planning of work activity as appropriate to job role.	2.1. Break down work activities into achievable components 2.2. Undertake work in accordance with specified procedures on an individual and shared basis as appropriate 2.3. Record activities as required by procedures/work instructions 2.4. Seek assistance from other team members when difficulties in achieving allocated tasks arise.
3. Communicate effectively in the team.	3.1. Use interpersonal skills that are appropriate to the effective teamwork of the shift/crew/section within the workplace 3.2. Demonstrate effective listening skills 3.3. Communicate information effectively to team members 3.4. Acknowledge information and feedback provided by other team members in work group.
4. Participate in a team.	4.1. Acknowledge team roles and support team members in achieving their role 4.2. Participate constructively in team processes 4.3. Discuss and resolve problems through agreed and accepted processes where possible 4.4. Practise teamwork within and between groups so as to contribute to the achievement of the company's work standards.

## **RANGE OF VARIABLES:**

This competency unit depends upon the application of:

- communication procedures used within each enterprise
- established work practices
- structure of the teams.

This competency unit may vary according to the enterprise's use of the following information sources and documentation:

- procedures and work instructions
- safety data sheets
- job cards
- maintenance logs
- plant drawings.

Typical problems include:

- required information/materials not available
- required tool/equipment not available
- conflict of work priorities
- interpersonal conflict within the team.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of the organisation's information systems, procedures and equipment sufficient to plan daily work activities in order to meet timelines.

Knowledge of the enterprise's standard procedures and work instructions and relevant regulatory requirements, along with the ability to implement them within appropriate time constraints and in a manner relevant to the operation of the system.

Competence includes the ability for the practical completion of the job to:

- apply and/or describe :
  - importance of workplace documentation
  - effective communication techniques including appropriate body language and conversational language
  - where teams fit into the organisational structure
  - enterprise quality and safety procedures
  - individual's role within the team
    - distinguish between:
      - urgent and non urgent tasks
- v establish effective workplace relationships with colleagues.

**Critical aspects:**

Competence must be demonstrated in the ability to identify work activities and prioritise work in order to meet timelines, whilst interacting as a member of a group.

Consistent performance should be demonstrated. In particular look to see that:

- activities are planned in accordance with instructions
- there is a willingness to participate as part of a team
- relevant procedures are accessed and utilised in completing activities
- timelines are adhered to

- v assistance is sought from relevant personnel when difficulties arise.

**Language, literacy and numeracy requirements:**

This unit requires the ability to interpret typical product specifications, job sheets and material labels as provided to operators and complete workplace forms. Basic numeracy is required, eg, to estimate time required to complete tasks.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	2	1	2	1



**UNIT TITLE****PMBWKOPS303B - Induct new team members****UNIT DESCRIPTOR**

This competency applies to employees engaged in inducting employees into the workplace.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Outline the relationship between employee and the company to the new employee.	<ul style="list-style-type: none"><li>1.1. Conduct employee greetings and introductions to key personnel and areas in the workplace</li><li>1.2. Explain enterprise objectives, operating systems and organisational structures</li><li>1.3. Identify the relationship between the employees position and the organisational structure and objectives</li><li>1.4. Work within required occupational health and safety, workplace procedures and employment conditions</li><li>1.5. Identify sources of information and assistance for the employee.</li></ul>
2. Establish requirements of position.	<ul style="list-style-type: none"><li>2.1. Explain and describe job role, responsibilities and reporting relationships</li><li>2.2. Introduce immediate work colleagues</li><li>2.3. Show employee workplace facilities and layout</li><li>2.4. Arrange and conduct initial training in relevant occupational health and safety, equipment and work systems</li><li>2.5. Encourage opportunities for the employee to clarify concerns and ask questions</li><li>2.6. Identify training opportunities for the development of the individual's job role and clarify expectations</li><li>2.7. Explain requirements of federal/State/Territory legislation on equal employment opportunity, sexual harassment and anti-discrimination.</li></ul>
3. Complete relevant workplace documentation.	<ul style="list-style-type: none"><li>3.1. Complete enterprise personnel records (where required)</li><li>3.2. Check tax declaration and other relevant workplace documentation complies with requirements (where required)</li><li>3.3. Request employee for any additional information and take notes of any required additional actions</li><li>3.4. Submit documentation to appropriate personnel.</li></ul>

## **RANGE OF VARIABLES:**

### **Context:**

The role is critical to the effective integration of a new group or team member to the work area and/or organisation.

The competency is normally used within approved workplace routines, methods and procedures. Some discretion and judgement is required in the selection of equipment, work organisation, services and the allocation of work tasks within agreed time frames.

This competency includes resources such as:

- v job specifications
- v production capability statements/specifications
- v relevant workplace procedures and policies
- v machine or equipment instructions and readouts
- v manufacturer's specifications
- v materials safety data sheets
- v enterprise personnel records
- v tax declarations and other relevant workplace documentation
- v relevant agreements, codes of practice and other legislative requirements.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of enterprise's standard procedures and work instructions and relevant regulatory requirements along with the ability to implement them within appropriate time constraints relevant to the job.

Competence includes the ability to:

- v apply and explain:
  - focus of operation of work systems, equipment, management and site operating systems
  - requirements for the employee's new position and working relationships
  - production workflow and the role of the employee and team members in the process
  - identification and correct use of technology, information systems, equipment, processes and procedures
- planning own work including predicting consequences and identifying improvements.

**Critical aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria. In addition, look to see that:

- v appropriate advice and information is identified and provided to deal with the employee's expectations
- v product, materials and work processes as appropriate for the individual's work role are identified
- v customer/client service is provided and employee works effectively with others
- v information is conveyed effectively in written and oral form
- v relevant information is located, interpreted and applied
- v workplace records are maintained
- v relevant safety information within requirements of duty of care are interpreted
- v relevant equipment, substances, other products and materials are identified and handled safely appropriate to the task of team members.
- v effective working relationships are established with colleagues
- v the new team member identifies and adapts to workplace objectives, cultures, products, customers and services
- v activities are modified to cater for variations in workplace contexts and environment
- v the inductor recognises and adapts appropriately to cultural differences in the workplace, including modes of behaviour and interactions among staff and others
- v the inductor consistently assists new employees to identify job role, legislative and workplace requirements and training opportunities.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets work instructions and materials labels as provided to operators.

Writing is required to the level of completing workplace forms and reports.

Basic numeracy is also required to the extent required by work instructions and procedures.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment and employees for induction. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	3	2	3	1	2	2



**UNIT TITLE****PMBWKOPS304B - Interpret job specifications****UNIT DESCRIPTOR**

This competency applies to employees required to read and interpret job specifications and identify the impact of the specifications on production requirements.

This competency is typically performed by operators working either independently or part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Collect information.	1.1. Read job specifications and note key requirements 1.2. Identify steps and stages in the process 1.3. Raise questions regarding requirements and expectations with appropriate personnel and obtain appropriate clarification of specifications.
2. Analyse job requirements.	2.1. Assess own competencies in terms of meeting job specifications 2.2. Discuss any required additional training with supervisor 2.3. Read and use standard operating procedures and any quality specifications to plan own work activities 2.4. Note points where particular care is required and identify and ensure strategies to adhere to work requirements.

**RANGE OF VARIABLES:****Context:**

Work involves the analysis of job specifications and the impact on plant, machinery, raw materials and personnel. It is broader and/or deeper than the interpretation of job specifications which is integral to all production processes and which form part of the 'PROD' competencies in this Training Package.

It applies to all work environments in the plastics, rubber and cabling industry.

The competency is normally used within approved workplace routines, methods and procedures. Discretion and judgement is required in the selection of equipment, work organisation, services and the allocation of work tasks within agreed time frames.

This competency includes resources such as:

- v job specifications
- v production capability statements/specifications
- v relevant workplace procedures and policies
- v machine or equipment instructions and readouts
- v manufacturer's specifications
- v materials safety data sheets
- v relevant agreements, codes of practice and other legislative requirements.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of enterprise's standard procedures and work instructions and relevant regulatory requirements along with the ability to implement them within appropriate time constraints relevant to the job.

Competence includes the ability to:

- v apply and explain:
- machine processes
- raw material capabilities
- quality procedures
- production workflow in relationship to own role in process
- focus of operation of work systems, equipment and site operating systems
- application of relevant agreements, codes of practice or other legislative requirements
- identification and correct use of equipment, processes and procedures
- planning own work including predicting consequences and identifying improvements.

### **Critical aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria. In addition, look to see that:

- v product, materials and work processes appropriate for the work role are identified
- v sources and impact of potential constraints on the work required are recognised and relevant procedures are utilised to minimise constraints
- v relevant safety information within requirements of duty of care are interpreted
- v relevant equipment, substances, other products and materials and safety precautions appropriate to the tasks are identified and followed
- v the requirements of standard operating procedures and job specifications are interpreted correctly and followed
- v standard quality and production procedures are read and used in planning work activities
- v workplace records are maintained
- v effective working relationships are established with colleagues
- v job specifications are interpreted and met consistently to the standard required
- v workplace objectives, cultures, products, customers and services are identified and adapted to achieve job specifications
- v activities are modified to cater for variations in workplace contexts and environment
- v completion of work is systematic and in accordance with safe operating procedures to minimise the risk of injury to self or others or damage to goods, equipment or products in production.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets work instructions and material labels as provided to operators.

Writing is required to the level of completing workplace forms and reports.

Basic numeracy is also required to the extent required by work instructions and procedures.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment and standard operating procedures. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	3



**UNIT TITLE****PMBWKOPS305B - Perform shift handover****UNIT DESCRIPTOR**

This competency applies to employees required to arrange shift handover.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Collect information.	1.1. Note and document stages of production at shift handover and any requirements for shift 1.2. Identify and communicate ongoing or pending maintenance 1.3. Check raw material supplies and place stock orders in accordance with workplace procedures.
2. Identify implications for continuing work.	2.1. Identify and report impact of impending or current production activities on workflow to appropriate personnel 2.2. Identify recommendations for next shift.
3. Communicate requirements to incoming shift.	3.1. Provide written and oral advice to incoming shift personnel 3.2. Appropriately tag machinery affected by maintenance/repair/ special process 3.3. Complete required documentation for shift handover 3.4. Make reports to appropriate personnel in accordance with workplace procedures.

**RANGE OF VARIABLES:****Context:**

Work involves the collection of information regarding work progress and any problem areas and communicating with incoming/outgoing shift personnel.

It applies to all work environments in the plastics, rubber and cablemaking industry.

The competency is normally used within approved workplace routines, methods and procedures. Discretion and judgement is required in the selection of equipment, work organisation, services and the allocation of work tasks within agreed time frames.

This competency includes sources of documentation such as:

- v machine readouts
- v production reports
- v job specifications
- v production capability statements/specifications
- v relevant workplace procedures and policies
- v machine or equipment instructions and readouts
- v manufacturer's specifications
- v materials safety data sheets
- v relevant agreements, codes of practice and other legislative requirements.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

All operations are performed in accordance with standard procedures and work instructions.

#### **EVIDENCE GUIDE:**

##### **Essential knowledge and enterprise requirements:**

Knowledge of enterprise's standard procedures and work instructions and relevant regulatory requirements along with the ability to implement them within appropriate time constraints relevant to the job.

Competence includes the ability to:

- v apply and explain:
  - equipment status
  - work order requirements
  - production workflow requirements in relation to shift
  - focus of work systems and equipment
  - identification and correct use of technology, information systems, equipment, processes and procedures
  - planning own work including predicting consequences and identifying improvements.

**Critical aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria. In addition, look to see that:

- v requirements for production process are identified
- v product, materials and work processes appropriate for the work role are identified
- v sources and impact of potential constraints on the work required are recognised and relevant procedures are utilised to minimise constraints
- v relevant safety information within requirements of duty of care are interpreted
- v relevant equipment, substances, other products and materials and safety precautions appropriate to the tasks are identified and followed
- v relevant information is located, interpreted and applied, data collated, and information communicated effectively orally and in writing
- v implications of data to projected production is applied
- v appropriate shift records are maintained
- v effective working relationships are established with colleagues
- v workplace objectives, cultures, products, customers and services are identified and adapted to achieve job specifications
- v activities are modified to cater for variations in workplace contexts and environment
- v completion of work is systematic and in accordance with safe operating procedures to minimise the risk of injury to self or others or damage to goods, equipment or products in production.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets work instructions and material labels as provided to operators.

Writing is required to the level of completing workplace forms and reports.

Numeracy is also required to the extent required by production data, work instructions and procedures.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment and standard operating procedures. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

<b>KEY COMPETENCIES</b>						
<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	3



**UNIT TITLE****PMBWKOPS309A - Maintain and organise workplace records****UNIT DESCRIPTOR**

This unit applies to employees required to maintain and organise workplace records.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Record information.	1.1. Identify purpose(s) of records to be maintained in relation to customer requirements, quality system or production requirements 1.2. Identify requirements for completion of workplace records in accordance with workplace procedures 1.3. Record and collate information ensuring appropriate information and any samples are included in an appropriate manner.
2. Maintain document filing arrangements.	2.1. Identify organisation system for records 2.2. File records following workplace conventions 2.3. Deal with obsolete or non-conforming records following workplace procedures.
3. Respond to information requests.	3.1. Interpret requests for information and prioritise 3.2. Identify information requested and provide information within required workplace policies and time frames.
4. Organise file movements.	4.1. Identify files to be relocated 4.2. Complete records of movement and file following workplace procedures.
5. Maintain security of workplace records.	5.1. Identify security requirements for workplace records 5.2. Maintain security arrangements for files 5.3. Notify (any) security breaches to appropriate personnel.

**RANGE OF VARIABLES:****Context:**

This unit covers work involving the maintenance of workplace records in paper or electronic form and may include sample products or materials for testing or quality purposes. Work is governed by established workplace procedures, and extent of authority for adjustments and other work activities are defined.

It applies to all work environments in the plastics, rubber and cablemaking industry.

The competency is normally used within approved workplace routines, methods and procedures. Discretion and judgement are required in the selection of equipment, work organisation, services and the allocation of work tasks within agreed time frames.

This competency includes sources of documentation such as:

- v production reports
- v job specifications
- v production capability statements/specifications
- v relevant workplace procedures and policies
- v quality standards
- v enterprise manuals
- v machine or equipment instructions and readouts
- v manufacturer's specifications
- v materials safety data sheets
- v reliability, human resource, financial and production information
- v relevant agreements, codes of practice and other legislative requirements.

Filing systems may be manual or computerised.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

All operations are performed in accordance with standard procedures.

#### **EVIDENCE GUIDE:**

##### **Essential knowledge and enterprise requirements:**

Knowledge of enterprise's standard procedures and work instructions and relevant regulatory requirements along with the ability to implement them within appropriate time constraints relevant to the job.

Competence includes the ability to:

- v apply and explain:
  - production workflow in relation to records generated and records access requirements
  - focus of operation of record systems and equipment
  - identification and correct use of record keeping processes and procedures
- v plan own work including predicting consequences and identifying improvements.

**Critical aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria. In addition, look to see that:

- v work processes appropriate for the filing and retrieval of workplace information are identified
- v importance of records held and relevant procedures to maintain records to minimise time delays in accessing records and maintenance of information for suppliers, customers and the enterprise are recognised
- v relevant information is interpreted
- v appropriate workplace language and communication technologies are used
- v relevant information and records are located, interpreted and applied
- v workplace records systems are maintained
- v records are identified and handled within enterprise procedures
- v security precautions appropriate to the records are applied
- v records are consistently filed and accessed in accordance with workplace procedures
- v relevant information is located, interpreted and applied, data collated, and information communicated effectively orally and in writing
- v effective working relationships are established with colleagues
- v workplace objectives, cultures, products, customers and services are identified and adapted to achieve job specifications
- v completion of work is systematic and in accordance with safe operating procedures to minimise the risk of injury to self or others or damage to goods, equipment or products in production.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets work instructions and material labels as provided to operators.

Writing is required to the level of completing workplace forms and reports.

Numeracy is also required to the extent required by production data, work instructions and procedures.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

Established records system, information to be recorded, requests for information and actual or simulated production process.

Suitable access to an operating plant or equipment and standard operating procedures. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	2	2	2	2

**UNIT TITLE****PMBWKOPS402B - Apply workplace procedures to improve workplace performance****UNIT DESCRIPTOR**

This competency covers the application of workplace policies and procedures to the implementation and ongoing development of work areas within particular production processes.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify workflow in the workplace in relation to productivity.	<ul style="list-style-type: none"><li>1.1. Identify workflow including the effect that variation(s) in workflow have on operations</li><li>1.2. Consider the impact of factors such as high and low workload periods and the volume of output of production processes on workflow when identifying workflow and productivity factors</li><li>1.3. Analyse production processes in the work area to detect any areas which may impact on workflow effectiveness</li><li>1.4. Document variance of workflows against agreed benchmarks</li><li>1.5. Consider causes of workflow variances and generate alternate solutions for rectification</li><li>1.6. Make recommendations to resolve the issues and report to appropriate personnel.</li></ul>
2. Explain workplace relations processes which effect the workplace and the operations of its production processes.	<ul style="list-style-type: none"><li>2.1. Identify aspects of awards and enterprise agreements which may contribute to improving the effectiveness of work operations</li><li>2.2. Identify opportunities for training and development within the workplace context and workplace procedures</li><li>2.3. Identify processes for negotiation of changes at enterprise level to improve workplace effectiveness</li><li>2.4. Raise suggestions which may lead to improved work effectiveness of teams and individuals within workplace policies and procedures.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
3. Organise staff and equipment to complete specific tasks.	3.1. Identify priorities for tasks and inform workplace personnel 3.2. Explain operating procedures and methods to workplace personnel and use follow-up communication methods to ensure that work requirements are applied 3.3. Identify competency needs for the work and allocate and/or train and assess staff to meet these needs 3.4. Organise workplace personnel and equipment to meet requirements ensuring that work loads are balanced and other required workplace activities are completed within production schedules 3.5. Optimise work practices for the type of product within production workflow and regulatory requirements in the production area 3.6. Ensure appropriate workplace occupational health and safety and other regulatory procedures are followed by team members when completing production activities 3.7. Provide advice to line manager on the allocation of staff and This section should be read in conjunction with the range of variables for this unit of competency. Resources required to produce products including those with special requirements 3.8. Amend workplace procedures within agreed parameters and trial to assess the degree of improved performance.
4. Assist work team members to maintain workplace security.	4.1. Inform personnel of workplace policies and procedures in relation to security 4.2. Provide workplace personnel with feedback in relation to the implementation/non-implementation of security procedures 4.3. Provide employees with ongoing supervision and training to facilitate awareness and detection of theft 4.4. Report matters likely to affect security in accordance within workplace policy.

**RANGE OF VARIABLES:****Context:**

The competency unit applies to a range of processes and equipment.

The competency is normally used within approved workplace routines, methods and procedures. Some discretion and judgement are required in the selection of equipment, work organisation, services and the allocation of work tasks within agreed time frames.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of enterprise's standard procedures and work instructions and relevant regulatory requirements along with the ability to implement them within appropriate time constraints relevant to the job.

Competence includes the ability to:

- v apply and explain:
- scope of authority of the position
- consultative processes to implement change
- workplace management structure and lines of authority
- content of award, enterprise agreement and workplace policies and procedures
- production workflow
- focus of operation of work systems and equipment
- identification and correct use of equipment, processes and procedures
- planning own work including predicting consequences and identifying improvements.

### **Critical aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria. In addition, look to see that:

- v effective working relationships are established with colleagues
- v activities are modified to cater for variations in workplace contexts and environment
- v appropriate recognition and adaptation is made to cultural differences in the workplace, including modes of behaviour and interactions among staff and others
- v consistent recommendations are made which result in potential for improvement in production outcomes (product quality, employee health and safety, environmental impact and production costs)
- v work is completed systematically in accordance with safe operating procedures to minimise the risk of injury to self or others or damage to goods, equipment or products in production.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets work instructions and material labels as provided to operators.

Writing is required to the level of completing workplace forms and reports.

Basic numeracy is also required to the extent required by work instructions and procedures.

### **Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment and a group or a team that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	3



**UNIT TITLE****PSPPM502A - Manage projects****UNIT DESCRIPTOR**

This unit covers management of projects which may be reasonably complex in terms of scope, degree of risk, political, cultural and social factors that apply, consequences of failure and degree of control of the project.

This competency is typically performed by senior technicians/technologists/team leaders or engineers working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Apply knowledge of project management tools.	<ul style="list-style-type: none"><li>1.1. A planning and monitoring system is applied and progress is reported to stakeholders</li><li>1.2. Financial management systems are implemented to address accountability standards</li><li>1.3. Project management tools are selected and applied effectively to achieve project outcomes.</li></ul>
2. Manage acquisition.	<ul style="list-style-type: none"><li>2.1. A contract is developed which is auditable in terms of scope of work, performance, deliverables, probity, fairness and value for money</li><li>2.2. Project change proposals are negotiated, agreed and documented in accordance with policy and procedures</li><li>2.3. Project plans and contracts are monitored, reviewed and amended as appropriate, and outcomes reported to stakeholders</li><li>2.4. Project progress is reported in relation to agreed milestones to provide a measure of performance throughout the life of the contract</li><li>2.5. Disagreements and disputes are resolved to the satisfaction of stakeholders.</li></ul>
3. Co-ordinate project integration activities.	<ul style="list-style-type: none"><li>3.1. All aspects of the project and related projects are integrated and links are established to ensure objectives are met</li><li>3.2. Consultation mechanisms are identified and staff and contractors are regularly consulted to discuss progress and ensure effective outcomes</li><li>3.3. Programmed review of objectives and achievement is planned and implemented.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
4. Arrange building/trialing/testing of project.	<p>4.1. Significant judgment is applied in the analysis of project outcomes against specifications, performance standards and project objectives, and reported to stakeholders</p> <p>4.2. Support package arrangements are identified and offered to stakeholders who will be required to adopt the project outcomes</p> <p>4.3. Environmental and cultural analysis is undertaken and outcome reported to stakeholders</p> <p>4.4. Operational and support authorities are consulted to investigate the requirement for testing and evaluation, and funds are included in project plans.</p>

### RANGE OF VARIABLES:

*The range of variables provides information about the context in which the unit of competency is carried out. It allows for differences between States and Territories and the Commonwealth, and between organisations and workplaces. It allows for different work requirements, work practices, and knowledge. The range of variables also provides a focus for assessment and relates to the unit as a whole.*

Policy and procedures may include:

- v legislation and regulations
- v organisational guidelines and procedures including project management, recruitment, security, risk management, procurement guidelines and strategic plans.

Project management tools may include:

- v critical path method (CPM)
- v bar and Gantt charts
- v work breakdown structures
- v program evaluation and review technique (PERT)
- v database project management packages
- v spreadsheets
- v cost schedule control systems
- v logistics support analysis
- v life cycle cost analysis
- v recording systems - electronic and manual.

Contracts may include:

- v verbal orders
- v written orders
- v partly verbal and partly written orders
- v deeds of agreement
- v agreements and understandings of a non-legal nature.

<p>Project plans may include:</p> <ul style="list-style-type: none"><li>v financial management plans</li><li>v acquisition strategies</li><li>v fraud control plans</li><li>v risk management plans</li><li>v project implementation plans</li><li>v transition plans</li><li>v integrated logistics support</li><li>v HRD/HRM plans</li><li>v specifications</li><li>v test and evaluation process</li><li>v training</li><li>v intellectual property</li><li>v industry impact</li><li>v quality assurance</li><li>v life cycle costs.</li></ul>	<p>Contract change proposals may include:</p> <ul style="list-style-type: none"><li>v engineering</li><li>v technical</li><li>v administration</li><li>v scope</li><li>v specifications.</li></ul> <p>Integration of project activities may include:</p> <ul style="list-style-type: none"><li>v scope</li><li>v time</li><li>v cost</li><li>v quality</li><li>v human resources</li><li>v communications</li><li>v risk</li><li>v procurement.</li></ul>
<p>Stakeholders may include:</p> <ul style="list-style-type: none"><li>v customers</li><li>v production personnel</li><li>v other company personnel</li><li>v regulatory agencies</li><li>v senior management.</li></ul>	<p>Documented information may include:</p> <ul style="list-style-type: none"><li>v a contract</li><li>v spreadsheet</li><li>v progress reports</li><li>v performance reports against milestones.</li></ul>

### **EVIDENCE GUIDE:**

#### **Critical aspects of evidence:**

v documented information and/or examples of personal work which confirms that the performance criteria have been applied on the job prior within relevant contexts outlined in the range statements.

#### **Interdependent assessment of units:**

This competency has **no** prerequisite

#### **Underpinning knowledge:**

- v contract law
- v scope of project
- v project management systems
- v procurement guidelines
- v the organisation's culture
- v political climate
- v budgetary framework
- v critical analysis
- v business and commercial issues.

**Underpinning skills:**

- v negotiation techniques
- v project management techniques
- v problem solving techniques.

**Resource implications:**

- v no special requirements.

**Consistency of performance:**

- v knowledge and performance to be assessed over time to confirm consistency.

**Context/s of assessment:**

- v this competency may be assessed on or off the job.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	3

## MEM9.1AA Draw and interpret a sketch

**Band - Specialisation band A**

**Field - Drawing, Drafting & Design**

**Unit**

**2**

**Notes**

**Element 9.1A.1 Prepare freehand sketch**

**Criteria**

*Assessor guide: observe that –*

*Assessor guide: confirm that –*

**9.1A.1.1**

Sketch correctly and appropriately drawn

The sketch is correctly drawn with appropriate views where applicable

The object(s) to be sketched can be identified

The number of views necessary to convey all relevant information about the objects to be sketched can be identified

**9.1A.1.2**

Sketch depicts object or part

The object is appropriately represented in the sketched view(s)

Where appropriate, the objects represented in the sketch are correctly labelled and/or identified

**9.1A.1.3**

Dimensions obtained correctly

The dimensions of the object are obtained correctly using appropriate measuring techniques/instruments

The units of measurement used in preparing the sketch are clearly identified

The measuring techniques/instruments to be used to obtain the dimensions of the object can be identified.

The reasons for selecting the chosen measuring techniques/instruments can be explained.

**Criteria 9.1A.1.4**

Dimensions shown clearly

All necessary dimensions are shown clearly on the sketch

The key dimensions to be conveyed by the sketch can be identified

**Criteria 9.1A.1.5**

Instructions shown clearly

All necessary instructions/ information is conveyed by the appropriate use of notes in the sketch

The information/instructions to be conveyed by the sketch can be identified  
Where appropriate, symbols to be used in the sketch and their purpose/meaning are identified

**Element 9.1A.1 Prepare freehand sketch****Criteria****Criteria 9.1A.1.6**

Base line or datum point indicated

*Assessor guide: observe that –*

Where appropriate, the base line, centre line and/or datum point for the object is clearly indicated on the sketch

*Assessor guide: confirm that –*

The function of base lines, centre lines and datum points can be explained

The appropriate base line, centre line and/or datum point for the object being sketched can be identified

<b>Element 9.1A.2 Interpret details from freehand sketch</b>		
<b>Criteria</b>	<i>Assessor guide: observe that</i>	<i>Assessor guide: confirm that –</i>
<b>9.1A.2.1</b> Components, assemblies or objects recognised as required		Where appropriate, the relationship between the views contained in the sketch can be identified The number of objects represented in the sketch can be identified The objects represented in the sketch can be correctly identified
<b>9.1A.2.2</b> Dimensions identified as appropriate to field of employment		The units of measurement used in the preparation of the sketch can be identified The dimensions of the key features of the object(s) depicted in the sketch can be correctly identified
<b>9.1A.2.3</b> Instructions identified and followed as required		The instructions contained in the sketch can be identified The actions to be undertaken in response to those instructions can be given
<b>9.1A.2.4</b> Material requirements identified as required		Where appropriate, the materials from which the object(s) are made can be identified from the sketch
<b>9.1A.2.5</b> Symbols recognised as appropriate in sketch		Where appropriate, any symbols used in the sketch can be identified and correctly interpreted

**Range statement**

Sketches may be applied to any of the full range of engineering disciplines. Sketches will consist of a single plane drawing with dimensions and specifications gained by hand measuring equipment. The level of symbol knowledge applied in this unit will be appropriate to the field and level of employment of the person interpreting the sketch. Where any drawing sketch, chart, diagram is only used as the technique for communication then this unit does not apply, see Unit 1.1F (Undertake interactive workplace communication).

**Evidence guide****Assessment context**

This unit may be assessed on the job, off the job or a combination of both on and off the job. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

**Assessment conditions**

The candidate will have access to: All tools, equipment, materials and documentation required.

The candidate will be permitted to refer to the following documents:

- v Any relevant workplace procedures.
- v Any relevant product and manufacturing specifications.
- v Any relevant codes, standards, manuals and reference materials.

The candidate will be required to:

- v Orally, or by other methods of communication, answer questions put by the assessor.
- v Identify colleagues who can be approached for the collection of competency evidence where appropriate.
- v Present evidence of credit for any off-job training related to this unit.

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge.

### Critical aspects

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with the drawing and interpretation of sketches or other units requiring the exercise of the skills and knowledge covered by this unit. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

### Special notes

During assessment the individual will:

- v demonstrate safe working practices at all times
- v communicate information about processes, events or tasks being undertaken to ensure a safe and efficient working environment
- v take responsibility for the quality of their own work
- v plan tasks in all situations and review task requirements as appropriate
- v perform all tasks in accordance with standard operating procedures
- v perform all tasks to specification
- v use accepted engineering techniques, practices, processes and workplace procedures.

Tasks involved will be completed within reasonable timeframes relating to typical workplace activities.



## MEM9.2AA Interpret technical drawing

**Band - Specialisation band A**  
**Notes**

**Field - Drawing, Drafting & Design**

**Unit 4**

**Element 9.2A.1 Interpret technical drawing**

**Criteria 9.2A.1.1**

Components, assemblies or objects recognised as required

*Assessor guide: observe that –*

*Assessor guide: confirm that –*

**9.2A.1.2**

Dimensions identified as appropriate to field of employment

**9.2A.1.3**

Instructions identified and followed as required

**9.2A.1.4**

Material requirements identified as required

**9.2A.1.5**

Symbols recognised as appropriate in drawing

The relationship between the views contained in the drawing can be identified  
The number of objects/components contained in the drawing can be identified  
The objects represented in the drawing can be correctly identified  
The units of measurement used in the preparation of the drawing can be identified  
The dimensions of the key features of the objects depicted in the drawing can be correctly identified  
The instructions contained in the drawing can be identified  
The actions to be undertaken in response to those instructions can be given  
The materials from which the object(s) are made can be identified from the drawing  
Any symbols used in the drawing can be identified and interpreted correctly

### Element 9.2A.2 Select correct technical drawing

#### Criteria

##### 9.2A.2.1

Drawing checked and validated against job requirements or equipment

*Assessor guide: observe that –*

The drawing is checked against job requirements/related equipment in accordance with standard operating procedures

*Assessor guide: confirm that –*

The procedures for checking and validating drawings against job requirements and/or the related equipment can be given

The reasons for validating the drawing against the job requirements and/or related equipment can be explained

##### 9.2A.2.2

Drawing version checked and validated

The drawing version is confirmed as being current in accordance with standard operating procedures

Where appropriate, the current version of the drawing is obtained in accordance with standard operating procedures

The version of the drawing can be identified

The source of information with respect to the current version of the drawing can be identified

The procedures for obtaining current versions of drawings can be given

The reasons for validating that the current version of the drawing is being used can be explained

#### Range statement

Technical drawing interpretation is applied to any of the full range of engineering disciplines. Technical drawings may utilise perspective, exploded views or hidden view techniques. Drawings are provided to Australian Standard 1100 and/or Australian Standard 1102 and their equivalents from the full range of engineering disciplines. Standard symbols to Australian Standard 1100 and/or Australian Standard 1102 or equivalent as above, are recognised in field of employment. Technical drawings may include symbol glossaries. Where interpretation of any drawing sketch, chart, diagram is required and is provided at a lower level than Australian Standard 1100/Australian Standard 1102 or their equivalent then these skills are covered by Unit 9.1A (Draw and interpret sketch). Where any drawing sketch, chart, diagram is only used as the technique for communication then this unit does not apply, see Unit 1.1F (Undertake interactive workplace communication).

## **Evidence guide**

### **Assessment context**

This unit may be assessed on the job, off the job, or a combination of both on and off the job. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

### **Assessment conditions**

The candidate will be provided with: All tools, equipment, materials and documentation required.

The candidate will be permitted to refer to the following documents:

- v Any relevant workplace procedures.
- v Any relevant product and manufacturing specifications.
- v Any relevant codes, standards, manuals and reference materials.

The candidate will be required to:

- v Orally, or by other methods of communication, answer questions put by the assessor.
- v Identify colleagues who can be approached for the collection of competency evidence where appropriate.
- v Present evidence of credit for any off-job training related to this unit.

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge.

### **Critical aspects**

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with the interpretation of technical drawings or other units requiring the exercise of the skills and knowledge covered by this unit. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

### **Special notes**

During assessment the individual will:

- v demonstrate safe working practices at all times
- v communicate information about processes, events or tasks being undertaken to ensure a safe and efficient working environment
- v take responsibility for the quality of their own work
- v plan tasks in all situations and review task requirements as appropriate
- v perform all tasks in accordance with standard operating procedures
- v perform all tasks to specification
- v use accepted engineering techniques, practices, processes and workplace procedures.

Tasks involved will be completed within reasonable timeframes relating to typical workplace activities

## MEM15.1AA Performs basic statistical quality control

**Band - Specialisation band A**  
**Notes**

**Field - Quality**

**Unit**

**2**

**Element 15.1A.1 Take samples**

**Criteria**

**15.1A.1.1**

Difference between population and sample understood  
Various sampling schemes applied in accordance with standard operating procedures.

*Assessor guide: observe that –*

The appropriate sampling scheme is applied to the given production process in accordance with standard operating procedures

*Assessor guide: confirm that –*

The difference between population and sample can be explained.  
A variety of sampling schemes and their application can be given.  
The sampling scheme to be applied to a given situation can be identified  
The reasons for selecting the chosen sampling scheme can be given  
The sampling procedures to be followed can be given.

**15.1A.2 Apply statistical process to monitor production**

**Criteria**

**15.1A.2.1**

Concept of variation in terms of average and spread understood  
Data used to produce relevant statistical information eg: average and range and the plotting of charts such as tally, run or control charts

*Assessor guide: observe that –*

Data produced from samples taken in conformance to sampling procedures is obtained in accordance with standard operating procedures

Where appropriate, tally, run or control charts are produced from sampling data

*Assessor guide: confirm that –*

The concept of variation can be explained in terms of average and spread  
The procedures for obtaining sampling data can be given  
The average and range of given sampling data can be determined  
The types of charts that can be produced to assist in the monitoring of products can be identified

## 15.1A.2 Apply statistical process to monitor production

### Criteria

#### 15.1A.2.2

Data interpreted accurately and information presented to appropriate authority utilising standard operating procedure

*Assessor guide: observe that –*

Information identified from sampling data is reported to the appropriate authority in accordance with standard operating procedures

*Assessor guide: confirm that –*

The information contained in given sampling data can be interpreted accurately  
The procedures for reporting information obtained from sampling data can be given  
The person to whom information obtained from sampling data is to be reported can be identified

### Range statement

This unit is intended to apply to the collation and interpretation of statistical data in the context of statistical quality control, for example, tally, run or control charts. When the production and interpretation of charts and graphs not dependent on knowledge and understanding of the implications for quality are required, Unit 2.8C10 (Perform computations) should be accessed. Uncontrolled variations are reported to appropriate authority.

### Evidence guide

#### Assessment context

This unit should be assessed on the job. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

#### Assessment conditions

The candidate will have access to: All tools, equipment, materials and documentation required.

The candidate will be permitted to refer to the following documents:

- v Any relevant workplace procedures
- v Any relevant product and manufacturing specifications
- v Any relevant codes, standards, manuals and reference materials.

The candidate will be required to:

- v Orally, or by other methods of communication, answer questions put by the assessor.
- v Identify colleagues who can be approached for the collection of competency evidence where appropriate.
- v Present evidence of credit for any off-job training related to this unit.

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge.

### **Critical aspects**

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with statistical quality control or other units requiring the exercise of the skills and knowledge covered by this unit. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

### **Special notes**

During assessment the individual will:

- v demonstrate safe working practices at all times
- v communicate information about processes, events or tasks being undertaken to ensure a safe and efficient working environment
- v take responsibility for the quality of their own work
- v plan tasks in all situations and review task requirements as appropriate
- v perform all tasks in accordance with standard operating procedures
- v perform all tasks to specification
- v use accepted engineering techniques, practices, processes and workplace procedures.

Tasks involved will be completed within reasonable timeframes relating to typical workplace activities





**UNIT TITLE****PMBCALC101A - Make measurements****UNIT DESCRIPTOR**

This unit applies to employees who are required to apply basic knowledge and skills to perform routine measurements for industry related operations. It applies to all sectors of the industry.

This competency is typically performed by all operators working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify appropriate measurements.	1.1. Select appropriate units on measuring device 1.2. Select appropriate scales on measuring device.
2. Perform measurements.	2.1. Explain range of results that may be obtained 2.2. Identify and take account of relevant external factors 2.3. Perform measurements using appropriate techniques 2.4. Compare measurements against the range of expected results 2.5. Self-check numerical information for accuracy and correct 2.6. Explain the need for calibration and use calibrated equipment to make measurements.
3. Record measurements as required.	3.1. Accurately record the result in the appropriate format 3.2. Record the result to the appropriate level of detail.

**RANGE OF VARIABLES:****Context:**

This competency is typically performed by plant operators who may be working individually or in a team environment. It typically is related to:

- v making measurements using physical and chemical measuring equipment
- v routine checking that instruments are in calibration
- v recording results using either a manual or computer system.

All operations are performed in accordance with standard operating procedures.

The measurement instrument itself may be simple or complex, but the process of using it is a matter of following procedure and reading off the numbers.

This competency includes tools and equipment such as:

- v calculators
- v computers for recording results
- v relevant personal protective equipment.

All operations are performed in accordance with standard procedures.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Application of knowledge of equipment and process sufficient to recognise process problems.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain:
  - basic units of measurement such as additions, subtractions, division, fractions, percentages
  - measuring devices including 'go and no go' gauges, dip sticks, scales, thermometers
  - graphs and scales
- v application of mathematical procedures including additions, subtractions, division, fractions, percentages
- v use dial, scale and digital readouts.

### **Critical aspects:**

It is essential that:

- v the range of appropriate readings is known
- v the importance of deviation from this normal range can be explained
- v the importance of using instruments that are within calibration can be explained (but not the process of calibration or the ability to calibrate).

When instruments have different scales, the differences between the scales should be appreciated and the appropriate scale chosen. Consistent performance should be demonstrated.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Numeracy is required to the level of basic arithmetical manipulations and the interpretation of the significance of numbers and variations of readings.

### **Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	1	1	1	1	1



**UNIT TITLE****PMBCALC303B - Use precision measuring equipment****UNIT DESCRIPTOR**

This unit applies to employees who are required to perform fine measurement procedures using a range of precision equipment for industry related operations. It applies to all sectors of the industry.

This competency is typically performed by experienced operators working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify appropriate measurement procedures.	<ul style="list-style-type: none"><li>1.1. Identify production metrology requirements and the impact on product quality of inaccurate measurement</li><li>1.2. Explain the functions and operation of measuring systems and equipment</li><li>1.3. Identify units for precision measurement</li><li>1.4. Select measuring equipment appropriate for the task</li><li>1.5. Identify dimensions to be measured from specifications and work procedures</li><li>1.6. Select appropriate equipment features/scales for the process</li><li>1.7. Select mathematical processes required to complete the task.</li></ul>
2. Check calibration of equipment.	<ul style="list-style-type: none"><li>2.1. Identify calibration checks</li><li>2.2. Check equipment for calibration/zero</li><li>2.3. Check calibration against specification for range of measurement and scale</li><li>2.4. Take appropriate action when equipment is out of calibration.</li></ul>
3. Carry out measurements and calculations.	<ul style="list-style-type: none"><li>3.1. Select appropriate measuring instruments</li><li>3.2. Perform calculations needed to complete the work tasks</li><li>3.3. Self check and correct numerical information for accuracy</li><li>3.4. Read instruments to the limit of accuracy of the tool and match to specification</li><li>3.5. Analyse results against specifications and take appropriate action in accordance with workplace procedures</li><li>3.6. Record and report measurements in accordance with workplace procedures</li><li>3.7. Store equipment in accordance with manufacturer's standards or workplace procedures.</li></ul>

### **RANGE OF VARIABLES:**

This unit covers comprehensive measuring skills where judgement is required in the selection of the most appropriate techniques/devices and results analysed. It is typically related to using a range of measuring devices and includes:

- v making measurements using a range of measuring equipment
- v checking of the calibration of equipment
- v analysing and recording results using either a manual or computer system.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

This competency includes tools and equipment such as:

- v slip gauges, dial gauges, laser equipment and other metrology tools
- v computer equipment
- v relevant personal protective equipment.

All operations are performed in accordance with standard procedures and work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Application of knowledge of the materials, equipment and process sufficient to recognise out of specification products, process problems and materials faults.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain:
    - application and purpose of mathematical processes
    - production metrology requirements and impact of incorrect measurement on quality
    - function and operation of measuring equipment
    - storage and handling requirements for precision measuring equipment
  - v read and interpret mathematical specifications or job instructions
  - v apply relevant mathematical procedures
  - v use relevant codes, standards, manuals and reference materials
  - v check calibration of equipment and take appropriate action
  - v select and use precision measurement equipment in accordance with standard operating procedures/techniques to obtain specified measurements
  - v analyse and interpret results and take appropriate action
  - v record results in appropriate format
- as is relevant to the practical completion of the job.

**Critical aspects:**

It is essential that the functions of precision measuring equipment is understood and utilised and the importance of deviation from normal range is analysed and appropriate action taken. The importance of using instruments that are within calibration (but not the ability to calibrate) and their storage and handling requirements should be explained. When instruments have different scales, the differences between the scales should be explained. Consistent performance should be demonstrated.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets, manufacturer's equipment specifications and material labels as provided to operators.

Writing is required to the level of completing workplace forms, records and reports.

Numeracy is required to the level of arithmetic, algebraic and geometric manipulation of data.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	2	3	3	3





**UNIT TITLE****PMBCOMP201B - Use computers in the workplace****UNIT DESCRIPTOR**

This competency covers the use of computer equipment and company software programs including selecting the correct programs for use and identifying minor faults in equipment or software. It applies to all sectors of the industry.

This competency is typically performed by all operators working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify information equipment and system.	<ul style="list-style-type: none"><li>1.1. Identify types of computerised equipment used in the work area</li><li>1.2. Identify functions of equipment, component parts and accessories</li><li>1.3. Identify routine faults in operating systems, software applications and operator errors</li><li>1.4. Identify sources of information on rectifying faults and operating equipment, systems and applications</li><li>1.5. Explain and follow security/company protection procedures.</li></ul>
2. Set up, input and retrieve files/data.	<ul style="list-style-type: none"><li>2.1. Adjust work station equipment to meet ergonomic requirements and use appropriate posture</li><li>2.2. Boot, log on and check for viruses (where required)</li><li>2.3. Navigate network to find appropriate program/file</li><li>2.4. Use operating manuals and/or help screens for equipment and software</li><li>2.5. Select and access software packages and accessories for required application</li><li>2.6. Create, correctly identify and open files</li><li>2.7. Identify data to be edited</li><li>2.8. Enter, change or delete data using keyboard/mouse, scanners or other appropriate equipment</li><li>2.9. Confirm input for accuracy</li><li>2.10. Save data regularly to avoid loss of data.</li></ul>
3. Present files/data, shutdown and exit system.	<ul style="list-style-type: none"><li>3.1. Access appropriate printers and use print preview to check document/data for format and layout if required</li><li>3.2. Transmit files/data electronically if required</li><li>3.3. Save files/data prior to shutdown</li><li>3.4. Follow shutdown procedures for files, applications and equipment</li><li>3.5. Access saved files through relevant directories</li><li>3.6. Make back up copies if required and store information and disks in accordance with procedures.</li></ul>

## **RANGE OF VARIABLES:**

This competency unit includes items of equipment such as:

- v computers - stand alone and/or networked
- v mobile terminals and hand held devices
- v printers
- v mouse, keyboard
- v facsimile equipment
- v onboard terminals
- v scanners
- v bar coders.

Software applications may include:

- v CC mail and email
- v internet or intranet
- v word processing, database and spreadsheet programs
- v company/process specific software.

Documents may include:

- v work orders
- v work instructions/standard operating procedures
- v email or CC mail
- v faxes
- v memos
- v tables
- v standard letters
- v standard reports.

Typical problems include:

- v software problems such as unable to access file, find correct page or send email, input data
- v security issues
- v communication between different users and systems
- v viruses
- v use of templates, standard forms, etc.

All operations are performed in accordance with standard procedures.

It includes the operation of all relevant additional equipment where that equipment is integral to the use of the computer/computer system.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain:
  - security procedures
  - functions of various hardware and software programs used on site
  - routine faults in computer equipment or software programs
- v utilise in plant computer programs
- v recognise and solve routine software or equipment problems
- v complete documents/records to standard required.

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that:

- v equipment is used in accordance with procedures
- v data is accessed, inputted and saved correctly
- v output standards are met consistently.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required.

### **Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
  - v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	1	2	2

**UNIT TITLE****PMBQUAL290A - Monitor and maintain product quality****UNIT DESCRIPTOR**

This unit covers the competency required for the monitoring and maintenance of process operations in order to produce a quality product.

The competency is typically performed by operators, who may be working individually or in a team environment.

**PREREQUISITES**

This unit of competency has **no** prerequisites, however it assumes the knowledge component included in the following unit of competency. Evidence must be available that the specified knowledge has been acquired and is able to be applied:

v PMB QUAL 101 A - Apply quality processes.

ELEMENT	PERFORMANCE CRITERIA
1. Assess quality of product.	1.1. Finished products are checked against standard sample or specifications 1.2. Quality control standards and procedures are applied in accordance with work site requirements.
2. Isolate and report variations in product quality.	2.1. Distinguish possible problem areas based on the past history of the product/process 2.2. Identify variations in product quality due to process or material faults and take appropriate action in accordance with procedures and work instructions 2.3. Follow enterprise procedures for reporting and managing variations.
3. Maintain standards throughout production processes.	3.1. Check production reports against schedule, rate and quantities of products produced 3.2. Complete quality check sheets/production report sheets 3.3. Constantly maintain visual checks 3.4. Adjustments to production process are made within work instructions. 3.5. Variations outside work instructions are reported 3.6. Monitor quality control systems to ensure procedures and work instructions are followed 3.7. Communicate information about variations in quality to appropriate personnel.
4. Communicate quality issues to relevant personnel.	4.1. Communicate information on product quality to appropriate personnel 4.2. Explain enterprise procedures/work instructions in relation to maintaining quality standards 4.3. Suggest options for improvement.

### **RANGE OF VARIABLES:**

The competency unit applies to a wide range of processes and equipment.

In large plants with multiple processes, it may apply to more than one process if those processes interact with each other. It applies to all operators across all functions.

All operations are performed in accordance with work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of the process, normal operating parameters, and product quality to recognise non-standard situations.

Knowledge of the relevant quality, OH&S and environmental requirements and an ability to work within appropriate time constraints, propose corrective action and provide recommendations.

Thorough knowledge of enterprise standard operating procedures is required. Some appreciation of the plant's business goals is required as a basis for decisionmaking and action.

Competence including the ability to:

■ describe:

- principles of operation
- quality control standards and procedures
- testing procedures
- materials characteristics in raw, process and processed form
  - distinguish between causes of problems such as:
- process
  - equipment

as is relevant to the ability to improve processes and procedures at that level.

**Critical aspects:**

It is essential that the equipment and processes be understood and that the importance of critical quality control standards and specifications is known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then take the action required.

Consistent performance should be demonstrated. In particular look to see that:

- v standards are maintained throughout processes
- v checks are completed in accordance with quality procedures and work instructions
- v variations in product quality are identified and rectified
- v recording and reporting procedures for non-conformance are followed.

**Language, literacy and numeracy requirements:**

This unit requires the ability to interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to complete workplace forms.

Basic numeracy is also required to the extent of recognise significant variations.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	1	1	2	2





**UNIT TITLE****PMBQUAL291A - Participate in continuous improvement****UNIT DESCRIPTOR**

This unit applies to all employees who are required to be involved in process improvement initiatives.

This competency is typically performed by an operator working independently or in a team.

**PREREQUISITES**

This unit of competency has **no** prerequisites, however it assumes the knowledge component included in the following unit of competency. Evidence must be available that the specified knowledge has been acquired and is able to be applied:

v PMB QUAL 101 A Apply quality processes.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify customers and suppliers.	1.1. Identify internal and external customers and suppliers 1.2. Identify individual requirements 1.3. Identify your role in meeting customer requirements.
2. Identify areas for improvement.	2.1. Identify issues affecting output and quality 2.2. Identify instances of variation 2.3. Follow enterprise procedures/work instructions for reporting and managing variations 2.4. Record non-conformance in accordance with company requirements.
3. Identify strategies for improvement.	3.1. Analyse problems/areas for improvement 3.2. Explain the use of information in developing improvements 3.3. Use appropriate quality tools and techniques for identifying causes of problem and areas for improvement 3.4. Suggest options for improvement 3.5. Discuss a proposed improvement with others in a team.
4. Participate in a team to implement an improvement proposal.	4.1. Implement changes in system and procedures 4.2. Monitor performance improvements 4.3. Evaluate results of improvements with others in a team.

### **RANGE OF VARIABLES:**

The competency unit applies to a wide range of processes and equipment. In large plants with multiple processes, it may apply to more than one process if those processes interact with each other. It applies to all operators across all functions.

All operations are performed in accordance with standard procedures and work instructions, temporary instructions and relevant industry and government codes and standards.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of the process, normal operating parameters and product quality to recognise non-standard situations.

Knowledge of the relevant OH&S and environmental requirements is required along with an ability to implement them in a manner which is relevant to determining the corrective action and provision of recommendations.

Thorough knowledge of enterprise standard operating procedures is required. Some appreciation of the plant's business goals is required as a basis for decisionmaking and action.

Competence to include the ability to:

- apply and explain
  - principles of operation
  - principles of recording and reporting
  - analytical problem solving techniques
    - distinguish between causes of problems such as:
  - process
  - maintenance
    - possible and fundamental
- as is relevant to the ability to improve processes and procedures at that level.

#### **Critical aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria. In addition, look to see that:

- appropriate documenting of the quality improvement process is undertaken
- enterprise procedures for identifying and suggesting improvements are followed
- the operator is able to participate in a team discussion
- enterprise procedures for implementing improvement proposals are followed

v standards are met consistently.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required, eg, to interpret quality data and graphs.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	1	1	1	2	1



**UNIT TITLE****PMBQUAL390A - Solve problems using 'quality tools'****UNIT DESCRIPTOR**

This competency covers the solving of process and other problems, beyond those associated directly with the process unit, using a structured approach such as problem solving tools and techniques to achieve the organisation's quality objectives.

The competency is typically performed by an experienced operator, leading hand or supervisor.

**PREREQUISITES**

This unit has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify the problem.	1.1. Identify variances from normal operating parameters and product/process quality 1.2. Define the extent, cause and nature of the problem by observation and investigation 1.3. State and specify the problem clearly.
2. Propose possible causes of the problem.	2.1. Identify possible causes based on experience and the use of problem solving tools/analytical techniques. 2.2. Develop possible cause statements 2.3. Identify fundamental cause.
3. Propose corrective action.	3.1. Consider possible options for resolution of the problem through consultation 3.2. Assess feasibility of options using available information and/or in discussion with workplace personnel 3.3. Propose corrective action to remove the problem and possible future causes and obtain appropriate clearance to proceed 3.4. Develop action plans identifying measurable objectives, resource needs, timelines and implement in accordance with safety, environment and standard procedures 3.5. Develop recommendations for ongoing monitoring and testing.
4. Communicate recommendations.	4.1. Prepare report on recommendations 4.2. Present recommendations to appropriate personnel 4.3. Follow up recommendations.
5. Monitor implementation of corrective action.	5.1. Determine measures/data which will indicate success or otherwise of recommendation 5.2. Monitor measures/data and determine progress towards improvement goal 5.3. Take appropriate action where improvement goals are not being met 5.4. Take appropriate action to ensure improvements remain in place when improvement goals are being met.

## **RANGE OF VARIABLES:**

### **Context:**

The competency unit applies to a wide range of processes and equipment. Each 'PROD' competency unit includes a problem solving element where problems specific to that competency unit are to be resolved. This competency unit is where structured problem solving techniques are to be applied more broadly, or with greater depth/rigour, than is implied by the problem solving element of the 'PROD' units.

In large plants with multiple processes, it may apply to more than one process if those processes interact with each other. It applies to all operators across all functions.

This competency unit may include:

■ the use of analytical techniques in problem solving such as:

- brainstorming
- fishbone diagrams/cause and effect diagrams
- logic tree
- process logic/process requirements
- similarity/difference analysis
- Pareto analysis
- force field/SWOT analysis

■ preparation of action plans to solve problems including:

- priority requirements
- measurable objectives
- resource requirements
- methods for reaching objectives
- timelines
- coordination and feedback requirements
- safety requirements
- risk assessment
- environmental requirements.

Typical problems include:

- process and quality problems
- equipment selection, availability and failure
- teamwork and work allocation problems
- safety and emergency situations and incidents.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of the process, normal operating parameters and product quality to recognise non-standard situations.

Knowledge of the relevant OH&S and environmental requirements is required along with an ability to implement them in a manner which is relevant to determining the corrective action and provision of recommendations.

Thorough knowledge of enterprise standard operating procedures/work instructions is assumed. Some appreciation of the plant's business goals is required as a basis for prioritising, decision making and action.

Competence includes the ability as is relevant to operate and problem solve at that level:

- apply and explain
- principles of operation
- analytical problem solving techniques
  - distinguish among causes of problems such as:
- process
- maintenance
- materials/products
  - possible and fundamental.

### **Critical Aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria.

Consistent performance should be demonstrated. In addition, look to see that:

- problems are recognised and defined
- possible causes are identified based on experience and use of analytical techniques in solving the problem, including identifying variations and cause and effect, separating single problems from multiple problems, and the recognition of recurring problems
- fundamental cause of process or equipment faults is determined
- corrective/preventative action plans are developed to avoid recurrence of the problem.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret quality procedures and work instructions, quality manuals, equipment manuals as is applicable to problem solving quality issues.

Writing is required to the level of writing reports/presentations on quality issues.

Numeracy is also required, eg, to analyse quality data or charts.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	2	2	2	2	3	2



**UNIT TITLE****PMBQUAL400A - Develop and monitor quality systems****UNIT DESCRIPTOR**

This competency covers the establishment, maintenance and evaluation of quality systems for a complete production area and/or plant.

This competency is typically performed by an experienced operator, leading hand or supervisor.

**PREREQUISITES**

This unit has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Establish and maintain framework for successful quality system.	1.1. Develop relevant policies which demonstrate the commitment of the enterprise to quality and a culture of improvement 1.2. Define and allocate responsibilities in quality system 1.3. Consult with key personnel to define role of procedures in the quality system 1.4. Seek and provide financial and human resources to allow thorough implementation of quality system 1.5. Develop system for communicating quality message and culture in the organisation.
2. Establish and maintain quality documentation system.	2.1. Identify quality documentation required including records of improvement plans and initiatives 2.2. Prepare and maintain quality documentation and keep data records 2.3. Maintain document control system.
3. Implement structured training program in accordance with quality system requirements.	3.1. Analyse roles and duties of relevant personnel 3.2. Identify training needs in relation to quality 3.3. Identify training programs to meet these needs 3.4. Implement the training program 3.5. Develop and maintain training records.
4. Evaluate the quality system.	4.1. Undertake regular audits of the quality system, its policies and procedures 4.2. Develop new procedures/work instructions as required 4.3. Implement improvements in the quality system.

### **RANGE OF VARIABLES:**

Plant documentation may include:

- **organisational policies**
- quality manuals
- standard operating procedures and work instructions
- company business objectives and key performance indicators.

Quality audits and evaluations may be undertaken as an individual or as part of a team.

All operations are performed in accordance with standard procedures and work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of the organisation's quality systems and appropriate national and international quality standards and protocols.

Knowledge of the relevant OH&S and environmental requirements and detailed knowledge of enterprise standard operating procedures is required.

An appreciation of the plant's business goals and key performance indicators is required as a basis for decision making and action.

Competence to include the ability to apply and explain:

- the principles of process improvement
- the principles of policy and procedure development
- the principles of data management and documentation.

#### **Critical aspects:**

Evidence of satisfactory performance in this unit can be obtained by observation of performance and questioning to indicate understanding and knowledge of the elements of the competency and performance criteria.

In addition, look to see that:

- effective maintenance and evaluation of quality systems are carried out
- relevant staff training programs are implemented
- adequate quality documentation is produced including policies and procedures.

#### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret quality procedures and work instructions, quality manuals, equipment manuals as is applicable to developing quality systems and procedures.

Writing is required to the level of developing quality documentation.

Numeracy is also required, eg, to analyse quality data or charts.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	2	2	3	2



## UNIT TITLE

### PMBSUP301A - Apply HACCP to the workplace

## UNIT DESCRIPTOR

This competency applies to senior operators working in sectors that make products which come into contact with food and beverages.

This competency covers the application of a HACCP based approach to food and beverage related products.

### Acronyms used in this competency

CCP	critical control points	HACCP	hazard analysis critical control points
CCF	critical control factors		
CCL	critical control limits	HAT	hazard analysis table

### This competency in practice

This competency applies to senior operators who apply a HACCP based approach to assist in the development of a HAT or to modify HATs due to changes in process or materials. It includes:

- v applying an existing HACCP to existing products and processes
- v modifying an existing HACCP for changes to process and materials (within appropriate protocols)
- v being part of a HACCP team developing a new HACCP
- v using the HACCP and HAT to recognise and resolve non-routine non-conformances.

### PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Apply a HAT to an existing process.	1.1. Identify CCPs 1.2. Recognise CCFs which are outside of or approaching CCLs 1.3. Describe hazard related to CCFs and CCLs 1.4. Implement corrective action as per HAT.
2. Develop/modify a HACCP.	2.1. Conduct a hazard analysis 2.2. Determine the CCPs 2.3. Establish critical limits 2.4. Establish/modify a system to monitor control of the CCPs 2.5. Establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control 2.6. Establish procedures for verification to confirm that the HACCP system is working effectively 2.7. Establish/modify documentation concerning all procedures and records appropriate to these principles and their application.

ELEMENT	PERFORMANCE CRITERIA
3. Interpret HACCP/HAT to another worker.	3.1. Explain the purpose and rationale of HACCP 3.2. Identify CCPs, CCFs and CCLs 3.3. Describe indicators of CCFs not within their CCLs 3.4. Describe impact of non-conformances 3.5. Demonstrate corrective action 3.6. Monitor worker implement HACCP.

#### **RANGE OF VARIABLES:**

This competency unit covers the development/modification of a HACCP/HAT to the manufacture of products to be used in contact with food, beverages or pharmaceuticals. It assumes an understanding of the operation of all relevant equipment and processes but does not necessarily require them to be used personally.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry where the product comes into contact with food, beverages or pharmaceuticals.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The processes covered by this unit include, but are not limited to:

- v blow moulding
- v injection moulding
- v blown film
- v general rubber/plastics manufacture requiring 'food grade' products.

This competency includes:

- v the application of the 'seven principles' of HACCP
- v the development of a HAT from a HACCP
- v developing a new HACCP as part of a HACCP team
- v making changes to existing HCAAPs/HATs resulting from process/material changes (provided such changes are not major requiring a complete new analysis)
- v helping operators to apply and use the HACCP/HAT in their routine work.

Typical hazards include:

- v biological hazards
- v chemical hazards
- v physical hazards
- v product contamination hazards
- v material contamination hazards.

Typical problems include:

- v recognition of CCFs approaching the CCLs
- v determination of corrective action from HAT
- v application of HACCP principles to situations not directly covered by HAT
- v recognising the need for a new/modified HACCP/HAT
- v modification of HACCP/HAT to meet changes circumstances.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of the materials, equipment and process sufficient to recognise HACCP/HAT issues and take appropriate corrective action.

Knowledge of the enterprise's standard procedures, HACCPs and HATs and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and in a manner relevant to the job.

Competence includes the ability for the practical completion of the job to:

v apply and/or explain:

- HACCP approach
- importance of Codex Alimentarius to the food industry and its relevance to food/beverage/pharmaceutical packaging
- HAT relevance to routine production
- impacts of variations in materials, process and product on HACCP

v analyse process and material variations in terms of the HACCP and determine appropriate action(s)

v develop a new HACCP as part of a team

v recognise the need to modify an existing HACCP/HAT and make minor modifications.

### **Critical aspects:**

It is essential that the procedures be understood and that the importance of CCPs, CCFs and CCLs can be explained. Competence must be demonstrated in the ability to recognise potential situations requiring action and then in implementing appropriate action.

Consistent performance should be demonstrated. In particular look to see that HACCP standards are met consistently.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read, interpret and write technical information and explain it to operators.

Writing is required to the level of writing technical reports and HACCP/HAT tables.

Numeracy is also required, eg, to interpret quantitative data, make comparisons and interpretations.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	2	3	2	2	3	2



**UNIT TITLE****PMCSUP292A - Sample and test materials and product****UNIT DESCRIPTOR**

This competency covers the taking of routine samples and the conducting of simple tests.

This competency is typically performed by operators working either independently or as part of a work team.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Take sample.	1.1. Determine type of sample and sampling equipment required 1.2. Check sampling equipment is clean and in good order 1.3. Take sample(s) of required type(s), from the required place(s) and at the required time(s) and place in required container(s) 1.4. Label sample(s) to procedure 1.5. Carry sample(s) to required place.
2. Complete test.	2.1. Check test required from procedures/work instruction 2.2. Check sample identification and integrity 2.3. Check test equipment is clean, in good order and within calibration 2.4. Complete test(s) required as per standard procedures/instructions.
3. Interpret results and take action.	3.1. Note anything about sample, equipment or the test itself which may have caused it to give a bad result 3.2. Compare results to specification 3.3. Take action appropriate to the test results and any other observations.
4. Complete sample and test cycle.	4.1. Complete required records 4.2. Store and/or dispose of sample as required 4.3. Clean all equipment and leave ready for next sample/test.

**RANGE OF VARIABLES:**

This competency unit includes the range of sampling and testing which may be carried out in the plant or in a plant laboratory. It typically applies to operators who carry out a narrow range of tests as part of their job.

It does NOT include testing which would normally be conducted in a laboratory, nor operators carrying out a wide range of testing which is a significant part of their job role. These competencies are more properly covered by PML TEST 300 A Perform basic tests or other units from the Laboratory Operations Training Package.

The tasks covered by this competency include:

- v receiving, handling and storing samples
- v preparing for sample collection
- v performing sample collection

- v performing sample preparation
- v performing tests
- v recording results.

Typical problems include:

- v correct sampling technique
- v test equipment condition/calibration
- v consistent test technique according to standard procedure
- v correct recording of result
- v interpretation of result and the initiation of appropriate action
- v correct retention/disposal of sample/test materials.

All operations are performed in accordance with standard procedures.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Application of knowledge of the sampling and testing techniques used sufficient to recognise a suspicious test result cause by a fault in these areas.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or describe:
  - basic principles of taking this particular sample
  - basic principles of this particular test
- v distinguish between causes of out of specification/suspicious results such as:
  - sample
  - test
  - process.

### **Critical aspects:**

It is essential that the specific techniques be understood and that the importance of critical sampling and testing factors is known. Competence must be demonstrated in the ability to recognise situations requiring action and then in implementing appropriate corrective action.

Consistent performance should be demonstrated. In particular look to see that:

- v reproducible results are obtained
- v suspicious results are identified and appropriate action taken
- v all equipment is maintained in a clean state and in good order.

Competence must be demonstrated in the operation of all ancillary equipment to the level required for this competency unit.

**Assessment method, context and resource implications:**

Competence in this unit may be assessed by observation over time on an operating plant. Where this is done, the time frame must allow for adequate assessment of operation under all normal and a range of abnormal conditions. Where this is not practical, additional assessment techniques must be used.

Competence may also be assessed by use of a suitable simulation and/or a range of case studies/scenarios. A combination of these techniques should be used to ensure the competency is adequately assessed.

In all cases it is expected that the practical assessment will be combined with targeted questioning to assess the underpinning knowledge. Questioning will be undertaken in such a manner as is appropriate to the language and literacy levels of the operator and reflecting the requirements of the competency.

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment which allows for appropriate and realistic simulation. A bank of case studies/scenarios will also be required where these form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunch room. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	1	1	1



## Unit Title:

### PMLTEST300A - Perform basic tests

#### Unit descriptor

This unit of competency covers the ability to perform basic tests and/or procedures using standard methods.

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1	Receive, label and store samples for testing.	1.1	Label laboratory samples to ensure all required information is transcribed accurately and legibly
		1.2	Register samples into laboratory system
		1.3	Record sample testing requirements
		1.4	Maintain sample integrity and eliminate cross-contamination.
2	Prepare sample.	2.1	Identify materials to be tested, appropriate standard method and safety requirements
		2.2	Use personal protective equipment as specified for standard method and material to be tested
		2.3	Record sample description, compare with specification, record and report discrepancies
		2.4	Prepare sample in accordance with appropriate standard methods.

- |   |                           |      |  |
|---|---------------------------|------|--|
| 3 | Perform tests on samples. | 3.1  | Check calibration status of equipment and calibrate if applicable                                |
|   |                           | 3.2  | Perform sequence of tests to be performed as per standard method                                 |
|   |                           | 3.3  | Identify, prepare and weigh or measure sample and standards to be tested                         |
|   |                           | 3.4  | Set up test reagents or equipment/instrumentation as per standard method                         |
|   |                           | 3.5  | Conduct tests in accordance with enterprise procedures   |
|   |                           | 3.6  | Record results in accordance with enterprise procedures  |
|   |                           | 3.7  | Identify and report “out of specification” or atypical results promptly to appropriate personnel |
|   |                           | 3.8  | Clean and care for test equipment  |
|   |                           | 3.9  | Store unused reagents as required by relevant regulations and codes                              |
|   |                           | 3.10 | Dispose of wastes in accordance with safety, enterprise and environmental requirements.          |

## RANGE OF VARIABLES

The range of variables places each unit of competency in context and allows for differences between enterprises and workplaces, including practices, knowledge and requirements.

Cross industry variables

The following variables may apply to all industry sectors covered by this Training Package.

This unit of competency describes the work conducted by supervised laboratory assistants who receive samples, prepare them for laboratory testing and perform a range of basic tests and measurements.

All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements. These procedures include or have been prepared from:

- v Australian and international standards, such as:

- AS/NZS 2243.2 Chemical aspects

- AS 2243.6 Mechanical aspects

- AS 2243.10 Storage of chemicals

- AS 2830 Good laboratory practice

- v codes of practice (such as GLP and GMP)

- v National Measurement Act

- v materials safety data sheets (MSDSs)

- v standard operating procedures (SOPs)

- v equipment manuals

- v equipment startup, operation and shutdown procedures

- v calibration and maintenance schedules

- v quality manuals

- v enterprise recording and reporting procedures

- v production and laboratory schedules
- v material, production and product specifications.

All operations are subject to stringent OHS requirements. Relevant standards may include:

- v sections of the occupational health and safety legislation
- v enterprise safety rules and procedures
- v relevant State and federal legislation
- v national standards
- v codes of practice.

Preparation of samples can include:

- v cutting of test specimens
- v moulding of test specimens
- v sub-sampling or splitting using procedures such as riffing, coning and quartering, manual and mechanical splitters
- v physical treatments such as ashing, dissolving, filtration, sieving, centrifugation and comminution.

Typical tests carried out by personnel at this level include:

- v hardness, tensometer, flex, impact
- v appearance, colour, identity
- v flow number and rheometry
- v melting points, boiling points, refractive indices, densities including compacted densities, viscosity measurements
- v ashes including sulfated ashes
- v Emerson class, pinhole dispersion, wet dry variation, Los Angeles abrasion, compression strength and flexural strength
- v spot tests, gravimetric tests, time/temperature, texture, pH and dipsticks.

Updating information

Changes in codes of practice and applicable standards should be noted.

## EVIDENCE GUIDE

Each unit of competency has an evidence guide that relates directly to the performance criteria and the range of variables. Its purpose is to guide assessment of the unit in the workplace and/or training program.

Critical aspects of competency

Cross industry

The following aspects of competency apply to all industry sectors covered by this Training Package. Competency must be demonstrated in the ability to receive and prepare samples, and perform tests on samples to obtain accurate and reliable results within the required timeframe. In particular, the assessor should look to see that the candidate:

- v applies SOPs to efficiently prepare samples for test and analyses
- v uses safety information (eg, MSDSs) and performs procedures safely
- v checks testing equipment calibration status
- v completes all tests within required timeline without sacrificing safety, accuracy or quality
- v calculates, records and presents results accurately and legibly
- v cleans and maintains equipment.

Essential knowledge

Cross industry

The following knowledge requirements apply to all industry sectors covered by this Training Package.

Competency includes the ability to apply and explain the:

- v purpose of test
- v principles of the standard method
- v calibration procedures and their basis
- v relevant standards/specifications and their interpretation
- v source of uncertainty in measurement and methods for control
- v importance and appropriate use of certified reference materials
- v relevance of the National Measurement Act to laboratory measurement
- v interpretation and recording of test result, including calculation of results from test data where required
- v procedures for recognition of unexpected or unusual results and likely causes
- v OHS procedures for sample testing.

Assessment context

This unit of competency is to be assessed in the workplace or simulated workplace environment.

Interdependent assessment of unit

This unit of competency may be assessed with:

- v PML DATA 300 A – Process and record data
- v PML TEST 302 A – Calibrate test equipment and assist with its maintenance.

This unit of competency has no prerequisites.

Assessment methods and resources

The following assessment methods are suggested:

- v observation of the candidate performing a range of basic tests
- v oral or written questioning to check underpinning knowledge of test procedures
- v feedback from peers and supervisors
- v examples of records and workplace documentation completed by the candidate
- v analysis of results achieved by the candidate over time.

Resources may include:



- v standard laboratory equipped with appropriate equipment and calibration standards
- v SOPs, calibration and testing procedures.

This competency in practice

Industry representatives have provided storylines to illustrate the practical application of each unit of competency and show its relevance in a workplace setting.

Process manufacturing and construction materials industries

Standard testing methods may be viewed as 'legal' requirements that must be followed to ensure that a product manufactured in a chemical plant meets the specification by which it is sold to the customer. Technical assistants perform tests in a quality control laboratory to ensure that material meets 'legal' requirements and the material is safe and effective in use.

Peroxides may be present in ether as a result of light-catalysed air oxidation. Peroxides are toxic and can give rise to mixtures which are explosive when distilled. Technical assistants test ether to ensure that the level of peroxide is within acceptable limits. The test is done by shaking ether with a solution of potassium iodide. After standing for 30 minutes in the dark the yellow colour of the aqueous phase, due to the liberation of iodine, must not be more intense than a prepared standard solution. These tests ensure the quality and safety of the ether.

Food and beverage processing industries

The Eldorado Snack Food Company produces a range of high quality, impulse purchase snack foods. Some of these products are moisture and/or oxygen sensitive and are therefore packaged in multi-layer flexible packaging to provide optimum shelf-life. The packaging must also be able to withstand the rigours of the production and distribution process.

While the packaging is purchased to meet the shelf-life and distribution specifications, the quality assurance program requires the periodic evaluation of the packaging materials against these specifications. The tests conducted include tearing resistance, bursting strength, impact resistance and permeability and/or leakage. Tests are also conducted on aspects of the manufacturing process that can affect shelf-life. These tests involve the measuring of the heat-seam strength and the sealing performance of the closure process.

The test results are recorded by the laboratory assistant to verify the conformance of the materials to the supplier specifications and of the process to the manufacturing specifications. The assistant reports any anomalies or non-conformances to the appropriate personnel.

Key competencies

This information refers to the seven areas of generic competency that underpin effective workplace practices. The key competencies cover the three levels of performance in the following areas:

Communicating ideas & information	Collecting, analysing & organising information	Planning & organising activities	Working with others and in teams	Using mathematical ideas and techniques	Solving problems	Using technology
Level 1	Level 1	Level 1	Level 1	Level 1	Level 1	Level 1



## Unit Title:

### PMLTEST401A - Perform non-instrumental tests/procedures

#### Unit descriptor

This unit of competency covers the ability to prepare samples and use non-instrumental tests and procedures (such as physical testing and other laboratory equipment) to test materials.

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1	Prepare sample.	1.1	Identify materials to be tested, appropriate standard method and safety requirements
		1.2	Use personal protective equipment and safety procedures as specified for test method and materials to be tested
		1.3	Record sample description, compare with specification and note and report discrepancies
		1.4	Prepare sample in accordance with testing requirements.
2	Test sample.	2.1	Weigh or measure sample and standards (if appropriate) to be tested
		2.2	Set up and operate equipment as per test requirements
		2.3	Perform tests in accordance with enterprise procedures.
3	Process data.	3.1	Record test data noting atypical observations
		3.2	Ensure calculated quantities are consistent with estimations
		3.3	Record and report results in accordance with enterprise procedures
		3.4	Interpret trends in data and/or results and report “out of specification” or atypical results promptly to appropriate personnel
		3.5	Troubleshoot basic procedure or equipment problems which have led to atypical data or results.

4	Maintain a safe work environment.	4.1	Use established work practices to ensure personal safety and that of other laboratory personnel
		4.2	Minimise the generation of wastes
		4.3	Ensure the safe disposal of laboratory wastes
		4.4	Clean, care for and store equipment and reagents as required.
5	Maintain laboratory records.	5.1	Record approved results into enterprise system
		5.2	Maintain confidentiality of enterprise information and laboratory data
		5.3	Ensure security of enterprise information and laboratory data.
		5.4	Maintain equipment logs as per enterprise procedures.

## RANGE OF VARIABLES

The range of variables places each unit of competency in context and allows for differences between enterprises and workplaces, including practices, knowledge and requirements.

Cross industry variables

The following variables may apply to all industry sectors covered by this Training Package.

This unit of competency describes the work conducted by laboratory technicians who use non-instrumental methods/procedures to evaluate materials as part of their job.

All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements. These procedures include or have been prepared from:

- v Australian and international standards
- v codes of practice (such as GLP and GMP)
- v material safety data sheets (MSDSs)
- v National Measurement Act
- v standard operating procedures (SOPs)
- v quality manuals and equipment and procedure manuals
- v equipment startup, operation and shutdown procedures
- v enterprise recording and reporting procedures
- v production and laboratory schedules
- v material, production and product specifications.

All operations are subject to stringent OH&S requirements. Relevant standards may include sections of the occupational health and safety legislation, enterprise safety rules and procedures, relevant State and federal legislation, national standards or codes of practice.

Non-instrumental testing methods may include:

- v hardness, tensometer, flex, impact, adhesion
- v physical tests such as appearance, colour, odour, texture, melting point, boiling point, refractive index, density/specific gravity and viscosity
- v rheometry and flow number

- v particle size tests including sieve analysis
- v gravimetric analysis including loss on drying, ashes such as sulfated and gravimetric assays
- v qualitative tests such as identity tests
- v limit tests.

Test methods may be required for:

- v plant and field testing
- v product and material testing
- v control of starting materials, in-process materials and finished products
- v environmental monitoring
- v basic troubleshooting of enterprise processes.

Updating information

This unit of competency does not contain detailed information that requires regular updating.

## EVIDENCE GUIDE

Each unit of competency has an evidence guide that relates directly to the performance criteria and the range of variables. Its purpose is to guide assessment of the unit in the workplace and/or training program.

Critical aspects of competency

Cross industry

The following aspects of competency apply to all industry sectors covered by this Training Package.

Competency must be demonstrated in the ability to use non-instrumental methods to test materials, interpret and use test data appropriately, and report data in the appropriate format.

In particular, the assessor should look to see that the candidate:

- v prepares and test samples using procedures appropriate to the nature of sample
- v performs tests to appropriate standards
- v applies theoretical knowledge to interpret data and make relevant conclusions
- v calculates results in appropriate units if applicable
- v records and communicates results as per enterprise procedures
- v maintains security, integrity, traceability and identity of samples, sub-samples and documentation at all times
- v follows OH&S procedures and GLP.

Essential knowledge

Cross industry

The following knowledge requirements apply to all industry sectors covered by this Training Package.

Competency includes the ability to apply and explain:

- v chemical/physical principles underpinning test method
- v function of key components/reagents used in the test method
- v effects on test of modifying test variables
- v sample preparation procedures
- v test method troubleshooting procedures
- v reagent maintenance and evaluation procedures
- v OH&S procedures and GLP.

Assessment context

This unit of competency is to be assessed in the workplace or simulated workplace environment.

### Interdependent assessment of unit

This unit of competency may be assessed with:

- v PML DATA 300 A – Process and record data.

This unit of competency should be assessed after:

- v PML TEST 300 A – Perform basic tests.

### Assessment methods and resources

The following assessment methods are suggested:

- v observation of the candidate performing a range of non-instrumental tests/procedures
- v oral or written questioning
- v feedback from peers and supervisors
- v examples of testing records and workplace documentation completed by the candidate
- v review of results obtained by the candidate over a period of time to ensure accurate and consistent results are obtained within required timelines.

Resources may include:

- v standard laboratory equipped with appropriate equipment
- v laboratory reagents
- v standard operating procedures (SOPs) and testing methods.

### This competency in practice

Industry representatives have provided storylines to illustrate the practical application of each unit of competency and show its relevance in a workplace setting.

#### Process manufacturing and construction materials industries

The accurate measurement of physical properties is a routine but important function of all laboratory technicians. Technicians must use the required equipment and procedures to get accurate results.

For example, a technical assistant was measuring the specific density of a shipment of glycerol using a standard laboratory procedure. The result did not agree with the manufacturer's certificate of analysis. The assistant notified the manufacturer who came to the plant and checked the delivered material. It had been raining while the glycerol was in transit and rain water had entered the drum, diluting the glycerol. The drum was returned to the manufacturer and a new drum was supplied to the manufacturing plant. The manufacturer investigated the seals on the glycerol drums and took action to ensure that new seals would protect the product in transit.

#### Biomedical and environmental services

A technical assistant is employed at a laboratory doing environmental testing. The assistant is assisting with a survey of a town water supply which includes checking water quality in the distribution and storage network. The assistant is responsible for testing the water for chemical and biological contamination caused by run-off of fertilisers and animal faeces. When reporting the results to the laboratory supervisor, (s)he also suggests measures which could be taken to protect the water catchment area.

#### Food and beverage processing industries

A technician was testing the melt flow index of a new type of polymer that was to be used as a sealant for packages of freeze dried coffee. The technician measured the melt flow rate and found it was much too high. The technician then checked the melt flow equipment as per the manufacturer's directions and found the machine was out of calibration. After recalibration using recommended standards, another sample was obtained and retested. This time the polymer was within specification and was released for use in production.

### Key competencies

This information refers to the seven areas of generic competency that underpin effective workplace practices. The key competencies cover the three levels of performance in the following areas:

Communicating ideas & information	Collecting, analysing & organising information	Planning & organising activities	Working with others and in teams	Using mathematical ideas and techniques	Solving problems	Using technology
Level 1	Level 2	Level 2	Level 1	Level 2	Level 2	Level 1





## UNIT TITLE

### PMBENV100A - Identify and minimise environmental hazards

## UNIT DESCRIPTOR

This competency covers the awareness of environmental issues and enterprise environmental policies and procedures to minimise environmental threats.

This competency is performed by all operators in all plants. It reflects the regulatory requirements and the industry's concern to operate in an environmentally friendly manner.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify potential environmental threats.	1.1. Recognise the type and severity of environmental threat posed by the materials and processes used for own work 1.2. Identify ways materials used may enter the environment 1.3. Identify sensitive features of the local environment and their impact on work practice and procedures.
2. Identify workplace procedures and policies to minimise environmental threats.	2.1. Identify workplace policy for environmental protection 2.2. Identify in relevant standard operating procedures environmental protection measures appropriate for work 2.3. Explain contact procedures for personnel involved in environmental response teams 2.4. Recognise abnormal or unacceptable emission levels.
3. Follow approved work procedures to minimise environmental threats.	3.1. Implement environmental protection measures in relevant standard operating procedures 3.2. Report abnormal emissions to appropriate personnel 3.3. Apply containment procedures in accordance with SOPs where appropriate 3.4. Implement approved waste management procedures and practices 3.5. Follow approved safety procedures and use personal protective equipment as specified in approved workplace procedures.

## RANGE OF VARIABLES:

This competency unit includes:

■ awareness of the local environment and environmental issues such as:

- sensitive waterways/wetlands
- flows from the plant to the environment (eg, through sandy soil, local creek)
- particular environmental threats posed by materials and processes used and the work practices required to minimise these threats

■ indicative functions such as:

- communication, using in-plant reporting systems - verbal, electronic and written
- initiating first response to an environmental incident in accordance with SOPs

v resources such as:

- containment equipment
- personal protective equipment

v emissions/discharges include:

- noise
- light
- odour
- gas
- smoke
- vapour
- liquid and solids
- particulates
- fumes.

Typical problems are restricted to responding as required by the standard procedures. Responses are restricted to a 'first response' approach, including the notifying of appropriate enterprise personnel.

It is assumed that standard work practices will include features to minimise waste and environmental impact.

All operations are performed in accordance with standard operating procedures.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the relevant enterprise OH&S and environmental policy and procedures.

Thorough knowledge of enterprise standard operating procedures is required.

Competence to include the ability to apply the standard procedures. It includes an awareness of:

- v internal environmental control standards.
- v severity of environmental risks from materials and work processes used
- v likely impact on the environment of materials and process.

### **Critical aspects:**

Consistent performance should be demonstrated. In particular look to see that:

- standard procedures are followed
- deviations from desired conditions are recognised
- action specified in the standard procedures is carried out
- the impact of work practices/actions on the environment is understood.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to interpret typical job sheets and material labels as provided to operators and complete workplace forms.

Numeracy to estimate quantities and volumes.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
1	1	1	1	1	1	1



**UNIT TITLE****PMBENV200A - Respond to environmental hazards****UNIT DESCRIPTOR**

This competency covers the recognition of potential environmental hazards and incidents by an operator on any plant.

This competency is performed by workers who are expected to:

- v monitor their workplace for environmental hazards and incidents
- v respond to environmental incidents, and
- v participate in the implementation of the workplace environment policy.

**PREREQUISITES**

This unit has the prerequisite competency of:

- v PMB ENV 100 A Identify and minimise environmental hazards.

ELEMENT	PERFORMANCE CRITERIA
1. Recognise existing and potential environmental hazards.	1.1. Identify environmental hazards within the worksite 1.2. Identify causes/source of environmental hazards.
2. Follow procedures to respond to environmental hazards and incidents.	2.1. Report hazardous incidents noting location, severity and potential effects of the hazards to appropriate personnel 2.2. Activate environmental alarms where appropriate 2.3. Initiate control measures for environmental hazards in accordance with procedures 2.4. Cooperate with personnel controlling the incident 2.5. Respond to requests for information 2.6. Complete incident reports in accordance with procedures 2.7. Participate in the investigation of environmental incidents 2.8. Cooperate with internal and external investigating teams in accordance with procedures.
3. Monitor workplace environment.	3.1. Monitor hazards in accordance with procedures 3.2. Make recommendations for improvements to environmental practices in accordance with procedures.

**RANGE OF VARIABLES:**

Indicative functions include:

- monitoring
- physical senses
- instrumentation
- incident response
- initial response for incidents
- initiating control measures
- cooperation with appropriate bodies
- internal
- external.

Typical problems will include the application of plant, materials and process knowledge to identify environmental hazards and initiate an appropriate response. This includes losses of containment and other sources of environmental contamination.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the relevant OH&S and environmental policies and procedures, and the relationship of these to ISO 14000 where applicable.

Thorough knowledge of relevant enterprise standard operating procedures.

Competence to include the ability to apply and/or explain:

- nature and severity of environmental hazard caused by potential incidents
- sensitivity of local environment to these environmental threats
- pathways of entry to the environment from the plant
  - regulatory requirements such as:
- environment protection regulations
- OH&S
- HAZCHEM
  - external bodies such as:
- environmental protection
- water authorities
  - local councils
- v enterprise procedures for environmental protection.

### **Critical aspects:**

Competence must be demonstrated in the ability to:

- v recognise and analyse potential situations requiring action
- v select appropriate action
- v predict and take available action to prevent potential problems rather than recovery from a disaster.

Consistent performance should be demonstrated. In particular look to see that:

- early warning signs of an environmental incident are recognised
- potential effects of an environmental incident are understood
- action is taken in accordance with procedures
- items initiated are followed through
- the impact of work practices/actions on the environment is understood.

**Language, literacy and numeracy requirements:**

This unit requires the ability to interpret typical job sheets and material labels as provided to operators and complete workplace forms.

Numeracy to estimate quantities and volumes.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
1	1	1	1	1	1	1





## UNIT TITLE

### PMBENV300A - Minimise environmental impact of process

## UNIT DESCRIPTOR

This competency covers the minimisation of waste and environmental threat by a plant and/or a process. It covers all resources used and products made.

This competency is performed by more experienced operators who are expected to develop and implement improvement projects. This unit may be performed individually or as part of a team.

## PREREQUISITES

This unit of competency has the prerequisite of:

v PMB ENV 100 A Identify and minimise environmental hazards.

ELEMENT	PERFORMANCE CRITERIA
1. Develop resource conservation practices and/ or procedures.	1.1. Identify the nature of resources used in the plant/process 1.2. Determine the primary source of these resources 1.3. Describe the impact of the depletion of these resources on the environment and the community 1.4. Determine which resource(s) will yield a greater benefit from their conservation 1.5. Develop methods to reduce the consumption of these resources 1.6. Complete required documentation to implement change.
2. Develop pollution minimisation practices and/ or procedures.	2.1. Identify the nature of pollutants produced by the plant/process 2.2. Determine the source(s) of these pollutants within the plant/process 2.3. Describe the impact of these pollutants on the environment and the community 2.4. Determine which pollutant(s) will yield a greater benefit from their reduction 2.5. Develop methods to reduce the production of this pollutant 2.6. Complete required documentation to implement change.
3. Develop waste minimisation practices and/ or procedures.	3.1. Identify the nature of wastes produced by the plant/process 3.2. Determine the source(s) of these wastes within the plant/process 3.3. Describe the impact of these wastes on the environment and the community 3.4. Determine which waste(s) will yield a greater benefit from their reduction 3.5. Develop methods to reduce the production of this waste 3.6. Complete required documentation to implement change.

## **RANGE OF VARIABLES:**

This competency is not necessarily about capital projects. It may apply to improvements brought about by changes in work practice, procedures or, if appropriate, capital projects.

Indicative functions include:

- examining plant records
  - examining operating procedures and practices
  - liaising with a range of internal people
- v modifying/updating standard operating procedures to 'lock in' any changes made.

Typical problems will include minimisation of waste, maximisation of product yield from raw materials, reduction in volume of pollutants made, reduction in concentration/intensity of pollutants made, reduction in emissions.

All operations are performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the relevant OH&S and environmental requirements is required along with an ability to implement them in a manner which is relevant to the operation of the equipment item.

Thorough knowledge of enterprise standard operating procedures is required. Some understanding of the plant's business goals is required as a basis for decision making and action.

Competence to include the ability to apply and explain:

- nature and severity of potential environmental hazards caused by the plant/process
  - sensitivity of local environment to these environmental threats
  - pathways of entry to the environment from the plant
  - regulatory requirements such as:
    - environment protection regulations
    - OH&S
    - HAZCHEM
    - duty of care
    - dangerous goods
- v external licensing requirements such as:
- EPA
  - water authorities
  - local councils
- v enterprise procedures and practices.

**Critical aspects:**

It is essential that the process be understood and that the importance of critical parameters is known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action, and in implementing appropriate corrective action.

Consistent performance at the required standard should be demonstrated. In particular look to see that:

- v a holistic, 'clean production' approach to waste minimisation is taken
- v potential effects on the environment are understood
- v items initiated are followed through until final resolution has occurred
- v the process/plant is understood and proposals are capable of implementation.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is also required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

**Assessment method and context:**

Competence in this unit may be assessed:

- v by a project on an operating plant
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

As the three elements are seen as parallel, competence in one element only will generally need to be demonstrated. Many projects will naturally combine two or all three elements.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	1	1	3	2



## UNIT TITLE

### PMBWASTE101B - Collect waste for recycling or safe disposal

## UNIT DESCRIPTOR

This competency covers the collection, sorting and appropriately storage of wastes for recycling or safe disposal. It applies to all sectors of the industry.

This competency is typically performed by all operators working either independently or as part of a work team.

### This competency in practice

This competency applies to operators who deal with the collection, sorting and disposal of waste products from the production process. The key factors are knowing the type of waste being collected, what to do with it and ensuring it goes to the right destination. It includes:

- v gathering waste materials from equipment and floor areas
- v segregating waste into recyclable and other materials
- v avoiding contamination of recyclable waste
- v transporting waste to the appropriate storage areas
- v loading waste into drums, skips, or other receptacles.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify waste products.	1.1. Identify waste products from the production process in terms of the material type, toxicity, recyclability, flammability and reactivity 1.2. Identify sources of waste and approved locations for storage of each waste type.
2. Relocate and store non-recyclable waste.	2.1. Employ manual handling techniques appropriate for safely relocating waste 2.2. Identify and comply with co-storing requirements for waste products 2.3. Update and maintain storage inventory systems.
3. Sort and prepare materials for reuse.	3.1. Sort and categorise materials for recycling 3.2. Identify procedures for preprocessing activity to prepare products for reuse as required 3.3. Relocate preprocessed materials for reuse 3.4. Identify materials requiring disposal 3.5. Contain materials for safe disposal in conformance with environmental requirements 3.6. Mark, label or otherwise identify products for disposal.

ELEMENT	PERFORMANCE CRITERIA
4. Complete waste processes.	<ul style="list-style-type: none"><li>4.1. Arrange for waste disposal according to workplace instructions</li><li>4.2. Ensure appropriate safety and lifting equipment is available as needed for safe loading of waste</li><li>4.3. Complete reports on wastage in accordance with workplace procedures as required</li><li>4.4. Monitor quantities of waste stored for compliance with workplace procedures and environmental regulations as required.</li></ul>

### RANGE OF VARIABLES:

This competency unit includes the use of manual handling aids such as handcarts. It may include the use of powered equipment/aids such as electric hoists and cranes, provided they don't require special licensing.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry. It includes the operation of all relevant ancillary equipment.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The processes covered by this unit include, but are not limited to:

- v movement of materials
- v handling of semi-bulk materials (bulki-boxes, pallets, etc)
- v stacking and storing of materials
- v storing materials.

This competency includes tools and equipment such as:

- v hand carts and trolleys
- v hoists/lifting equipment not requiring any special permits or licences
- v basic hand tools such as brooms, shovels and knives
- v relevant personal protective equipment.

Typical hazards include:

- v spills
- v dusts/vapours
- v hazardous materials
- v manual handling hazards
- v knife hazards.

Typical problems include:

- v getting in the way of mobile equipment
- v contamination of materials
- v foreign matter being included in selected waste.

All operations are performed in accordance with standard procedures.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of the materials, equipment and process sufficient to recognise how those materials are changed through the production process and what methods of disposal are appropriate.

Knowledge of the enterprise's standard procedures and work instructions and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and in a manner relevant to the job.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain:
  - production workflow sequences and the waste produced at each stage
  - correct selection and use of equipment, materials, processes and procedures
  - hazards of the materials and process and appropriate hazard control procedures
- v distinguish between causes of faults such as:
  - waste materials contaminated with foreign matter
  - waste materials mixed with recyclables/reusables
  - incompatible waste materials placed together.

### **Critical aspects:**

It is essential that competence is demonstrated in the ability to:

- v recognise the importance of categories of waste and key waste properties
- v apply approved procedures
- v take appropriate action to resolve problems or report problems to appropriate personnel
- v explain and implement emergency procedures.

Consistent performance should be demonstrated. In particular look to see that :

- v waste disposal standards are met consistently
- v communication is timely and effective
- v procedures are read and interpreted correctly
- v problems are identified and appropriate action is taken (ie, the problem is fixed or reported)
- v all safety procedures are followed.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms/labels.

Basic numeracy is also required.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	2	2	2	2



## UNIT TITLE

### PMBWASTE302B - Coordinate waste disposal

## UNIT DESCRIPTOR

This competency covers the development and coordination of waste disposal procedures. It applies to all sectors of the industry.

This competency is typically performed by senior operators/team leaders working either independently or as part of a work team.

### This competency in practice

This competency applies to individuals who coordinate the collection, sorting, recycling and disposal of waste products from the production process. The key factors are knowing what type of waste is being produced, where it comes from and establishing systems to deal with it. It includes:

- v checking records relating to the waste management cycle
- v establishing a working knowledge of sources and quantities of waste
- v planning the waste removal process
- v establishing systems to record the recycling and disposal of waste products
- v monitoring and keeping waste records.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify requirements for waste and recyclable products.	1.1. Identify waste products from the production process in terms of the material type, toxicity, recyclability, flammability and reactivity 1.2. Identify sources of waste and approved locations for storage of each waste type based on regulatory requirements and workplace approved policies and procedures.
2. Develop waste and recycling procedures.	2.1. Identify requirements for handling, disposing or recycling waste 2.2. Develop storage and handling policies and procedures 2.3. Publish and post waste management procedures in appropriate locations 2.4. Identify and retain contractors for disposal of waste 2.5. Train or arrange training for relevant employees in waste management procedures required by the organisation.
3. Develop waste record systems.	3.1. Instigate and monitor data collection methods to record wastage rates 3.2. Produce and introduce appropriate proformas to record details of waste collection storage, recycling or waste disposal 3.3. Establish and maintain reporting relationships among appropriate personnel and complete reports as required.

### **RANGE OF VARIABLES:**

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry.

Standard procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The processes covered by this unit include:

- v monitoring and supervision of the waste management process
- v keeping records
- v overseeing the activities of waste collection employees
- v developing and improving waste management systems
- v identifying waste management issues.

This competency includes tools and equipment such as:

- v waste management records.

Typical hazards include occasional exposure to -

- v spills
- v dusts/vapours
- v hazardous materials
- v manual handling hazards.

Typical problems include:

- v atypical waste production situations
- v hold-ups in waste removal
- v environmental queries
- v waste removal systems not working.

All operations are performed in accordance with standard procedures.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Application of knowledge of the materials, equipment and process sufficient to recognise conditions which may lead to waste disposal issues.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain:
  - human resource practices which encourage and support staff
  - dispute resolution procedures
  - operation of waste systems and equipment
  - correct selection and use of waste retrieval equipment, materials, processes and procedures
  - hazards of the materials and process and appropriate hazard control procedures
- v distinguish between causes of faults such as:
  - failure to pick up or dispose of waste according to the agreed process or timing
  - poor work practices.

**Critical aspects:**

It is essential that competence is demonstrated in the ability to:

- v identify critical issues in relation to waste disposal
- v plan own work process within workplace procedures and explain the reasons for the steps in the process
- v take appropriate action to observe equipment, materials and products for atypical waste issues and take appropriate action.

Consistent performance should be demonstrated. In particular look to see that:

- v waste disposal standards are met consistently
- v problems are anticipated from observations
- v problems are efficiently resolved.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product and waste disposal schedules.

Writing is required to the level of writing workplace procedures and drafting reporting forms.

Basic numeracy is also required, eg, to use waste recording system.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
3	3	3	3	3	3	3



**UNIT TITLE****PMBHAN201B - Process orders and despatch products****UNIT DESCRIPTOR**

This competency covers the processing of orders and despatching of goods. It applies to all sectors of the industry.

This competency is typically performed by operators working either independently or as part of a work team.

**This competency in practice**

This competency applies to operators who process despatch orders, despatch stock and maintain records. The key factors are correctly identifying and selecting the goods to be despatched and ensuring they are despatched to the correct location. It includes:

- v checking order requests/consignment note documentation for products to be despatched
- v identifying and selecting the correct product(s)
- v organising products to be moved into the right place by the right time, using the appropriate handling equipment
- v completing and checking all documentation
- v updating stock records.

**PREREQUISITES**

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify work requirements.	<ul style="list-style-type: none"><li>1.1. Read and interpret order request and consignment note documentation</li><li>1.2. Identify required schedules for despatch</li><li>1.3. Identify product(s) in order</li><li>1.4. Plan sequence of events using workplace and product knowledge</li><li>1.5. Select appropriate materials handling equipment within required OH&amp;S regulations and timeframe for the despatch.</li></ul>
2. Prepare goods for despatch.	<ul style="list-style-type: none"><li>2.1. Identify and read workplace procedures for assembling and completing orders</li><li>2.2. Select goods for despatch</li><li>2.3. Check goods for despatch against product knowledge, labels and other identification systems</li><li>2.4. Sort, assemble and consolidate products</li><li>2.5. Secure order and place in storage areas, in accordance with schedule</li><li>2.6. Check order against despatch schedule and order form.</li></ul>

3. Despatch product.	3.1. Complete workplace records 3.2. Attach appropriate labels and documentation 3.3. Check load labels and documentation and organise loading 3.4. Undertake final check of load labels and documentation 3.5. Explain transportation requirements to driver where appropriate.
4. Complete product movement records.	4.1. Complete product movement records 4.2. Update stock records as required 4.3. Complete other paperwork and records as required.

### **RANGE OF VARIABLES:**

This competency unit covers the organisation of products to be moved within and out of a plant/storage. It is NOT intended for people who, as a major function, operate a warehouse. The appropriate Transport and Distribution competencies should be used here.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry. It includes the operation of all relevant ancillary equipment.

The terms order request, documentation, labels, transportation requirements, paperwork and records means any and all relevant information and data whether it is manual, paper based, electronic or verbal, either in person or by phone/radio.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The processes covered by this unit include, but are not limited to:

- v identification of products
- v organising the movement of products
- v organising the despatch of products.

This competency includes the use of ancillary equipment such as:

- v computers
- v mechanical and computerised measuring devices.

Typical problems include:

- v insufficient product(s) to complete order
- v resolving conflicting priorities
- v ensuring the correct products arrive at the correct place at the right time
- v incomplete or incorrect paperwork.

All operations are performed in accordance with procedures.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of products and the materials handling processes and requirements sufficient to recognise non-standard situations and then determine appropriate action which is consistent with operating guidelines.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain:
  - product knowledge
  - inventory and ordering systems
  - transport requirements and restrictions for products
  - correct OH&S procedures
- v plan own work including predicting consequences and identifying improvements
- v identify and describe own role and role of others involved directly in the processing of orders and despatching of products
- v use PPE, safely handle products and materials, read relevant safety information and apply safety precautions appropriate to the task
- v distinguish between causes of problems such as:
  - product requirements
  - job priority.

### **Critical aspects:**

It is essential that competence is demonstrated in the ability to:

- v apply approved procedures
- v take appropriate action to resolve problems or report problems to appropriate personnel.

Consistent performance should be demonstrated. In particular look to see that :

- v processing and despatching standards are met consistently
- v upstream and downstream communication is timely and effective
- v procedures and work instructions are read and interpreted correctly
- v problems are identified and appropriate action is taken (ie, the problem is fixed or reported)
- v all safety procedures are followed.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets, procedures, material labels and safety information as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and that the theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	2	1	1	1



**UNIT TITLE****PMBHAN202B - Load and unload goods****UNIT DESCRIPTOR**

This competency covers the loading, unloading and shifting of goods using mechanical aids. It applies to all sectors of the industry.

This competency is typically performed by operators working either independently or as part of a work team.

**This competency in practice**

This competency applies to operators who move goods using mechanical aids. The key factors are identifying and using the correct equipment and method to move the goods. It includes:

- v planning the correct method to move the goods
- v moving the goods safely without damage to the goods, personnel or equipment.

**PREREQUISITES**

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Plan operation.	<ul style="list-style-type: none"><li>1.1. Correctly identify type and quantity of product or materials to be moved</li><li>1.2. Identify load characteristics including weight, volume, shape, balance and dimensions</li><li>1.3. Identify dangerous or other hazardous goods and correct handling procedures</li><li>1.4. Identify most efficient and appropriate piece of equipment to be used</li><li>1.5. Determine location of storage</li><li>1.6. Identify most efficient and appropriate movement route.</li></ul>
2. Relocate load.	<ul style="list-style-type: none"><li>2.1. Load specified products or materials using good OH&amp;S practices and complying with all regulations and procedures</li><li>2.2. Shift products or materials according to instructions, using good OH&amp;S practices</li><li>2.3. Unload products or materials without damage to goods, personnel or equipment using good OH&amp;S practices</li><li>2.4. Check load for stability during the loading, shifting and unloading process</li><li>2.5. Return equipment to appropriate storage area.</li></ul>
3. Secure and protect load.	<ul style="list-style-type: none"><li>3.1. Secure load using appropriate load restraints and protection</li><li>3.2. Protect load in accordance with legal and workplace safety requirements</li><li>3.3. Check distribution of load to ensure it is even, legal and within safe working capacity.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
4. Complete documentation.	4.1. Inspect load and check for security to travel 4.2. Check holding area conditions meet material requirements 4.3. Store materials as required for production and to meet health and safety needs 4.4. Complete required workplace documentation/records.

#### **RANGE OF VARIABLES:**

This competency unit includes the use of manual and mechanical handling aids. It does NOT include the use of licensed load shifting equipment.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry. It includes the operation of all relevant ancillary equipment.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The processes covered by this unit include, but are not limited to:

- v movement of packages,
- v loose goods,
- v materials and products.

This competency includes the use of equipment such as:

- v hand carts, trolleys, self-propelled trolleys and dollies
- v wheelbarrows
- v block and tackle
- v pallet trucks
- v relevant personal protective equipment.

Typical hazards include:

- v irregular shaped loads
- v unlabelled goods, materials and products.

Typical problems include:

- v load too heavy, large for safe, easy moving
- v load in awkward position for safe, easy moving
- v clash of work priorities
- v correct equipment not available.

All operations are performed in accordance with procedures.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the materials handling processes and requirements sufficient to recognise non-standard situations and then determine appropriate action which is consistent with operating guidelines.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or describe:
  - appropriate lifting and moving equipment
  - load and operating limitations of equipment
  - inventory systems
  - correct OH&S procedures
- v plan own work including predicting consequences and identifying improvements
- v identify and describe own role and role of others involved directly in the loading and unloading process
- v use PPE, safely handle products and materials, read relevant safety information and apply safety precautions appropriate to the task
- v distinguish between jobs which:
  - may be easily and safely done with a single person
  - require assistance from other people
  - require manual handling equipment
  - need mechanical lifting aids.

### **Critical aspects:**

It is essential that competence is demonstrated in the ability to:

- v apply approved procedures
- v take appropriate action to resolve problems or report problems to appropriate personnel.

Consistent performance should be demonstrated. In particular look to see that :

- v loading and unloading standards are met consistently
- v upstream and downstream communication is timely and effective
- v procedures and work instructions are read and interpreted correctly
- v problems are identified and appropriate action is taken (ie, the problem is fixed or reported)
- v all safety procedures are followed.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets, procedures, material labels and safety information as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and that the theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	1	2	1	1	1

**UNIT TITLE****PMBHAN204B - Package goods/materials****UNIT DESCRIPTOR**

This competency covers the packaging of goods/materials for despatch or storage.

This competency is typically performed by operators working either independently or as part of a work team.

**This competency in practice**

This competency applies to operators who package goods and/or loose materials for despatch or storage. The key factors are correctly identifying the packaging requirements and the technology required to package the goods/materials. It includes:

- v identifying and interpreting the packaging requirements
- v selecting the appropriate technology for packaging
- v labelling the goods/materials after packaging.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare goods/materials for packaging.	1.1. Interpret packaging specifications 1.2. Interpret order packaging documentation 1.3. Select appropriate technology for packaging goods/materials 1.4. Identify packaging materials and match specifications.
2. Package goods.	2.1. Complete packaging following standard workplace procedures 2.2. Stack packaged goods/materials to minimise damage.
3. Label packed goods/materials.	3.1. Identify workplace labelling standards 3.2. Identify appropriate goods handling, labelling and other identification symbols 3.3. Attach appropriate label.
4. Complete documentation.	4.1. Complete workplace records/documentation 4.2. Attach invoices and picking slips (where required).

**RANGE OF VARIABLES:**

This application of this competency will vary according to the product requirements, range of equipment, technology and the varied range of process procedures within an enterprise.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry. It includes the operation of all relevant ancillary equipment.

The terms documentation, labels and records means any and all relevant information and data whether it is manual, paper based, electronic or verbal, either in person or by phone/radio.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The processes covered by this unit include, but are not limited to:

- identification of goods
- organising the packaging of goods
- organising the labelling of packaged goods.

This competency includes the use of ancillary equipment such as:

- v shrink wrappers
- v tape machine labelers
- v loose bulk packing equipment.

Sources of documentation may include:

- v goods identification numbers and codes
- v manifests
- v picking slips, merchandising transfers, stock requisitions and bar codes
- v manufacturers specifications
- v supplier and/or client instructions.

Typical hazards include:

- v stationary and moving machinery, parts or components
- v noise, light, energy sources
- v humidity, air temperature, radiant heat
- v manual handling hazards.

Typical problems include:

- v insufficient goods to complete order
- v resolving conflicting priorities
- v incomplete or incorrect paperwork.

All operations are performed in accordance with procedures.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of goods and the packaging processes and requirements sufficient to recognise non-standard situations and then determine appropriate action that is consistent with operating guidelines.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or describe:
  - production workflow and requirements for packaging
  - packaging methods to minimise waste
  - identification symbols
  - correct OH&S procedures
  - approved hazard control and safety procedures and the use of PPE in relation to handling materials, equipment operation and cleanup
  - waste management and importance of reusing non-conforming materials wherever possible
  - correct selection and use of equipment, materials, processes and procedures

- v plan own work including predicting consequences and identifying improvements
- v identify when the operator is able to rectify problems, when assistance is required and who is the appropriate source for assistance
- v identify and describe own role and role of others involved directly in the packaging process
- v identify factors which may affect product quality and appropriate remedies
- v use PPE, safely handle products and materials, read relevant safety information and apply safety precautions appropriate to the task
- v distinguish between causes of problems such as:
  - packaging and labelling requirements
  - goods being damaged after packaging.

**Critical aspects:**

It is essential that competence is demonstrated in the ability to:

- v recognise the importance of material properties and qualities
- v apply approved procedures
- v take appropriate action to resolve problems or report problems.

Consistent performance should be demonstrated. In particular look to see that :

- v packaging standards are met consistently
- v upstream and downstream communication is timely and effective
- v procedures and work instructions are read and interpreted correctly
- v problems are identified and action is taken (ie, the problem is fixed or reported)
- v all safety procedures are followed.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets, procedures, material labels and safety information as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and that the theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

<b>KEY COMPETENCIES</b>						
<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
1	1	1	2	1	1	1



## UNIT TITLE

### PMBHAN205B - Transfer loads with slings

## UNIT DESCRIPTOR

This competency covers the movement of loads using cranes and gantries. It applies to all sectors of the industry.

This competency is typically performed by operators working either independently or as part of a work team.

### This competency in practice

This competency applies to operators who move loads using cranes and gantries. The key factors are applying knowledge of the nature of the load to be shifted, safety precautions required and the capacity of load shifting equipment and relevant support structures. It includes:

- v planning the correct method to move the goods
- v moving the goods safely without damage to the goods, personnel or equipment.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Plan operation.	<ul style="list-style-type: none"><li>1.1. Correctly identify products, goods or material to be relocated</li><li>1.2. Identify load characteristics including weight, volume, shape, balance and dimensions</li><li>1.3. Identify most efficient and appropriate piece of equipment to be used</li><li>1.4. Estimate points of balance</li><li>1.5. Consider effect of moving contents which may be loose, liquid, dangerous or hazardous</li><li>1.6. Determine location of storage</li><li>1.7. Identify most efficient and appropriate movement route.</li></ul>
2. Check equipment.	<ul style="list-style-type: none"><li>2.1. Check pulleys and block and tackle for safe operation and load capacity</li><li>2.2. Check ropes, cable, net and chain systems before use for safe condition and conformity to specification</li><li>2.3. Conduct testing of ropes, cable, net and chain system when required to ensure safe operating capacity</li><li>2.4. Calculate safe working load (SWL) or working load limit (WLL) using standardised formulae for different types of lifting cables</li><li>2.5. Check sling material for conformity with equipment and safety requirements</li><li>2.6. Report any unsafe equipment to designated person.</li></ul>

3. Sling and unsling goods.	3.1. Sling/unsling goods in accordance with national safety codes and workplace operating procedures 3.2. Identify and use correct securing devices 3.3. Steady load by tag lines, when required 3.4. Release sling attachments from load ensuring no injury to personnel or damage to machinery or goods.
4. Strap and unstrap goods.	4.1. Strap/unstrap goods in accordance with national safety codes and workplace operating procedures 4.2. Use mechanical strapping equipment in accordance with manufacturer's instructions 4.3. Ensure strapping arrangements are secured/released to/from load with no injury to personnel or damage to machinery or goods.
5. Complete documentation.	5.1. Inspect load and identify and report damaged goods in accordance with company reporting procedures 5.2. Check storage area meets material requirements 5.3. Complete required workplace documentation/ records.

#### **RANGE OF VARIABLES:**

This competency unit includes the use of cranes, gantries and lifting equipment to relocate loads. Licensing or certification requirements may apply through workplace procedures or legislative requirements. These are independent of this competency and must be met in addition to the requirements specified in this competency.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry. It includes the operation of all relevant ancillary equipment.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The processes covered by this unit include, but are not limited to:

- v movement of packages,
- v loose goods,
- v materials and products
- v moulds, dies and tools.

This competency includes tools and equipment such as:

- v cranes and gantries
- v slings, ropes, chains or nets
- v block and tackle
- v computers
- v relevant personal protective equipment.

Typical hazards include:

- v irregular shaped loads
- v unlabelled goods, materials and products.

Typical problems include:

- v material specifications
- v equipment failure.

All operations are performed in accordance with procedures.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge of the materials handling processes and requirements sufficient to recognise non-standard situations and then determine appropriate action which is consistent with operating guidelines.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or describe:
  - appropriate points for locations of slings
  - estimation/ calculation of weights
  - requirements for safe working loads (SWL) or working load limits (WLL)
  - production workflow and requirements for load shifting
- v plan own work including predicting consequences and identifying improvements
- v identify when the operator is able to rectify problems, when assistance is required and who is the appropriate source for assistance
- v identify and describe own role and role of others involved directly in the transferring loads with slings
- v use PPE, safely handle products and materials, read relevant safety information and apply safety precautions appropriate to the task
- v distinguish between causes of problems such as:
  - balance points and behaviour of suspended loads
  - incorrect use of equipment.

### **Critical aspects:**

It is essential that competence is demonstrated in the ability to:

- v apply approved procedures
- v take appropriate action to resolve problems or report problems to appropriate personnel.

Consistent performance should be demonstrated. In particular look to see that :

- v standards are met consistently
- v upstream and downstream communication is timely and effective
- v procedures and work instructions are read and interpreted correctly
- v problems are identified and appropriate action is taken (ie, the problem is fixed or reported)
- v all safety procedures are followed.

### **Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets, procedures, material labels and safety information as provided to operators.

Writing is required to the level of completing workplace forms.

Numeracy is required to calculate loads and estimate balance points for slinging.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and that the theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	2	2	2	1	2	1

**UNIT TITLE****PMBHAN208B - Store products****UNIT DESCRIPTOR**

This competency covers the storing of products (raw or finished) for production or despatch. It applies to all sectors of the industry.

This competency is typically performed by operators working either independently or as part of a work team.

**This competency in practice**

This competency applies to operators who organise the storage of finished products and raw materials for production, post-production and despatch. The key factors are identifying of products, storing of products/materials and keeping appropriate records. It includes:

- v identifying different types of materials and products
- v storing products correctly and safely
- v monitoring products
- v maintaining records of products in storage.

**PREREQUISITES**

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify required products.	1.1. Identify products to be stored for type, potential uses, possible hazards, frequency of use 1.2. Determine size, shape and special storage requirements 1.3. Identify stock/inventory systems requirements and relevant product information.
2. Establish storage area.	2.1. Select storage area to meet regulatory requirements for storing product type and quantity 2.2. Obtain appropriate workplace clearances for use of storage area 2.3. Clear storage area of waste and contaminants 2.4. Install appropriate safety equipment 2.5. Plan storage areas into classes of goods based on hazards, frequency of use, safe height, weight, size and crushability of the products 2.6. Ensure access and egress for safe use by appropriate manual handling equipment, forklifts or safe lifting by personnel.
3. Store products.	3.1. Observe product condition on delivery 3.2. Return any product below specifications to appropriate work areas 3.3. Transfer product using appropriate equipment according to enterprise requirements and using good OH&S procedures 3.4. Store products observing any requirements for separation of particular classes of goods 3.5. Locate products to enable appropriate number and ease of access for frequently required items.

ELEMENT	PERFORMANCE CRITERIA
4. Monitor products in storage.	4.1. Check and maintain supplies of products 4.2. Check physical and chemical state of stored products 4.3. Check equipment used to keep stored products in required state 4.4. Take action required by procedures.
5. Complete stock and inventory records.	5.1. Complete stock and inventory records and forward to appropriate personnel 5.2. Maintain stock and inventory records 5.3. Raise appropriate reorder documentation as required.

### RANGE OF VARIABLES:

The application of this competency will vary according to the product requirements, range of equipment, technology and the varied range of process procedures within an enterprise. It is NOT intended for people who, as a major function, operate a warehouse. The appropriate Transport and Distribution competencies should be used here.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry. It includes the operation of all relevant additional equipment where that equipment is integral to the store process. It does not include the operation of forklifts or other devices requiring special licences.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

This competency includes equipment and storage facilities such as:

- v motorised rail and road vehicles
- v mechanical handling equipment
- v computers
- v hand tools and safety equipment
- v mechanical and computerised measuring devices
- v bunkers, silos, bins/hoppers, weigh bins, tanks and portable tanks
- v flammable stores.

Products may include:

- v products supplied from an external source
- v products produced internally for secondary processes
- v products ready for despatch.

Typical problems include:

- v material specifications
- v contamination of stored stock
- v quality of received products
- v equipment failure.

All operations are performed in accordance with procedures.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Application of knowledge of the materials/products/packaging sufficient to recognise variance from storage requirements and then determine an appropriate action that is consistent with operating guidelines.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or describe:
  - principles of storing products
  - product characteristics
  - impact of contamination
  - hazard identification
  - transfer system
  - manual handling techniques
- v plan own work including predicting consequences and identifying improvements
- v identify when the operator is able to rectify problems, when assistance is required and who is the appropriate source for assistance
- v identify and describe own role and role of others involved directly in the storing of products
- v identify factors which may affect product quality and appropriate remedies
- v use PPE, safely handle products and materials, read relevant safety information and apply safety precautions appropriate to the task
- v distinguish between causes of faults such as:
  - different products
  - equipment (electrical, mechanical and manual)
  - contamination.

### **Critical aspects:**

It is essential that competence is demonstrated in the ability to:

- v recognise the importance of material properties and qualities
- v apply approved procedures
- v take appropriate action to resolve problems or report problems to appropriate personnel.

Consistent performance should be demonstrated. In particular look to see that :

- v storing standards are met consistently
- v upstream and downstream communication is timely and effective
- v procedures and work instructions are read and interpreted correctly
- v problems are identified and appropriate action is taken (ie, the problem is fixed or reported)
- v all safety procedures are followed.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets, procedures, material labels and safety information as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and that the theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	2	1	1	1



**UNIT TITLE****PMBORG205B - Receive goods****UNIT DESCRIPTOR**

This competency covers the receiving of goods from both internal and external sources.

This competency is typically performed by operators working either independently or as part of a work team.

**This competency in practice**

This competency applies to operators who receive goods from either internal or external sources. The key factors are checking and inspecting goods for conformity to documentation upon arrival. It includes:

- v reading and interpreting receipt documentation
- v identifying and following procedures for checking goods
- v identifying and reporting non-conforming goods
- v completing workplace documentation.

**PREREQUISITES**

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify work requirements.	1.1. Identify workplace procedures for the receipt of goods 1.2. Read and interpret documents associated with the receipt of goods 1.3. Identify workplace documentation for the receipt of goods and reporting of damage.
2. Check and inspect goods upon arrival.	2.1. Identify and follow procedures for checking goods in comparison with orders or manifests 2.2. Report discrepancies and/or damaged goods to appropriate person 2.3. Document non-conforming goods 2.4. Despatch or store non-conforming goods in accordance with workplace procedures.
3. Complete documentation.	3.1. Complete product movement records 3.2. Update stock records as required 3.3. Complete other paperwork and records as required.

### **RANGE OF VARIABLES:**

The application of this competency will vary according to the types of goods received.

This competency applies to all work environments and sectors within the plastics, rubber and cablemaking industry.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

The processes covered by this unit include:

- identification of goods
- checking goods against documentation.

Sources of documentation may include:

- v goods identification numbers and codes
- v manifests
- v picking slips, merchandising transfers, stock requisitions and bar codes
- v manufacturers specifications
- v supplier and/or client instructions.

Typical hazards include:

- v stationary and moving machinery, parts or components
- v noise, light, energy sources
- v humidity, air temperature, radiant heat.

Typical problems include:

- v incorrect goods delivered
- v incomplete or incorrect paperwork.

All operations are performed in accordance with procedures.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Knowledge of goods and materials sufficient to recognise variance from specifications and then determine appropriate action that is consistent with operating guidelines.

Knowledge of the enterprise's procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability for the practical completion of the job to:

- v apply and/or explain:
  - procedures for receipt of goods
  - reconciliation of orders and invoices
- v plan own work including predicting consequences and identifying improvements
- v identify when the operator is able to rectify problems, when assistance is required and who is the appropriate source for assistance
- v identify and describe own role and role of others involved directly in the receiving of goods

- v use PPE, safely handle products and materials, read relevant safety information and apply safety precautions appropriate to the task
- v distinguish between causes of problems such as:
  - incorrect/incomplete paperwork
    - wrong goods.

**Critical aspects:**

It is essential that competence is demonstrated in the ability to:

- v recognise the importance of material properties and qualities
- v apply approved procedures
- v take appropriate action to resolve problems or report problems to appropriate personnel.

Consistent performance should be demonstrated. In particular look to see that :

- v standards are met consistently
- v upstream and downstream communication is timely and effective
- v procedures and work instructions are read and interpreted correctly
- v problems are identified and appropriate action is taken (ie, the problem is fixed or reported)
- v all safety procedures are followed.

**Language, literacy and numeracy requirements:**

This unit requires the ability to read and interpret typical product specifications, job sheets, procedures, material labels and safety information as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is required, eg, to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

**Assessment method and context:**

Competence in this unit may be assessed:

- v on an operating plant allowing for operation under all normal and a range of abnormal conditions
- v by use of a suitable simulation and/or a range of case studies/scenarios
- v by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and that the theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

<b>KEY COMPETENCIES</b>						
<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	1	2	1	1	1

**UNIT TITLE****TDTD1097A - Operate a forklift****UNIT DESCRIPTOR**

Knowledge and skills to operate a forklift safely, including systematic and efficient control of all vehicle functions and effective management of hazardous situations.

Note that at the time of writing the Transport and Distribution Training Package is under review. The revised unit should be imported when it becomes available.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Check forklift condition.	<ul style="list-style-type: none"><li>1.1. Condition of forklift is checked for compliance with enterprise requirements for warning devices, operation to specifications and the nature of the load shifting exercise</li><li>1.2. Attachments are checked to ensure appropriate adjustment and operation</li><li>1.3. Mirrors and seats are adjusted for safe operation by the driver</li><li>1.4. Logs are checked and appropriate workplace documentation completed.</li></ul>
2. Drive the forklift.	<ul style="list-style-type: none"><li>2.1. Forklift is started, steered, manoeuvred, positioned and stopped in accordance with traffic regulations and manufacturer's instructions</li><li>2.2. Engine power is managed to ensure efficiency and performance and to minimise engine and gear damage</li><li>2.3. Driving hazards are identified and/or anticipated and avoided or controlled through defensive driving.</li><li>2.4. The forklift is driven in reverse, maintaining visibility and achieving accurate positioning</li><li>2.5. The forklift is parked, shut down and secured in accordance with manufacturer's specifications, traffic regulations and company procedures.</li></ul>
3. Operate a forklift to handle loads.	<ul style="list-style-type: none"><li>3.1. The lifting task to be undertaken is appropriately planned and the correct lifting truck and attachments are selected</li><li>3.2. The load is lifted, carried, lowered and set down in accordance with occupational health and safety legislation, manufacturer's specifications and company procedures.</li></ul>
4. Monitor site conditions.	<ul style="list-style-type: none"><li>4.1. When selecting the most efficient route, hazards and traffic flow are identified and appropriate adjustments are made</li><li>4.2. Site conditions are assessed to enable safe operations and to ensure no injury to people or damage to property, equipment, loads or facilities occurs.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
Monitor and maintain forklift performance.	<p>Performance and efficiency of vehicle operation is monitored during use</p> <p>Defective or irregular performance and malfunctions are reported to company</p> <p>Forklift records are maintained/updated in accordance with company procedures and legislative requirements.</p>

## RANGE OF VARIABLES:

### General context:

Work is performed under some supervision, generally within a team environment.

Customers may be internal or external.

Enterprises may comprise large, medium or small worksites.

Work may be undertaken in various work environments.

Worksite environment may include:

- v operations conducted by day or night
- v work conducted in restricted spaces or exposed conditions or controlled or open environments
- v exposure to chemicals, dangerous or hazardous substances and movements of equipment, goods and vehicles
- v warehousing forklift operations including counterbalance trucks, reach trucks, pallet trucks and straddle trucks.

Sources of information/documents may include:

- v goods identification numbers and codes
- v manifests
- v picking slips, merchandise transfers, stock requisitions and bar codes
- v manufacturer's specifications
- v company operating procedures and policies
- v supplier and/or client instructions
- v materials safety data sheets
- v phone, Electronic Data Interchange, fax, e-mail, Internet, radio, oral, aural or signed communications
- v codes of practice
- v legislation and regulations
- v award, enterprise bargaining agreement, other industrial arrangements
- v standards and certification requirements
- v quality assurance procedures
- v Australian Standard 2359 - Industrial Truck Code.

Workplace context may include:

- v work organisation procedures and practices
- v conditions of service, legislation and industrial agreements including
  - workplace agreements and awards
  - occupational health & safety
  - State, federal or Territory legislation.

Consultative processes may involve:

- |   |  |
|---|--|
| v | staff members  |
| v | management   |
| v | union representatives  |
| v | industrial relations, occupational health and safety specialists |
| v | other professional or technical staff.                           |

<p>Applicable State/Territory/Commonwealth regulations and legislation may include but are not limited to:</p>
--

- |   |   |
|---|---|
| v | occupational health and safety              |
| v | workplace relations                         |
| v | workers' compensation                       |
| v | water and road use and licence arrangements |
| v | licence, patent or copyright arrangements   |
| v | dangerous goods and air freight regulations |
| v | export/import/quarantine/bond requirements  |
| v | marine orders                               |
| v | environmental protection legislation        |
| v | emergency procedures.                       |

## **EVIDENCE GUIDE:**

### **Critical aspects of evidence to be considered:**

Assessment must confirm appropriate knowledge and skills to

- v locate, interpret and apply relevant information
- v provide customer, client service
- v work effectively with colleagues
- v convey information in written and oral form
- v maintain workplace records
- v use workplace colloquial and technical language and communication technologies in the workplace context
- v handle loads and drive defensively
- v manage forklift controls, read instruments and adjust engine power to site requirements
- v drive safely in warehouse environment
- v meet as a minimum requirements of (any) relevant legislation.

### **Interdependent assessment of units:**

This unit of competency may be assessed in conjunction with other units that form part of a job role or function.

### **Required knowledge and skills:**

Displays the following knowledge and skills in terms of job role or function:

- v focus of operation of work systems, equipment, management and site operating systems
- v impact of job on enterprise and individual performance
- v application of relevant industrial or other legislative requirements
- v identification and correct use of equipment, processes and procedures
- v modifying activities dependant on differing workplace contexts and environment
- v application of regulations and company operating procedures on forklift load shifting operation
- v identification of points of balance and safe lifting positions on a range of loads.



**Resource implications:**

Access to forklifts, attachments where appropriate and load to be shifted.

**Consistency in performance:**

Applies knowledge and skills when:

- v establishing plans
- v describing consequences
- v completing tasks
- v identifying improvements
- v applying safety precautions relevant to the task.

Follows company and regulatory requirements for forklifts in all operations.

Loads safely and economically lifted, shifted and located without damage to equipment.

Relocated material is restacked appropriately for the transport method, safe height, weight loading, size and crushability of the goods.

Shows evidence of application of relevant workplace procedures including:

- v hazard policies and procedures including codes of practice
- v issue resolution procedures
- v job procedures and work instructions
- v relevant guidelines relating to the safe use of equipment
- v quality assurance procedures (where existing)
- v security procedures
- v following recognised housekeeping processes
- v waste, pollution and recycling management processes
- v reporting of unsafe or damaged equipment.

Action taken promptly - accidents and incidents reported in accordance with statutory requirements and enterprise procedures.

Recognises and adapts appropriately to cultural differences in the workplace, including modes of behaviour and interactions among staff and others.

Work completed systematically with attention to detail without damage to goods, equipment or personnel.

**Context for assessment:**

Assessment may occur on the job or in a simulated workplace.



**UNIT TITLE****BSZ401A - Plan assessment****UNIT DESCRIPTOR**

This unit covers the requirements for planning an assessment in a specific context. The unit details the requirements for determining evidence requirements, selecting appropriate assessment methods and developing an assessment tool in a specific context.

**PREREQUISITES**

This competency has **no** prerequisites but has corequisites for the purposes of this Training Package.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Establish evidence required for a specific context.	<ul style="list-style-type: none"><li>1.1. The evidence required to infer competency from the industry/enterprise competency standards, or other standards of performance, is established for a specified context</li><li>1.2. Relevant unit(s) of competency are read and interpreted accurately to identify the evidence required</li><li>1.3. Specified evidence requirements:</li><li>1.4. assure valid and reliable inferences of competency</li><li>1.5. authenticate the performance of the person being assessed and</li><li>1.6. confirm that competency is current</li><li>1.7. Sufficient evidence is specified to show consistent achievement of the specified standards</li><li>1.8. The cost of gathering the required evidence is established.</li></ul>
2. Establish suitable assessment method(s).	<ul style="list-style-type: none"><li>2.1. Assessment methods are selected which are appropriate for gathering the type and amount of evidence required</li><li>2.2. Opportunities to consolidate evidence gathering activities are identified</li><li>2.3. Allowable adjustments in the assessment method are proposed to cater for the characteristics of the person(s) being assessed.</li></ul>
3. Develop assessment tools appropriate to a specific assessment context.	<ul style="list-style-type: none"><li>3.1. An assessment tool is developed to gather valid, reliable and sufficient evidence for a specific assessment context</li><li>3.2. The assessment tool is designed to mirror the language used to demonstrate the competency in a specific context</li><li>3.3. Clear instructions (spoken or written) are prepared including any adjustments which may be made to address the characteristics of the person(s) being assessed</li><li>3.4. The assessment tool is checked to ensure flexible, fair, safe and cost-effective assessment occurs.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
4. Trial assessment procedure.	<p>4.1. Assessment methods and tools are trialed with an appropriate sample of people to be assessed</p> <p>4.2. Evaluation of the methods and tools used in the trial provides evidence of clarity, reliability, validity, fairness, cost-effectiveness and ease of administration</p> <p>4.3. Appropriate adjustments are made to improve the assessment method and tools in light of the trial</p> <p>4.4. Assessment procedures, including evidence requirements, assessment methods and tools, are ratified with appropriate personnel in the industry/enterprise and/or training organisation where applicable.</p>

**Assessment system may be developed by:**

- v the industry through the endorsed component of Training Packages assessment guidelines
- v the enterprise
- v a Registered Training Organisation
- v a combination of the above.

**The assessment system should specify the following:**

- v the purpose of assessment
- v competencies required of assessors
- v record keeping procedures and policies
- v any allowable adjustments to the assessment method which may be made
- v the appeal/review mechanisms and procedures
- v the review and evaluation of the assessment process
- v the linkages between assessment and training qualifications/awards
- v employee classification
- v remuneration
- v progression
- v relevant policies
- v quality assurance mechanisms
- v apportionment of costs/fees (if applicable)
- v marketing/promotion of assessment
- v verification arrangements
- v auspicing arrangements, if applicable
- v partnership arrangements, if applicable.

**Specific assessment context may be determined by:**

- v purpose of the assessment such as:
  - to gain a particular qualification or a licence
  - to determine employee classification
  - to recognise prior learning/current competencies
  - to identify training needs or progress
- v location of the assessment such as:
  - on the job or off the job
  - combination of both
- v assessment guidelines of Training Package or other assessment requirements.

**Characteristics of persons being assessed may include:**

- v language, literacy and numeracy needs
- v cultural, language and educational background
- v gender
- v physical ability
- v level of confidence, nervousness or anxiety
- v age
- v experience in training and assessment
- v previous experience with the topic.

**Appropriate personnel many include:**

- v assessors
- v person(s) being assessed
- v employee/union representatives
- v consultative committees
- v users of assessment information such as training providers, employers, human resource departments
- v State/Territory training/recognition authorities
- v training and assessment coordinators
- v relevant managers/supervisors team leaders
- v technical specialists.

**Appropriate procedure:**

The assessment procedure is developed (and endorsed) by person(s) responsible for the implementation of the assessment process in:

- v the industry
- v the enterprise
- v the training organisation
- v a combination of the above.

**The assessment procedure should specify the following:**

- v recording procedure
- v appeal/review mechanism
- v assessment methods to be used
- v instructions/materials to be provided to the person(s) being assessed
- v criteria for making decisions of competent or not yet competent
- v number of assessors
- v assessment tools
- v evidence required
- v location of assessment
- v timing of assessment
- v assessment group size
- v allowable adjustments to the assessment procedure depending on the characteristics of the person being assessed.

**Assessment methods may include:**

- v direct observation of performance, products, practical tasks, projects and simulation exercises
- v review of log books and/or portfolios of evidence
- v consideration of third party reports and authenticated prior achievements
- v written, oral or computer managed questioning.

These methods may be used in combination in order to provide sufficient evidence to make a judgement.

**Assessment tools may include:**

- v specific instructions to be given relating to the performance of practical tasks or processes or simulation exercises
- v specific instructions to be given in relation to the production of projects and exercises
- v sets of verbal/written/computer based questions to be asked
- v performance checklists
- v log books
- v descriptions of competent performance.

A number of these tools may be used in combination in order to provide enough evidence to make judgments.

**Assessment environment and resources to be considered include:**

- v time
- v location
- v personnel
- v finances/costs
- v equipment
- v materials
- v OH&S requirements
- v enterprise/industry standard operating procedures.

**Allowable adjustments may include:**

- v provision of personal support services (eg, Auslan interpreter, reader, interpreter, attendant carer, scribe)
- v use of adaptive technology or special equipment (eg, word processor or lifting gear)
- v design of shorter assessment sessions to allow for fatigue or medication
- v use of large print version of any papers.

**Critical aspects of evidence:**

Assessment requires evidence of the following products to be collected:

- v documentation in relation to:
  - specific assessment context, including the purpose of assessment
  - features of the assessment system
  - characteristics of the person being assessed
  - evidence of competency required
  - plan of opportunities for gathering the evidence required
  - assessment methods selected including any allowable adjustments to meet characteristics of person(s) being assessed
- v an assessment tool(s) for the specific assessment context which ensures valid, reliable, flexible and fair assessment including any allowable adjustments
- v an assessment procedure for the specific context.

Assessment requires evidence of the following processes to be provided:

- v how the context of assessment was specified
- v how the characteristics of the person(s) being assessed were identified
- v why a particular assessment method was selected
- v how the assessment was planned to ensure that language, literacy and numeracy issues were taken into consideration
- v how evidence was evaluated in terms of validity, authenticity, sufficiency, currency and consistent achievement of the specified standard
- v how the assessment tool was developed for the specified context
- v how the assessment tool was validated and ratified by appropriate personnel.

**Interdependent assessment of units:**

This unit of competency may be assessed in conjunction with other units that form part of a job role.

**Required knowledge and skills:**

Knowledge of standards of performance including industry or enterprise competency standards and assessment guidelines.

Knowledge of legal and ethical responsibilities including occupational health and safety regulations and procedures, equal employment and anti-discrimination requirements relevant to the specified context.

Understanding of the assessment principles of reliability, validity, fairness, flexibility, authenticity, sufficiency and consistency.

Knowledge of the assessment guidelines of the Workplace Training and Assessment Training Package.

Skills in the application of various assessment methods, relevant to the workplace context.

Planning of own work including predicting consequences and identifying improvements.

Language, literacy and numeracy skills required to:

- v read and interpret relevant information to plan assessment
- v give clear and precise information/instructions in spoken or written form
- v adjust spoken and written language to suit target audience
- v write assessment tools using language which mirrors the language used to demonstrate the competency in the specific context
- v prepare required documentation using clear and comprehensible language and layout
- v calculate and estimate costs.

Communication skills appropriate to the culture of the workplace and the individual(s).

**Resource implications:**

Access to relevant competencies, sources of information on assessment methods, assessment tools and assessment procedures.

Access to person(s) wishing to be assessed, any relevant workplace equipment, information and appropriate personnel.

**Consistency in performance:**

Competency in this unit needs to be assessed over a period of time, in a range of contexts and on multiple occasions, involving a combination of direct, indirect and supplementary forms of evidence.

**Context for assessment:**

Assessment should occur on the job or in a simulated workplace. The candidate assessor should use competencies relevant to their area of technical expertise.

**Corequisites:**

Workplace assessors (people who plan, conduct and review assessments leading to a qualification) require:

- |         |                    |
|---------|--------------------|
| BSZ401A | Plan assessment    |
| BSZ402A | Conduct assessment |
| BSZ403A | Review assessment. |

These **three units together** qualify for the relevant Statement of Attainment under BSZ98 and may also be counted as **one** unit of competency towards a qualification in PMB01.



**UNIT TITLE****BSZ402A - Conduct assessment****UNIT DESCRIPTOR**

This unit covers the requirements for conducting an assessment in a specific context.

**PREREQUISITES**

This competency has **no** prerequisites but has corequisites for the purposes of this Training Package.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify and explain the context of assessment.	<ul style="list-style-type: none"><li>1.1. The context and purpose of assessment are discussed and confirmed with the person(s) being assessed</li><li>1.2. The relevant performance standards to be used in the assessment (eg, current endorsed competency standards for the specific industry) are clearly explained to the person being assessed</li><li>1.3. The assessment procedure is clarified and expectations of assessor and candidate are agreed</li><li>1.4. Any legal and ethical responsibilities associated with the assessment are explained to the person(s) being assessed</li><li>1.5. The needs of the person being assessed are determined to establish any allowable adjustments in the assessment procedure</li><li>1.6. Information is conveyed using language and interactive strategies and techniques to communicate effectively with the person(s) being assessed.</li></ul>
2. Plan evidence gathering opportunities.	<ul style="list-style-type: none"><li>2.1. Opportunities to gather evidence of competency which occurs as part of workplace or training activities are identified covering the dimensions of competency</li><li>2.2. The need to gather additional evidence which may not occur as part of the workplace or training activities are identified</li><li>2.3. Evidence gathering activities are planned to provide sufficient, reliable, valid and fair evidence of competency in accordance with the assessment procedure.</li></ul>
3. Organise assessment.	<ul style="list-style-type: none"><li>3.1. The resources specified in the assessment procedure are obtained and arranged within a safe and accessible assessment environment</li><li>3.2. Appropriate personnel are informed of the assessment</li><li>3.3. Spoken interactions and any written documents employ language, strategies and techniques to ensure the assessment arrangements are understood by all person(s) being assessed and appropriate personnel.</li></ul>

ELEMENT	PERFORMANCE CRITERIA
4. Gather evidence.	<p>4.1. Verbal and non-verbal language is adjusted and strategies are employed to promote a supportive assessment environment to gather evidence</p> <p>4.2. The evidence specified in the assessment procedure is gathered, using the assessment methods and tools</p> <p>4.3. Evidence is gathered in accordance with specified allowable adjustments where applicable</p> <p>4.4. The evidence gathered is documented in accordance with the assessment procedure.</p>
5. Make the assessment decision.	<p>5.1. The evidence is evaluated in terms of:</p> <ul style="list-style-type: none"> <li>5.1.1. validity</li> <li>5.1.2. authenticity</li> <li>5.1.3. sufficiency</li> <li>5.1.4. currency</li> <li>5.1.5. consistent achievement of the specified standard</li> </ul> <p>5.2. The evidence is evaluated according to the dimensions of competency:</p> <ul style="list-style-type: none"> <li>5.2.1. task skills</li> <li>5.2.2. task management skills</li> <li>5.2.3. contingency management skills</li> <li>5.2.4. job/role environment skill</li> <li>5.2.5. transfer and application of knowledge and skills to new contexts</li> </ul> <p>5.3. Guidance is sought when in doubt from a more experienced assessor(s)</p> <p>5.4. The assessment decision is made in accordance with the criteria specified in the assessment procedure.</p>
6. Record assessment results.	<p>6.1. Assessment results are recorded accurately in accordance with the specified record keeping requirements</p> <p>6.2. Confidentiality of assessment outcome is maintained and access to the assessment records is provided only to authorised personnel.</p>
7. Provide feedback to persons being assessed.	<p>7.1. Clear and constructive feedback in relation to performance is given to the person(s) being assessed using language and strategies to suit the person(s), and guidance on further goals/training opportunities is provided to the person(s) being assessed</p> <p>7.2. Opportunities for overcoming any gaps in competency, as revealed by the assessment, are explored with the person(s) being assessed</p> <p>7.3. The person(s) being assessed are advised of available reassessment opportunities and/or review appeal mechanisms where the assessment decision is challenged.</p>

ELEMENT	PERFORMANCE CRITERIA
8. Report on the conduct of the assessment.	<p>8.1. Positive and negative features experienced in conducting the assessment are reported to those responsible for the assessment procedure</p> <p>8.2. Any assessment decision disputed by the person(s) being assessed is recorded and reported promptly to those responsible for the assessment procedure</p> <p>8.3. Suggestions for improving any aspect of the assessment process are made to appropriate personnel..</p>

**Assessment system may be developed by:**

- v the industry through the endorsed component of Training Packages assessment guidelines
- v the enterprise
- v a Registered Training Organisation
- v a combination of the above.

**The assessment system should specify the following:**

- v the purpose of assessment
- v competencies required of assessors
- v record keeping procedures and policies
- v any allowable adjustments to the assessment method which may be made
- v the appeal/review mechanisms and procedures
- v the review and evaluation of the assessment process
- v the linkages between assessment and training qualifications/awards
- v employee classification
- v remuneration
- v progression
- v relevant policies
- v quality assurance mechanisms
- v apportionment of costs/fees (if applicable)
- v marketing/promotion of assessment
- v verification arrangements
- v auspicing arrangements, if applicable
- v partnership arrangements, if applicable.

**Specific assessment context may be determined by:**

- v purpose of the assessment such as:
  - to gain a particular qualification or a licence
  - to determine employee classification
  - to recognise prior learning/current competencies
  - to identify training needs or progress
- v location of the assessment such as:
  - on the job or off the job
  - combination of both
- v assessment guidelines of Training Package or other assessment requirements.

**Characteristics of persons being assessed may include:**

- v language, literacy and numeracy needs
- v cultural, language and educational background
- v gender
- v physical ability
- v level of confidence, nervousness or anxiety
- v age
- v experience in training and assessment
- v previous experience with the topic.

**Appropriate personnel many include:**

- v assessors
- v person(s) being assessed
- v employee/union representatives
- v consultative committees
- v users of assessment information such as training providers, employers, human resource departments
- v State/Territory training/recognition authorities
- v training and assessment coordinators
- v relevant managers/supervisors team leaders
- v technical specialists.

**Appropriate procedure:**

The assessment procedure is developed (and endorsed) by person(s) responsible for the implementation of the assessment process in:

- v the industry
- v the enterprise
- v the training organisation
- v a combination of the above.

**The assessment procedure should specify the following:**

- v recording procedure
- v appeal/review mechanism
- v assessment methods to be used
- v instructions/materials to be provided to the person(s) being assessed
- v criteria for making decisions of competent or not yet competent
- v number of assessors
- v assessment tools
- v evidence required
- v location of assessment
- v timing of assessment
- v assessment group size
- v allowable adjustments to the assessment procedure depending on the characteristics of the person being assessed.

**Assessment methods may include:**

- v direct observation of performance, products, practical tasks, projects and simulation exercises
- v review of log books and/or portfolios of evidence
- v consideration of third party reports and authenticated prior achievements
- v written, oral or computer managed questioning.

These methods may be used in combination in order to provide sufficient evidence to make a judgement.

**Assessment tools may include:**

- v specific instructions to be given relating to the performance of practical tasks or processes or simulation exercises
- v specific instructions to be given in relation to the production of projects and exercises
- v sets of verbal/written/computer based questions to be asked
- v performance checklists
- v log books
- v descriptions of competent performance.

A number of these tools may be used in combination in order to provide enough evidence to make judgments.

**Assessment environment and resources to be considered include:**

- v time
- v location
- v personnel
- v finances/costs
- v equipment
- v materials
- v OH&S requirements
- v enterprise/industry standard operating procedures.

**Allowable adjustments may include:**

- v provision of personal support services (eg, Auslan interpreter, reader, interpreter, attendant carer, scribe)
- v use of adaptive technology or special equipment (eg, word processor or lifting gear)
- v design of shorter assessment sessions to allow for fatigue or medication
- v use of large print version of any papers.

**Critical aspects of evidence:**

Assessment requires evidence of the following products to be collected:

- v documentation in relation to:
  - specific assessment context, including the purpose of assessment
  - features of the assessment system
  - characteristics of the person being assessed
  - evidence of competency required
  - plan of opportunities for gathering the evidence required
  - assessment methods selected including any allowable adjustments to meet characteristics of person(s) being assessed
- v an assessment tool(s) for the specific assessment context which ensures valid, reliable, flexible and fair assessment including any allowable adjustments
- v an assessment procedure for the specific context.

Assessment requires evidence of the following processes to be provided:

- v how the context of assessment was specified
- v how the characteristics of the person(s) being assessed were identified
- v why a particular assessment method was selected
- v how the assessment was planned to ensure that language, literacy and numeracy issues were taken into consideration
- v how evidence was evaluated in terms of validity, authenticity, sufficiency, currency and consistent achievement of the specified standard
- v how the assessment tool was developed for the specified context
- v how the assessment tool was validated and ratified by appropriate personnel.

**Interdependent assessment of units:**

This unit of competency may be assessed in conjunction with other units that form part of a job role.

**Required knowledge and skills:**

Knowledge of standards of performance including industry or enterprise competency standards and assessment guidelines.

Knowledge of legal and ethical responsibilities including occupational health and safety regulations and procedures, equal employment and anti-discrimination requirements relevant to the specified context.

Understanding of the assessment principles of reliability, validity, fairness, flexibility, authenticity, sufficiency and consistency.

Knowledge of the assessment guidelines of the Assessment and Workplace Training Training Package.

Skills in the application of various assessment methods, relevant to the workplace context.

Planning of own work including predicting consequences and identifying improvements.

Language, literacy and numeracy skills required to:

- v read and interpret relevant information to plan assessment
- v give clear and precise information/instructions in spoken or written form
- v adjust spoken and written language to suit target audience
- v write assessment tools using language which mirrors the language used to demonstrate the competency in the specific context
- v prepare required documentation using clear and comprehensible language and layout
- v calculate and estimate costs.

Communication skills appropriate to the culture of the workplace and the individual(s).

**Resource implications:**

Access to relevant competencies, sources of information on assessment methods, assessment tools and assessment procedures.

Access to person(s) wishing to be assessed, any relevant workplace equipment, information and appropriate personnel.

**Consistency in performance:**

Competency in this unit needs to be assessed over a period of time, in a range of contexts and on multiple occasions, involving a combination of direct, indirect and supplementary forms of evidence.

**Context for assessment:**

Assessment should occur on the job or in a simulated workplace. The candidate assessor should use competencies relevant to their area of technical expertise.

**Corequisites:**

Workplace assessors (people who plan, conduct and review assessments leading to a qualification) require:

BSZ401A Plan assessment

BSZ402A Conduct assessment

BSZ403A Review assessment.

These **three units together** qualify for the relevant statement of attainment under BSZ98 and may also be counted as **one** unit of competency towards a qualification in PMB01.





**UNIT TITLE****BSZ403A - Review assessment****UNIT DESCRIPTOR**

This unit covers requirements to review assessment procedures in a specific context.

**PREREQUISITES**

This competency has **no** prerequisites but has corequisites for the purposes of this Training Package.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
8. Review the assessment procedure(s).	<p>1.1 Appropriate personnel are given the opportunity to review the assessment outcomes and procedure using agreed evaluation criteria</p> <p>The review process established by the enterprise, industry or registered training organisation is followed</p> <p>The assessment procedure(s) is reviewed at a specified site in cooperation with person(s) being assessed, and any appropriate personnel in the industry/enterprise/training establishment and/or any agency identified under legislation</p> <p>Review activities are documented, findings are substantiated and the review approach evaluated.</p>
9. Check consistency of assessment decision.	<p>2.1 Evidence from a range of assessments is checked for consistency across the dimensions of competency</p> <p>2.2 Evidence is checked against the key competencies</p> <p>2.3 Consistency of assessment decisions with defined performance standards are reviewed and discrepancies and inconsistencies are noted and acted upon.</p>
10. Report review findings.	<p>3.1 Recommendations are made to appropriate personnel for modifications to the assessment procedure(s) in light of the review outcomes</p> <p>3.2 Records are evaluated to determine whether the needs of appropriate personnel have been met</p> <p>3.3 Effective contributions are made to system-wide reviews of the assessment process and feedback procedures, and are reviewed.</p>

**Assessment system may be developed by:**

- v the industry through the endorsed component of Training Packages assessment guidelines
- v the enterprise
- v a Registered Training Organisation
- v a combination of the above.

**The assessment system should specify the following:**

- v the purpose of assessment
- v competencies required of assessors
- v record keeping procedures and policies
- v any allowable adjustments to the assessment method which may be made
- v the appeal/review mechanisms and procedures
- v the review and evaluation of the assessment process
- v the linkages between assessment and training qualifications/awards
- v employee classification
- v remuneration
- v progression
- v relevant policies
- v quality assurance mechanisms
- v apportionment of costs/fees (if applicable)
- v marketing/promotion of assessment
- v verification arrangements
- v auspicing arrangements, if applicable
- v partnership arrangements, if applicable.

**Specific assessment context may be determined by:**

- v purpose of the assessment such as:
  - to gain a particular qualification or a licence
  - to determine employee classification
  - to recognise prior learning/current competencies
  - to identify training needs or progress
- v location of the assessment such as:
  - on the job or off the job
  - combination of both.
- v assessment guidelines of Training Package or other assessment requirements.

**Evaluation criteria in review process should include:**

- v number of persons being assessed
- v duration of the assessment procedure
- v organisational constraints within which assessors must operate
- v occupational health and safety factors
- v relationship of the assessor to other appropriate personnel in the assessment process
- v frequency of assessment procedure
- v budgetary restraints
- v information needs of government and other regulatory bodies
- v support needs and professional development needs of assessors
- v characteristics of persons being assessed
- v human resource management implications

- v consistency of assessment decisions
- v levels of flexibility in the assessment procedure
- v fairness of the assessment procedure
- v efficiency and effectiveness of the assessment procedure
- v competencies achieved by the person(s) being assessed
- v difficulties encountered during the planning and conduct of the assessment
- v motivation of the person(s) being assessed
- v location and resource suitability
- v reliability, validity, fairness and flexibility of the assessment tool(s)
- v relevance of assessment to specified context
- v grievances/challenges to the assessment decision by the person(s) being assessed or their supervisor/manager/employer
- v ease of administration
- v access and equity considerations
- v practicability.

**Characteristics of persons being assessed may include:**

- v language, literacy and numeracy needs
- v cultural, language and educational background
- v gender
- v physical ability
- v level of confidence, nervousness or anxiety
- v age
- v experience in training and assessment
- v previous experience with the topic.

**Appropriate personnel may include:**

- v assessors
- v person(s) being assessed
- v employee/union representatives
- v consultative committees
- v users of assessment information such as training providers, employers, human resource departments
- v State/Territory training/recognition authorities
- v training and assessment coordinators
- v relevant managers/supervisors team leaders
- v technical specialists.

**Appropriate procedure:**

The assessment procedure is developed (and endorsed) by person(s) responsible for the implementation of the assessment process in:

- v the industry
- v the enterprise
- v the training organisation
- v a combination of the above.

**The assessment procedure should specify the following:**

- v recording procedure
- v appeal/review mechanism
- v assessment methods to be used

- v instructions/materials to be provided to the person(s) being assessed
- v criteria for making decisions of competent, or not yet competent
- v number of assessors
- v assessment tools
- v evidence required
- v location of assessment
- v timing of assessment
- v assessment group size
- v allowable adjustments to the assessment procedure depending on the characteristics of the person being assessed.

**Assessment methods may include:**

- v direct observation of performance, products, practical tasks, projects and simulation exercises
- v review of log books/or and portfolios of evidence
- v consideration of third party reports and authenticated prior achievements
- v written, oral or computer managed questioning.

These methods may be used in combination in order to provide sufficient evidence to make a judgement.

**Assessment tools may include:**

- v specific instructions to be given relating to the performance of practical tasks or processes or simulation exercises
- v specific instructions to be given in relation to the production of projects and exercises
- v sets of verbal/written/computer based questions to be asked
- v performance checklists
- v log books
- v descriptions of competent performance.

A number of these tools may be used in combination in order to provide enough evidence to make judgments.

**Assessment environment and resources to be considered include:**

- v time
- v location
- v personnel
- v finances/costs
- v equipment
- v materials
- v OHS requirements
- v enterprise/industry standard operating procedures.

**Allowable adjustments may include:**

- v provision of personal support services (eg, Auslan interpreter, reader, interpreter, attendant carer, scribe)
- v use of adaptive technology or special equipment (eg, word processor or lifting gear)
- v design of shorter assessment sessions to allow for fatigue or medication
- v use of large print version of any papers.

**Assessment requires evidence of the following processes to be provided:**

- v how the review process for evaluating the assessments in the enterprise, industry or organisation was implemented

- |  |
|--|
| <ul style="list-style-type: none"><li>v why particular review/evaluation methodologies were chosen</li><li>v how cooperation and input from the person(s) assessed and appropriate personnel was sought as part of the review.</li></ul> |
|--|

**Interdependent assessment of units:**

This unit of competency may be assessed in conjunction with other units that form part of a job role.

**Required knowledge and skills:**

Knowledge of the review process established by the industry, enterprise or training organisation.

Knowledge of evaluation methodologies relevant to the assessment context.

Relevant standards of performance including industry or enterprise competency standards and assessment guidelines.

Knowledge of legal and ethical responsibilities including occupational health and safety regulations and procedures, equal employment and anti-discrimination requirements.

Knowledge of relevant organisational policies and procedures of the workplace and/or job roll.

Understanding of the assessment principles of reliability, validity, fairness, flexibility, authenticity, sufficiency and consistency.

Skills in the application of various assessment methods, relevant to the workplace context.

Planning of own work including predicting consequences and identifying improvements.

Language, literacy and numeracy skills required to:

- v read and interpret relevant information to plan assessment
- v participate in discussions and listen strategically to evaluate information critically
- v gather, select and organise findings from a number of sources
- v document findings in summary form, graphs or tables
- v present findings in a short report to relevant personnel
- v make recommendations based on findings
- v determine cost effectiveness.

Communication skills appropriate to the culture of the workplace and the individual(s).

**Resource implications:**

Access to relevant competencies, sources of information on assessment methods, assessment tools and assessment procedures.

Access to person(s) wishing to be assessed, any relevant workplace equipment, information and appropriate personnel.

**Consistency in performance:**

Competency in this unit needs to be assessed over a period of time, in a range of contexts and on multiple occasions, involving a combination of direct, indirect and supplementary forms of evidence.

**Context for assessment:**

**Assessment should occur on the job or in a simulated workplace. The candidate assessor should use competencies relevant to their area of technical expertise.**

**Corequisites:**

Workplace assessors (people who plan, conduct and review assessments leading to a qualification) require:

BSZ401A      Plan assessment

BSZ402A      Conduct assessment

BSZ403A      Review assessment.

**These three units together qualify for the relevant Statement of Attainment under BSZ98 and may also be counted as one unit of competency towards a qualification in PMB01.**





**UNIT TITLE****BSZ404A - Train small groups****UNIT DESCRIPTOR**

This unit covers the requirements for planning, delivering and reviewing training provided for the purposes of developing competency on a one-to-one or small group basis.

This single unit qualifies for the relevant Statement of Attainment under BSZ98 and may also be counted as one unit of competency towards a qualification in PMB01.

**PREREQUISITES**

This competency has **no** prerequisites.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare for training.	1.1. Specific needs for training are identified and confirmed through consultation with appropriate personnel 1.2. Training objectives are matched to identified competency development needs 1.3. Training approaches are planned and documented.
2. Deliver training.	2.1. Training is conducted in a safe and accessible environment 2.2. Training delivery methods are selected appropriate to training participant(s) needs, trainer availability, location and resources 2.3. Strategies and techniques are employed which facilitate the learning process 2.4. Objectives of the training, sequence of activities and assessment processes are discussed with training participant(s) 2.5. A systematic approach is taken to training and the approach is revised and modified to meet specific needs of training participant(s).
3. Provide opportunities for practices.	3.1. Practice opportunities are provided to ensure that the participant achieves the components of competency 3.2. Various methods for encouraging learning are implemented to provide diverse approaches to meet the individual needs of participants.
4. Review training.	4.1. Participants are encouraged to self evaluate performance and identify areas for improvement 4.2. Participants' readiness for assessment is monitored and assistance provided in the collection of evidence of satisfactory performance 4.3. Training is evaluated in the context of self-assessment, participant feedback, supervisor comments and measurements against objectives 4.4. Training details are recorded according to enterprise and legislative requirements 4.5. Results of evaluation are used to guide further training.

**Relevant information to identify training needs includes:**

- v industry/enterprise or other performance competency standards
- v endorsed components of relevant industry training package
- v industry/workplace training practices
- v job descriptions
- v results of training needs analyses
- v business plans of the organisation which identify skill development requirements
- v standard operating and/or other workplace procedures.

**Appropriate personnel may include:**

- v team leaders/supervisors/ technical experts
- v managers/employers
- v training and assessment coordinators
- v training participants
- v representative government regulatory bodies
- v union/employee representatives
- v consultative committees
- v assessors.

**Training delivery methods and opportunities for practice may include:**

- v presentations
- v demonstrations
- v explanations
- v problem solving
- v mentoring
- v experiential learning
- v group work
- v on the job coaching
- v job rotation
- v a combination of the above.

**Components of competency include:**

- v task skills
- v task management skills
- v contingency management skills
- v job/role environment skills
- v transfer and application of skills and knowledge of new contents.

**Characteristics of training participant may include information in relation to:**

- v language, literacy and numeracy needs
- v cultural, language, and educational background
- v gender
- v physical ability
- v level of confidence, nervousness or anxiety
- v age
- v previous experience with the topic
- v experience in training and assessment.

**Training sessions may include:**

- v one to one demonstration
- v small group demonstration (2 to 5 persons).

**Resources may include:**

- v time
- v location
- v personnel
- v materials and equipment
- v OH&S and other workplace requirements
- v enterprise/industry standard operating procedures
- v finances/costs.

**Strategies and techniques may include:**

- v active listening
- v targeted questioning
- v points of clarification
- v group discussions.

**Critical aspects of evidence:**

Assessment requires evidence of the following products to be collected:

- v description of the specific training need and required competency outcomes
- v outline of the training approach and steps to be followed
- v description of training participant(s) and delivery method(s) to be used
- v specific This section should be read in conjunction with the range of variables for this unit of competency. Resources required
- v outline of the evidence to be collected for monitoring training participant progress
- v trainers' self assessment of training delivery
- v participant evaluation of training delivery
- v evaluation of review comments against plan of training
- v records/documentation for monitoring progress of training participant(s).

These products may be collected using proformas or template.

Assessment requires evidence of the following processes to be provided:

- v how the specific training need was determined
- v how the sequence of the training was determined
- v how appropriate personnel were identified
- v why particular delivery method(s) were selected
- v how the characteristics of training participant(s) were identified
- v how the resource requirements were established
- v how participant progress was monitored
- v why and how the training resources were selected
- v appropriate personnel to confirm training arrangements
- v how participant(s) were informed of:
  - intended training outcomes
  - competencies to be achieved
  - on and/or off the job practice opportunities
  - benefits of practices
  - learning activities and tasks

- assessment tasks and requirements
- v how constructive feedback was provided to training participant about progress toward competency to be acquired
- v how training participant readiness for assessment was determined and confirmed
- v how records were maintained to ensure confidentiality, accuracy and security.

Evidence may be provided verbally or in written form.

**Interdependent assessment of units:**

This unit may be assessed in conjunction with other units that form part of a job function.

**Required knowledge and skills:**

- v competency in the units being taught
- v workplace application of the relevant competencies
- v identification of evidence of competency
- v planning of own work including predicting consequences and identifying improvements
- v application of relevant workplace policies (eg, OH&S and EEO) and any relevant legislative or regulatory requirements
- v correct use of equipment, and any other processes and procedures appropriate for the training
- v ethical handling of performance issues
- v language, literacy and numeracy required skills to:
  - conduct discussions and ask probing questions to review the training
  - gather information (in spoken or written form) for review purposes
  - make verbal recommendations for delivery of future training
  - adjust language to suit target audience (training participant/appropriate personnel)
  - complete records on training
  - provide verbal feedback and report on training outcomes
  - follow and model examples of written texts
  - promote training in verbal or written form
- v communication skills appropriate to the culture of the workplace, appropriate personnel and training participants.

**Resource implications:**

Access to records system for training, information, and training participants and supervisory staff (where appropriate).

**Consistency in performance:**

Competency in this unit needs to be assessed over a period of time, in a range of contexts and on multiple occasions involving a combination of direct, indirect and supplementary forms of evidence.

**Context for assessment:**

Assessment may occur on the job or in a simulated workplace. Candidate workplace trainers should use competencies relevant to their area of technical expertise.

## UNIT TITLE

### PMBWELD301A - Butt weld polyethylene plastic pipelines

## UNIT DESCRIPTOR

This competency covers the butt welding of polyethylene (PE) plastics pipes and pipeline components under industrial conditions both in the field and in factory conditions.

This competency is performed by operators as part of a work team.

### This competency in practice

This competency applies to operators who are involved in the butt welding of polyethylene (PE) pipes and pipeline components to required quality assurance demands whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:

- v identifying materials being used in the installation as compatible for welding
- v calculating appropriate welding parameters to be used
- v maintaining and calibrating welding equipment
- v performing welding
- v assessing quality of welded joints made.

End applications include pipelines for transmitting gas and liquids.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify materials as being compatible for welding.	1.1. Identify materials as polyethylene (PE) from specifications and work site instructions 1.2. Identify PE materials and pipes supplied as being compatible for welding from specifications.
2. Calculate appropriate pipe welding parameters.	2.1. Identify welding machine type and operating data 2.2. Identify pipe materials and dimensions 2.3. Perform welding parameter calculations for individual welding machines and pipe details 2.4. Prepare field operational sheets as per enterprise requirements/ procedures.
3. Maintain and calibrate welding equipment.	3.1. Set up welding equipment and work area 3.2. Ensure safety equipment is available and operational 3.3. Identify non-conformance, report and rectify 3.4. Check operation and calibrate where required, heating, trimming, and pressure systems.

ELEMENT	PERFORMANCE CRITERIA
4. Perform welding.	4.1. Assemble pipeline components in welding machine 4.2. Clean, align and trim pipe ends 4.3. Perform heating, welding, and cooling phases using calculated welding parameters 4.4. Monitor and record achieved weld parameters for each joint as per enterprise requirement 4.5. Clean up equipment when completed as per enterprise procedures 4.6. Clean up work site, dispose of scrap materials as per enterprise procedures 4.7. Use personal protective equipment as per enterprise requirements.
5. Assess quality of completed joints.	5.1. Identify quality requirements for joints 5.2. Assess joints against specification requirements, and report results 5.3. Identify and report non-conformances as per enterprise requirements.

#### **RANGE OF VARIABLES:**

This competency unit includes the butt welding of polyethylene (PE) pipeline components using hydraulic activated welding machines. The end applications include pipelines used for transmission of gaseous and water based fluids.

It also includes the operation of all relevant ancillary equipment.

Specifications include national standards for materials (AS/NZS 4130, and AS/NZS 4131), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v hydraulic activated butt welding machines, and pipe supports
- v measurement devices including pressure gauges, timers, temperature probes, calipers and computer based pressure/temperature monitors
- v cleaning fluids and spray equipment
- v calculators
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning fluids
- v pipe material handling
- v heavy stationary and moving machinery, cutting and heating components.

Routine problems include:

- v variable PE materials, and as supplied pipes
- v equipment malfunction, wear and tear
- v variable field site conditions.

All operations are required to be performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PE materials and pipeline components as described in national standards to recognise welding compatibility and suitability.

Knowledge of detailed work instructions necessary to perform butt welding, and the ability to implement within required parameters to attain required quality outcomes.

Competence includes the ability to:

- v identify materials being used
- v calculate welding parameters for individual machines and pipeline components
- v maintain and adjust operating conditions in welding machine
- v set up and maintain safe working environment
- v operate welding machine within required parameters
- v assess quality of completed joints
- v identify and rectify fault causes arising from machine operation and component variables
- v establish and maintain quality records  
as relevant for the practical completion of work required.

### **Critical aspects:**

Consistent achievement of required weld quality standards is critical.

### **Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

**Assessment method and context:**

Current competence in this unit may be assessed by the combination of:

- v practical workshop welding exercises
- v completion of a short answer questionnaire
- v completion of weld parameter calculations
- v in-course workshop style discussions.

**Resource implications:**

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required for training institutions include suitable powered workshop facilities and classroom space with visual support aids, specialised hydraulic activated welding machines, measuring and monitoring control devices for pressure and temperature, together with necessary PE component samples and material ancillaries.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required for training institutions include comprehensive training resource manuals, and support visual aids derived from field experience activities.

Presenters require specialised training and field experience in PE materials, pipeline components, welding technology and material testing.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2



## UNIT TITLE

### PMBWELD302A - Electrofusion weld polyethylene pipelines

## UNIT DESCRIPTOR

This competency covers the electrofusion welding of polyethylene (PE) plastic pipes and pipeline components under industrial conditions both in the field and in factory conditions.

This competency is performed by operators as part of a work team.

### This competency in practice

This competency applies to operators who are involved in the electrofusion of polyethylene (PE) pipes and pipeline components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:

- v identifying materials being used in the installation as compatible for welding
- v calculating appropriate welding parameters to be used
- v maintaining and calibrating welding equipment
- v performing welding
- v assessing quality of welded joints made.

End applications include pipelines for transmitting gas and liquids.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify materials as being compatible for electrofusion welding.	1.1. Identify materials as polyethylene (PE) from specifications and work site instructions 1.2. Identify PE materials and pipes supplied as being compatible for welding from specifications.
2. Identify compatibility of commercial electrofusion control systems.	2.1. Identify electrofusion welding control unit type and operating data 2.2. Identify pipe material and dimension compatibility with electrofusion fittings 2.3. Identify control unit compatibility with electrofusion fitting control system.
3. Maintain and calibrate electrofusion control unit equipment.	3.1. Set up electrofusion welding equipment and work area as per enterprise procedures 3.2. Ensure safety equipment is available and operational as per enterprise procedures 3.3. Identify non-conformance, report and rectify according to enterprise procedures 3.4. Determine equipment is operational according to specifications.

ELEMENT	PERFORMANCE CRITERIA
4. Perform electrofusion welding.	4.1. Prepare pipe and fitting as per specification 4.2. Perform heating, welding and cooling phases using selected electrofusion welding parameters 4.3. Monitor and record achieved electrofusion weld parameters for each joint as per enterprise procedures 4.4. Clean up equipment when completed as per enterprise procedures 4.5. Clean up work site, dispose of scrap materials as per operational procedures.
5. Assess quality of completed electrofusion joints.	5.1. Identify quality requirements for electrofusion joints as per specifications 5.2. Assess joints against specification requirements and report results 5.3. Identify and report non-conformances according to enterprise requirements.

#### **RANGE OF VARIABLES:**

This competency unit includes the electrofusion welding of polyethylene (PE) pipeline components using calibrated output electrofusion control units. The end applications include pipelines used for transmission of gaseous and water based fluids.

It also includes the operation of all relevant ancillary equipment.

Specifications include national standards for materials (AS/NZS 4129, AS/NZS 4130 and AS/NZS 4131), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v calibrated output electrofusion control units and pipe clamp supports
- v measurement devices including timers, temperature probes, calipers and computer based output monitors
- v cleaning fluids, spray equipment and scrapers
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning fluids
- v pipe material handling
- v heavy stationary and moving machinery, cutting and heating components.

Routine problems include:

- v variable PE materials, and as supplied pipes
- v equipment malfunction, wear and tear
- v variable field site conditions.

All operations are required to be performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PE materials and pipeline components, as described in national standards, to recognise electrofusion welding compatibility, and suitability.

Knowledge of detailed work instructions necessary to perform electrofusion welding, and the ability to implement within required parameters to attain required quality outcomes.

Competence includes the ability to:

- v identify materials being used
- v identify compatibility of commercial operating systems
- v select electrofusion welding parameters for individual control units and fittings components
- v prepare electrofusion joint assemblies
- v set up and maintain safe working environment
- v operate control unit within required parameters
- v identify and rectify fault causes arising from machine operation and component variables
- v establish and maintain quality records.

as relevant for the practical completion of work required.

### **Critical aspects:**

Consistent achievement of required quality standards is critical.

### **Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

### **Assessment method and context:**

Current competence in this unit may be assessed by the combination of:

- v practical workshop electrofusion welding exercises
- v completion of a short answer questionnaire
- v selection of electrofusion weld parameters
- v in-course workshop style discussions.

### Resource implications:

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required for training institutions include suitable powered workshop facilities and classroom space with visual support aids, specialised calibrated output electrofusion control units, measuring and monitoring control devices for pressure and temperature, together with necessary PE component samples and material ancillaries.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required for training institutions include comprehensive training resource manuals, and support visual aids derived from field experience activities. Presenters require specialised training and field experience in PE materials, pipeline components, electrofusion welding technology and material testing.

### KEY COMPETENCIES

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2

**UNIT TITLE****PMBWELD303A - Install polyethylene (non-pressure) drainage pipelines****UNIT DESCRIPTOR**

This competency covers the installation of relevant elements of polyethylene (PE) plastic non-pressure drainage pipes and pipeline components under industrial conditions in the field.

This competency is performed by operators as part of a work team.

**This competency in practice**

This competency applies to operators who are involved in the installation of relevant elements of polyethylene (PE) plastics non-pressure drainage pipes and pipeline components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:

- v identifying materials being used in the installation as being suitable for specific applications
- v identifying applications for alternative jointing technologies
- v determining appropriate methods of handling, storage and transport of PE non-pressure drainage plastics components
- v identifying and carrying out connection and repair techniques
- v assessing quality of completed installations by determining appropriate testing and commissioning procedures.

End applications include pipelines used for drain, waste and vent installations above and below ground.

**PREREQUISITES**

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify PE pipe materials as being suitable for specific non-pressure drainage applications above and below ground.	1.1. Identify materials as PE grades from National Standards, job specifications and work site instructions 1.2. Determine PE materials properties from national standards and material data sheets 1.3. Identify job needs from worksite instructions and specifications.
2. Identify applications for alternative jointing technologies.	2.1. Identify properties and limitations of mechanical jointing systems 2.2. Identify properties and limitations of thermal welding jointing systems 2.3. Perform trial jointing for all methods, identify non-conformance, report and rectify 2.4. Assess quality against specification requirements.

ELEMENT	PERFORMANCE CRITERIA
3. Determine methods for handling, storage, transport and installation of PE non-pressure drainage pipeline components.	3.1. Identify requirements for handling and transport of PE drainage materials 3.2. Determine requirements for long term storage 3.3. Determine requirements for installation including additional materials.
4. Identify appropriate connection and repair techniques.	4.1. Determine alternative material connection requirements 4.2. Identify possible alternative material connection methods to meet specified requirements 4.3. Perform connections to meet requirements 4.4. Determine repair requirements 4.5. Identify alternative repair options 4.6. Perform repair installation to meet requirements.
5. Assess quality of completed installation by determining appropriate testing and commissioning procedures.	5.1. Determine specific installation test requirements. 5.2. Identify alternative test procedures to meet requirements.

#### RANGE OF VARIABLES:

This competency unit includes the installation of relevant elements of polyethylene (PE) non-pressure drainage pipeline components. The end applications include pipelines used for drain, waste and vent installations above and below ground.

It also includes the operation of alternative jointing procedures, connections and repairs using all relevant ancillary equipment.

Specifications include national standards for materials (AS/NZS 4129, AS/NZS 2566, AS/NZS 4401 and AS/NZS 2033), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v mechanical and thermal jointing equipment, and ancillary jigs and fixtures
- v measurement devices including pressure gauges, timers, temperature probes, calipers and computer based monitors
- v calculators
- v alternative material connection and repair equipment and products
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning fluids
- v pipe material handling
- v heavy stationary and moving machinery, cutting and heating components.

Routine problems include:

- v variable PE materials, and as supplied pipes and components
- v equipment malfunction, wear and tear
- v variable field site conditions
- v limitations in available data on specific job requirements.

All operations are required to be performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PE materials and non-pressure drainage pipeline components as described in national standards to recognise suitability for specific application and installation, and to establish work instructions. Knowledge of specific job requirements necessary to determine detailed work instructions, and the ability to implement requirements to attain required quality outcomes.

Competence includes the ability to:

- v identify types of materials and components being used
  - v establish specific job needs
  - v set up and maintain safe working environment
  - v set up and maintain required storage, handling, and transport procedures
  - v establish installation requirements
  - v perform jointing and installation to meet required quality levels
  - v identify and rectify fault causes arising from machine operation and component variability
  - v establish completion test requirements
  - v establish and maintain quality records
- as relevant for the practical completion of work required.

### **Critical aspects:**

It is essential that the procedures are known and followed, and the importance of critical factors is understood. Competence must be demonstrated to recognise situations requiring remedial action, and to implement such actions within required time frames.

Consistent achievement of required output quality standards needs to be demonstrated.

### **Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

**Assessment method and context:**

Current competence in this unit may be assessed by a combination of:

- v practical workshop installation exercises
- v completion of a short answer questionnaire
- v selection of installation parameters
- v in-course workshop style discussions.

**Resource implications:**

This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable powered workshop facilities, and classroom space with visual support aids, specialised jointing machines, alternative material connection and repair equipment, measuring and monitoring control devices for pressure, temperature, and time, together with necessary PE pipeline product component samples and material ancillaries.

Software This section should be read in conjunction with the range of variables for this unit of competency. Resources required for training institutions include comprehensive training resource manuals and support visual aids derived from field experience activities. Presenters require specialised training and field experience in PE materials, pipeline components, application and limitation of jointing technology, field installation and materials testing.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2



**UNIT TITLE****PMBWELD304A - Design polyethylene (non-pressure) drainage pipelines****UNIT DESCRIPTOR**

This competency covers the design of relevant elements of polyethylene (PE) plastics non-pressure drainage pipes and pipeline components under industrial conditions in the field.

This competency is performed by operators as part of a work team.

**This competency in practice**

This competency applies to operators who are involved in the design of relevant elements of polyethylene (PE) plastics non-pressure drainage pipes and pipeline components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:

- v identifying materials being used in the installation as being suitable for specific applications
- v determining the appropriate products from relevant national standards for the specific application
- v assessing quality of completed installations by determining appropriate testing and commissioning procedures.

End applications include pipelines used for drain, waste and vent installations above and below ground.

**PREREQUISITES**

This competency has the prerequisite of PMBWELD303A Install polyethylene (non-pressure) drainage pipelines.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify PE pipe materials as being suitable for specific non-pressure drainage applications above and below ground.	1.1. Identify materials as PE grades from national standards, job specifications and worksite instructions 1.2. Determine PE materials properties from national standards and material data sheets 1.3. Identify job needs from worksite instructions and specifications.
2. Determine appropriate products from national standards.	2.1. Identify material options from national standards, supplier data sheets, and government codes and regulations 2.2. Identify material option performance limitations 2.3. Perform material selection, contrasting specific job needs and product properties 2.4. Prepare field operational sheets.
3. Assess quality of completed installation by determining appropriate testing and commissioning procedures.	3.1. Determine specific installation test requirements. 3.2. Identify alternative test procedures to meet requirements.

## **RANGE OF VARIABLES:**

This competency unit includes the design of relevant elements of polyethylene (PE) non-pressure drainage pipeline components. The end applications include pipelines used for drain, waste and vent installations above and below ground.

Specifications includes national standards for materials (AS/NZS 4129, AS/NZS 2566, AS/NZS 4401 and AS/NZS 2033), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v measurement devices including pressure gauges, timers, temperature probes, calipers and computer based monitors
- v calculators
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning fluids
- v pipe material handling
- v heavy stationary and moving machinery, cutting and heating components.

Routine problems include:

- v variable PE materials, and as supplied pipes
- v variable field site conditions
- v limitations in available data on specific job requirements.

All operations are required to be performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PE materials and non-pressure drainage pipeline components as described in national standards to recognise suitability for specific application, and to establish work instructions.

Knowledge of specific job requirements necessary to determine detailed work instructions, and the ability to implement requirements to attain required quality outcomes.

Competence includes the ability to:

- v identify types of materials and components being used
- v establish specific job needs
- v establish product selection
- v set up and maintain safe working environment
- v establish installation requirements
- v identify and rectify fault causes arising from application and component variabilites
- v establish completion test requirements
- v establish and maintain quality records

as relevant for the practical completion of work required.

**Critical aspects:**

It is essential that the procedures are known and followed, and the importance of critical factors is understood. Competence must be demonstrated to recognise situations requiring remedial action, and to implement such actions within required time frames.

Consistent achievement of required output quality standards needs to be demonstrated.

**Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

**Assessment method and context:**

Current competence in this unit may be assessed by the combination of:-

- v completion of a short answer questionnaire
- v completion of in-course calculation exercises
- v in-course workshop style discussions.

**Resource implications:**

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable powered workshop facilities, and classroom space with visual support aids specialised measuring and monitoring control devices for pressure and time, together with necessary PE pipeline product component samples and material ancillaries.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required for training institutions include comprehensive training resource manuals and support visual aids derived from field experience activities. Presenters require specialised training and field experience in PE materials, pipeline components, application and limitation, include field installation and materials testing.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2



## UNIT TITLE

### PMBWELD305A - Install polyethylene plastic pressure pipelines

## UNIT DESCRIPTOR

This competency covers the installing of relevant elements of polyethylene (PE) plastics pressure pipes and pipeline components under industrial conditions in the field.

This competency is performed by operators as part of a work team.

### This competency in practice

This competency applies to operators who are involved in the installation of relevant elements of polyethylene (PE) plastics pressure pipes and pipeline components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:

- v identifying materials being used in the installation as being suitable for specific applications
- v identifying applications for alternative jointing technologies
- v determining appropriate methods of handling, storage and transport of PE plastics components
- v identifying and carrying out service connection and repair techniques
- v assessing quality of completed installations by determining appropriate testing and commissioning procedures.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify PE pipe materials as being suitable for specific pressure applications.	1.1. Identify materials as PE grades from national standards, job specifications and work site instructions 1.2. Determine PE materials properties from national standards and material data sheets 1.3. Identify job needs from worksite instructions and specifications.
2. Identify applications for alternative jointing technologies.	2.1. Identify properties and limitations of mechanical jointing systems 2.2. Identify properties and limitations of thermal welding jointing systems 2.3. Perform trial jointing for all methods, identify non conformance, report, and rectify 2.4. Assess quality against specification requirements.
3. Determine methods for handling, storage, transport and installation of PE pipeline components.	3.1. Identify requirements for handling and transport of PE materials 3.2. Determine requirements for long term storage 3.3. Determine requirements for installation including additional materials.

ELEMENT	PERFORMANCE CRITERIA
4. Identify appropriate service connection and repair techniques.	4.1. Determine service connection requirements 4.2. Identify alternative service connection methods to meet requirements 4.3. Perform service connection to meet requirements 4.4. Determine repair requirements 4.5. Identify alternative repair options 4.6. Perform repair installation to meet requirements.
5. Assess quality of completed installation by determining appropriate testing and commissioning procedures.	5.1. Determine specific installation test requirements 5.2. Identify alternative test procedures to meet requirements.

### RANGE OF VARIABLES:

This competency unit includes the installation of relevant elements of polyethylene (PE) pressure pipeline components. The end applications include pipelines used for transmission of gaseous and water based fluids.

It also includes the operation of alternative jointing procedures, service connections repairs using all relevant ancillary equipment.

Specifications include national standards for materials (AS/NZS 4129, AS/NZS 4130, AS/NZS 2566 and AS/NZS 2033), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v mechanical and thermal jointing equipment, ancillary jigs and fixtures
- v measurement devices including pressure gauges, times, temperature probes, calipers and computer based monitors
- v calculators
- v service connection and repair equipment and products
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning fluids
- v pipe material handling
- v heavy stationary and moving machinery, cutting and heating components.

Routine problems include:

- v variable PE materials, and as supplied pipes and components
- v equipment malfunction, wear and tear
- v variable field site conditions
- v limitations in available data on specific job requirements.

All operations are required to be performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PE materials and pipeline components as described in national standards to recognise suitability for specific installation, and to establish work instructions. Knowledge of specific job requirements necessary to determine detailed work instructions, and the ability to implement requirements to attain required quality outcomes.

Competence includes the ability to:

- v identify types of materials and components being used
  - v establish specific job needs
  - v set up and maintain safe working environment
  - v set up and maintain required storage, handling, and transport procedures
  - v establish installation requirements
  - v perform jointing and installation to meet required quality levels
  - v identify and rectify fault causes arising from application and component variables
  - v establish completion test requirements
- as relevant for the practical completion of work required.

### **Critical aspects:**

It is essential that the procedures are known and followed, and the importance of critical factors is understood. Competence must be demonstrated to recognise situations requiring remedial action, and to implement such actions within required timeframes.

Consistent achievement of required output quality standards needs to be demonstrated.

### **Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

**Assessment method and context:**

Current competence in this unit may be assessed by the combination of:

- v practical workshop exercises
- v completion of a short answer questionnaire
- v in-course workshop style discussions.

**Resource implications:**

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable powered workshop facilities, and class room space with visual support aids, specialised jointing machines, service connection and repair equipment, measuring and monitoring control devices for pressure, temperature and time, together with necessary PE pipeline product component samples and materials ancillaries.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include comprehensive training resource manuals and support visual aids derived from field experience activities. Presenters require specialised training and field experience in PE materials, pipeline components, application and limitation of jointing technology, field installation and materials testing.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2



**UNIT TITLE****PMBWELD306A - Design polyethylene plastic pressure pipelines****UNIT DESCRIPTOR**

This competency covers the design of relevant elements of polyethylene (PE) plastics pressure pipes and pipeline components under industrial conditions in the field.

This competency is performed by operators as part of a work team.

**This competency in practice**

This competency applies to operators who are involved in the design of relevant elements of polyethylene (PE) plastics pressure pipes, and pipeline components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:-

- v identify materials being used in the installation as being suitable for specific applications
- v determine the appropriate products from relevant National Standards for the specific application
- v assess quality of completed installations by determining appropriate testing and commissioning procedures.

End applications include pipelines used for transmitting gas and liquids.

**PREREQUISITES**

This competency has a prerequisite of PMBWELD305A Install polyethylene plastic pressure pipelines.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Identify PE pipe materials as being suitable for specific pressure applications.	1.1. Identify materials as PE grades from national standards, job specifications and work site instructions 1.2. Determine PE materials properties from national standards and material data sheets 1.3. Identify job needs from work site instructions and specifications.
2. Determine appropriate products from national standards.	2.1. Identify material options from national standards, supplier data sheets, and government codes and regulations 2.2. Identify material option performance limitations 2.3. Perform material selection contrasting specific job needs and product properties 2.4. Prepare field operational sheets.
3. Assess quality of completed installation by determining appropriate testing and commissioning procedures.	3.1. Determine specific installation test requirements 3.2. Identify alternative test procedures to meet requirements.

## **RANGE OF VARIABLES:**

This competency unit includes the design of relevant elements of polyethylene (PE) pressure pipeline components. The end applications include pipelines used for transmission of gaseous and water based fluids.

Specifications include national standards for materials (AS/NZS 4129, and AS/NZS 4130, AS/NZS 2566 and AS/NZS 2033), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v measurement devices including pressure gauges, timers, temperature probes, calipers and computer based monitors
- v calculators
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning fluids
- v pipe material handling
- v heavy stationary and moving machinery, cutting and heating components.

Routine problems include:

- v variable PE materials, and as supplied pipes
- v variable field site conditions
- v limitations in available data on specific job requirements.

All operations are required to be performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PE materials and pipeline components as described in national standards to recognise suitability for specific application, and to establish work instructions.

Knowledge of detailed work instructions necessary to determine detailed work instructions and to implement requirements to attain required quality outcomes.

Competence includes the ability to:

- v identify types of materials and components being used
  - v establish specific job needs
  - v establish product selection
  - v set up and maintain safe working environment
  - v establish installation requirements
  - v identify and rectify fault causes arising from application and component variability
  - v establish completion test requirements
  - v establish and maintain quality records
- as relevant for the practical completion of work required.

**Critical aspects:**

It is essential that the procedures are known and followed, and the importance of critical factors is understood. Competence must be demonstrated to recognise situations requiring remedial action, and to implement such actions within required time frames.

Consistent achievement of required output quality standards needs to be demonstrated.

**Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Use simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

**Assessment method and context:**

Current competence in this unit may be assessed by the combination of:

- v completion of a short answer questionnaire
- v completion of in-course calculation exercises
- v in-course workshop style discussions.

**Resource implications:**

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required for training institutions include suitable powered workshop facilities, and classroom space with visual support aids, specialised measuring and monitoring control devices for pressure and time, together with necessary PE pipeline product component samples and material ancillaries.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required for training institutions include comprehensive training resource manuals and support visual aids derived from field experience activities. Presenters require specialised training and field experience in PE materials, pipeline components, application and limitation of component performance, field installation and materials testing.

<b>KEY COMPETENCIES</b>						
<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2

## UNIT TITLE

### PMBWELD307A - Install high temperature plastic pressure pipelines

## UNIT DESCRIPTOR

This competency covers the installing of relevant elements of PB, PEX, PP, A1/PEX composites, PVDF and CPVC plastics pressure pipes and pipeline components operating under high temperature industrial conditions in the field.

This competency is performed by operators as part of a work team.

### This competency in practice

This competency applies to operators who are involved in the installation and design of relevant elements of PB, PEX, PP, A1/PEX composites, PVDF, and CPVC plastics pressure pipes and pipeline components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:

- v identifying materials being used in the installation being suitable for specific applications
- v identifying applications for alternative jointing technologies
- v determining appropriate methods of handling, storage, and transport of PB, PEX, PP, A1/PEX composites, PVDF, and CPVC plastics components
- v identifying and carrying out service connection, and repair techniques
- v assessing quality of completed installations by determining appropriate testing and commissioning procedures.

End applications include transmitting liquids at high temperature.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify PB, PP, PEX, A1/PEX composites, PVDF and CPVC pipe materials as being suitable for specific pressure applications.	1.1. Identify materials from national standards, job specifications and work site instructions 1.2. Determine material properties from national standards and material data sheets 1.3. Identify job needs from worksite instructions, and specifications.
2. Identify applications for alternative jointing technologies.	2.1. Identify properties and limitations of mechanical jointing systems 2.2. Identify properties and limitations of thermal welding jointing systems 2.3. Perform trial jointing for all methods, identify non-conformance, report, and rectify 2.4. Assess quality against specification requirements.

ELEMENT	PERFORMANCE CRITERIA
3. Determine methods for handling, storage, transport and installation of plastics pipeline components.	3.1. Identify requirements for handling and transport of plastics materials 3.2. Determine requirements for long term storage 3.3. Determine requirements for installation including additional materials.
4. Identify appropriate service connection and repair techniques.	4.1. Determine service connection requirements 4.2. Identify alternative service connection methods to meet requirements 4.3. Perform service connection to meet requirements 4.4. Determine repair requirements 4.5. Identify alternative repair options 4.6. Perform repair installation to meet requirements.
5. Assess quality of completed installation by determining appropriate testing and commissioning procedures.	5.1. Determine specific installation test requirements 5.2. Identify alternative test procedures to meet requirements.

#### RANGE OF VARIABLES:

This competency unit includes the installation of relevant elements of polybutylene (PB), polypropylene (PP), crosslinked polyethylene (PEX), A1/PEX composites, polyvinylidene fluoride (PVDF) and chlorinated PVC (CPVC) pressure pipeline components. The end applications include pipelines used for transmission of water based fluids at high temperatures.

It also includes the operation of alternative jointing procedures, service connections and repairs using all relevant ancillary equipment.

Specifications include national standards for materials (AS/NZS 2642, AS/NZS 2492 and AS/NZS 4176), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v mechanical and thermal jointing equipment and ancillary jigs and fixtures
- v measurement devices including pressure gauges, times, temperature probes, calipers, and computer based monitors
- v calculators
- v service connection and repair equipment and products
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning fluids
- v pipe material handling
- v heavy stationary and moving machinery, cutting and heating components
- v hot fluids.

Routine problems include:

- v variable materials and as supplied pipes, and components
- v equipment malfunction, and wear and tear
- v variable field site conditions
- v limitations in available data on specific job requirements.

All operations are required to be performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PB, PP, PEX A1/PEX, PVDF and CPVC materials and pipeline components as described in national standards to recognise suitability for specific installation, and to establish work instructions.

Knowledge of detailed work instructions necessary to perform pipeline installations, and the ability to implement requirements to attain required quality outcomes.

Competence includes the ability to:

- v identify individual types of materials and components being used
- v establish specific job needs
- v set up and maintain safe working environment
- v set up and maintain required storage, handling, and transport procedures
- v establish installation requirements
- v perform jointing and installation to meet required quality levels
- v identify and rectify fault causes arising from application and component variability
- v establish completion test requirements
- v establish and maintain quality records

as relevant for the practical completion of work required.

### **Critical aspects:**

It is essential that the procedures are known and followed, and the importance of critical factors is understood. Competence must be demonstrated to recognise situations requiring remedial action, and to implement such actions within required timeframes.

Consistent achievement of required output quality standards needs to be demonstrated.

### **Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.



**Assessment method and context:**

Current competence in this unit may be assessed by the combination of:-

- v practical workshop exercises
- v completion of a short answer questionnaire
- v selection of in-course calculation exercises
- v in-course workshop style discussions.

**Resource implications:**

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable powered workshop facilities, and classroom space with visual support aids, specialised jointing machines, service connection and repair equipment, measuring and monitoring control devices for pressure, temperature and time, together with necessary plastics pipeline product component samples and material ancillaries.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include comprehensive training resource manuals and support visual aids derived from field experience activities. Presenters require specialised training and field experience in plastics materials, pipeline components, application and limitation of component performance, jointing technology, field installation and materials testing.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2



## UNIT TITLE

### PMBWELD308A - Install PVC plastic pressure pipelines

## UNIT DESCRIPTOR

This competency covers installing and designing relevant elements of polyvinylchloride (PVC) plastics pressure pipes and pipeline components under industrial conditions in the field.

This competency is performed by operators as part of a work team.

### This competency in practice

This competency applies to operators who are involved in the installation and design of relevant elements of polyvinylchloride (PVC) plastics pressure pipes and pipeline components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:

- v identifying alternative PVC materials being used in the installation as being suitable for specific applications
- v identifying applications for alternative jointing technologies
- v determining appropriate methods of handling, storage, and transport of PVC plastics components
- v identifying and carrying out service connection, and repair techniques
- v assessing quality of completed installations by determining appropriate testing and commissioning procedures.

End applications include pipelines transmitting gas and liquids.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify PVC pipe materials as being suitable for specific pressure applications.	1.1. Identify materials as UPVC, MPVC, OPVC grades from national standards, job specifications and worksite instructions 1.2. Determine UPVC, MPVC, OPVC materials properties from national standards and material data sheets 1.3. Identify job needs from worksite instructions and specifications.
2. Identify applications for alternative jointing technologies.	2.1. Identify properties and limitations of mechanical jointing systems 2.2. Identify properties and limitations of chemical bonding jointing systems 2.3. Perform trial jointing for all methods, identify non-conformance, report and rectify 2.4. Assess quality against specification requirements.
3. Determine methods for handling, storage, transport and installation of PVC pipeline components.	3.1. Identify requirements for handling and transport of PVC materials 3.2. Determine requirements for long term storage 3.3. Determine requirements for installation including additional materials.

ELEMENT	PERFORMANCE CRITERIA
4. Identify appropriate service connection and repair techniques.	4.1. Determine service connection requirements 4.2. Identify alternative service connection methods to meet requirements 4.3. Perform service connection to meet requirements 4.4. Determine repair requirements 4.5. Identify alternative repair options 4.6. Perform repair installation to meet requirements.
5. Assess quality of completed installation by determining appropriate testing and commissioning procedures.	5.1. Determine specific installation test requirements 5.2. Identify alternative test procedures to meet requirements.

### RANGE OF VARIABLES:

This competency unit includes the installation of relevant elements of polyvinylchloride (PVC) pressure pipeline components in the form of UPVC, MPVC and OPVC. The end applications include pipelines used for transmission of gaseous and water based fluids.

It also includes the operation of alternative jointing procedures, service connections and repairs using all relevant ancillary equipment.

Specifications includes national standards for PVC materials (AS/NZS 1477 UPVC, AS/NZS 4441 OPVC, AS/NZS 4765 MPVC, AS/NZS 2566 and AS/NZS 2032), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v mechanical and chemical bond jointing equipment, and ancillary jigs and fixtures
- v measurement devices including pressure gauges, timers, calipers and computer based monitors
- v calculators
- v service connection and repair equipment and products
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning and chemical bonding fluids
- v pipe material handling
- v heavy stationary and moving machinery, cutting and heating components.

Routine problems include:

- v variable materials, and as supplied pipes and components
- v equipment malfunction, wear and tear
- v variable field site conditions
- v limitations in available data on specific job requirements.

All operations are required to be performed in accordance with standard procedures and work instructions.

## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PVC materials and pipeline components in the forms of UPVC, MPVC and OPVC, as described in national standards, to recognise suitability for specific installation and to establish work instructions. Knowledge of specific job requirements necessary to determine detailed work instructions and the ability to implement requirements to attain required quality outcomes.

Competence includes the ability to:

- v identify types of PVC materials and components being used
  - v establish specific job needs
  - v set up and maintain safe working environment
  - v set up and maintain required storage, handling, and transport instructions
  - v establish installation requirements
  - v perform jointing and installation to meet required quality levels
  - v identify and rectify fault causes arising from application and component variability
  - v establish completion test requirements
  - v establish and maintain quality records
- as relevant for the practical completion of work required.

### **Critical aspects:**

It is essential that the procedures are known and followed, and the importance of critical factors is understood. Competence must be demonstrated to recognise situations requiring remedial action, and to implement such actions within required time frames.

Consistent achievement of output required quality standards needs to be demonstrated.

### **Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

**Assessment method and context:**

Current competence in this unit may be assessed by the combination of:

- v practical workshop exercises
- v completion of a short answer questionnaire
- v selection of in-course calculation exercises
- v in-course workshop style discussions.

**Resource implications:**

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable powered workshop facilities, and class room space with visual support aids, specialised jointing machines, service connection and repair equipment, measuring and monitoring control devices for pressure and time, together with necessary PVC pipeline product component samples and material ancillaries.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include comprehensive training resource manuals and support visual aids derived from field experience activities. Presenters require specialised training and field experience in PVC materials, pipeline components, application and limitation of component performance, jointing technology, field installation and materials testing.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2

## UNIT TITLE

### PMBWELD309A - Weld plastics using extrusion and injection techniques

## UNIT DESCRIPTOR

This competency covers the extrusion and injection welding of PE, PP, ABS, HIPS and PVC plastic components under industrial conditions both in the field and in factory conditions.

This competency is performed by operators as part of a work team.

### This competency in practice

This competency applies to operators who are involved in the extrusion and injection thermal welding of PE, PP, ABS, HIPS, PVC plastic components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are :

- v identifying materials being used in the installation as compatible for welding
- v identifying appropriate welding conditions to be used
- v maintaining and calibrating welding equipment
- v performing welding
- v assessing quality of welded joints made.

## PREREQUISITES

This competency has **no** prerequisites.

ELEMENT	PERFORMANCE CRITERIA
1. Identify materials as being compatible for welding.	1.1. Identify materials as PE, PP, ABS, HIPS and PVC from specifications and worksite instructions 1.2. Identify plastics materials and components supplied as being compatible for welding from specifications and tests.
2. Identify appropriate plastics welding conditions.	2.1. Identify welding machine type and operating requirements 2.2. Identify plastic component materials and dimensions 2.3. Identify and select appropriate welding rods or granules 2.4. Select welding conditions for individual welding machines and plastic components 2.5. Prepare field operational sheets as per enterprise specification.
3. Maintain, and calibrate welding equipment.	3.1. Set up welding equipment and work area as per enterprise specification 3.2. Ensure safety equipment available and operational as per enterprise procedures 3.3. Identify non-conformance, report and rectify according to enterprise procedures 3.4. Check operation, and calibrate where required, heating, material feed rate and pressure systems 3.5. Use personal protective equipment.

ELEMENT	PERFORMANCE CRITERIA
4. Perform welding.	<ul style="list-style-type: none"><li>4.1. Clean machine, align and trim abutting plastic component ends as per job specification</li><li>4.2. Assemble components in holding jigs</li><li>4.3. Perform heating, welding and cooling phases using selected welding conditions and specifications</li><li>4.4. Monitor and record achieved weld conditions for each assembly as per enterprise requirements</li><li>4.5. Clean up equipment when completed as per enterprise requirements</li><li>4.6. Clean up work site, dispose of scrap materials as per job specification.</li></ul>
5. Assess quality of completed joints.	<ul style="list-style-type: none"><li>5.1. Identify quality requirements for joints as per specifications</li><li>5.2. Assess joints against specification requirements, and report results according to enterprise requirements</li><li>5.3. Identify and report non-conformances according to job specification.</li></ul>

#### **RANGE OF VARIABLES:**

This competency unit includes the extrusion and injection welding of PE, PP, ABS, HIPS and PVC plastics components using electrical and pneumatic activated welding equipment.

It also includes the operation of all relevant ancillary equipment to assemble components prior to welding.

Specifications includes national standards for materials (AS 1886), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v electrical activated extrusion welding machines
- v electrical/pneumatic activated injection welding machines
- v measurement devices including, timers, temperature probes and calipers
- v cleaning fluids and spray equipment
- v plastics machining equipment and assembly jigs
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning fluids
- v plastics sheet material handling
- v heavy stationary and moving machinery, cutting and heating components.

Routine problems include:

- v variable plastics sheet material grades and supplied welding rods/granules
- v equipment malfunction, wear and tear
- v variable factory and field site conditions

All operations are required to be performed in accordance with standard procedures and work instructions.



## **EVIDENCE GUIDE:**

### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PE, PP, ABS, HIPS and PVC materials and welding rods/granules as described in national standards to recognise welding compatibility and suitability.

Knowledge of detailed work instructions necessary to perform extrusion and injection welding, and the ability to implement these within required parameters to attain required quality outcomes.

Competence includes the ability to:

- v identify substrate and welding materials being used
- v identify welding conditions for individual machine types and component materials
- v maintain and adjust operating conditions in welding machines
- v set up and maintain safe working environment
- v operate welding machines within required conditions
- v assess quality of completed welded joints
- v identify and rectify fault causes arising from machine operation and component variability
- v establish and maintain quality records  
as relevant for the practical completion of work required.

### **Critical aspects:**

Consistent achievement of required quality standards is critical.

### **Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

**Assessment method and context:**

Current competence in this unit may be assessed by the combination of:

- v practical workshop welding exercises
- v completion of a short answer questionnaire
- v identification and application of individual welding conditions
- v in-course workshop style discussions.

**Resource implications:**

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable electrical powered and air workshop facilities, and classroom space with visual support aids, specialised electrically activated extrusion welders, electrical/pneumatic activated injection welders, measuring and monitoring control devices for time and temperature, necessary PE component samples and material ancillaries, and plastics machining facilities to cut and shape abutting ends of plastics component sheeting.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include comprehensive training resource manuals and support visual aids derived from field experience activities. Presenters require specialised training and field experience in PE, PP, ABS, HIPS and PVC materials, plastics welding technology and material testing.

**KEY COMPETENCIES**

<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2

## UNIT TITLE

### PMBWELD310A - Design PVC plastic pressure pipelines

## UNIT DESCRIPTOR

This competency covers the designing of relevant elements of polyvinylchloride (PVC) plastics pressure pipes and pipeline components under industrial conditions in the field.

This competency is performed by operators as part of a work team.

### This competency in practice

This competency applies to operators who are involved in the design of relevant elements of polyvinylchloride (PVC) plastics pressure pipes and pipeline components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:

- v identifying alternative PVC materials being used in the installation as being suitable for specific applications
- v determining the appropriate products from relevant national standards for the specific application
- v assessing quality of completed installations by determining appropriate testing and commissioning procedures.

End applications include pipe lines for transmitting gas and liquids.

## PREREQUISITES

This competency has a prerequisite of PMBWELD308A Install PVC plastic pressure pipelines.

ELEMENT	PERFORMANCE CRITERIA
1. Identify PVC pipe materials as being suitable for specific pressure applications.	1.1. Identify materials as UPVC, MPVC, OPVC grades from national standards, job specifications and work site instructions 1.2. Determine UPVC, MPVC, OPVC materials properties from national standards and material data sheets 1.3. Identify job needs from worksite instructions and specifications.
2. Determine appropriate products from national standards.	2.1. Identify material options from national standards, supplier data sheets, and government codes and regulations 2.2. Identify material option performance limitations 2.3. Perform material selection contrasting specific job needs and product properties 2.4. Prepare field operational sheets as per enterprise requirements.
3. Assess quality of completed installation by determining appropriate testing and commissioning procedures.	3.1. Determine specific installation test requirements 3.2. Identify alternative test procedures to meet requirements.

### **RANGE OF VARIABLES:**

This competency unit includes the design of relevant elements of polyvinylchloride (PVC) pressure pipeline components in the form of UPVC, MPVC and OPVC. The end applications include pipelines used for transmission of gaseous, and water based fluids.

Specifications includes National Standards for PVC materials (AS/NZS 1477 UPVC, AS/NZS 4441 OPVC, AS/NZS 4765 MPVC, AS/NZS 2566 and AS/NZS 2032), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v measurement devices including pressure gauges, timers, calipers and computer based monitors
- v calculators
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning and chemical bonding fluids
- v pipe material handling
- v heavy stationary, and moving machinery, cutting and heating components.

Routine problems include:

- v variable material, or as supplied pipes, and components
- v variable field site conditions
- v limitations in available data on specific job requirements.

All operations are required to be performed in accordance with standard procedures and work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PVC materials and pipeline components in the forms of UPVC, MPVC and OPVC as described in national standards to recognise suitability for specific application, and to establish work instructions. Knowledge of specific job requirements necessary to determine detailed work instructions, and to implement requirements to attain required quality outcomes.

Competence includes the ability to:

- v identify types of PVC materials and components being used
  - v establish specific job needs
  - v establish product selection
  - v set up and maintain safe working environment
  - v establish installation requirements
  - v identify and rectify fault causes arising from application and component variability
  - v establish completion test requirements
  - v establish and maintain quality records
- as relevant for the practical completion of work required.

**Critical aspects:**

It is essential that the procedures are known and followed, and the importance of critical factors is understood. Competence must be demonstrated to recognise situations requiring remedial action, and to implement such actions within required timeframes.

Consistent achievement of required output quality standards needs to be demonstrated.

**Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

**Assessment method and context:**

Current competence in this unit may be assessed by the combination of:

- v completion of a short answer questionnaire
- v selection of in-course calculation exercises
- v in-course workshop style discussions.

**Resource implications:**

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable powered workshop facilities and classroom space with visual support aids, specialised measuring and monitoring control devices for pressure and time, together with necessary PVC pipeline product component samples and material ancillaries.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include comprehensive training resource manuals and support visual aids derived from field experience activities. Presenters require specialised training and field experience in PVC materials, pipeline components, application and limitation of component performance, jointing technology, field installation and materials testing.

<b>KEY COMPETENCIES</b>						
<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2

## UNIT TITLE

### PMBWELD311A - Design high temperature plastic pressure pipelines

## UNIT DESCRIPTOR

This competency covers the designing of relevant elements of PB, PEX, PP, A1/PEX composites, PVDF and CPVC plastics pressure pipes and pipeline components operating under high temperature industrial conditions in the field.

This competency is performed by operators as part of a work team.

### This competency in practice

This competency applies to operators who are involved in the design of relevant elements of PB, PEX, PP, A1/PEX composites, PVDF and CPVC plastics pressure pipes and pipeline components to quality assurance requirements whilst maintaining personal and immediate site safety. The key features in attaining the required quality are:

- v identifying materials being used in the installation being suitable for specific applications
- v determining the appropriate products from relevant national standards for the specific application
- v assessing quality of completed installations by determining appropriate testing and commissioning procedures.

End application includes pipelines for transmitting high pressure liquids and gases.

## PREREQUISITES

This competency has the prerequisite of PMBWELD307A Install high temperature plastic pressure pipelines.

ELEMENT	PERFORMANCE CRITERIA
1. Identify PB, PP, PEX, A1/PEX composites, PVDF and CPVC pipe materials as being suitable for specific pressure applications.	1.1. Identify materials from national standards, job specifications and worksite instructions 1.2. Determine material properties from national standards and material data sheets 1.3. Identify job needs from work site instructions, and specifications.
2. Determine appropriate products from national standards.	2.1. Identify material options from national standards, supplier data sheets, and government codes and regulations 2.2. Identify material option performance limitations 2.3. Perform material selection contrasting specific job needs and product properties 2.4. Prepare field operational sheets.
3. Assess quality of completed installation by determining appropriate testing and commissioning procedures.	3.1. Determine specific installation test requirements 3.2. Identify alternative test procedures to meet requirements.

### **RANGE OF VARIABLES:**

This competency unit includes the design of relevant elements of polybutylene (PB), polypropylene (PP), crosslinked polyethylene (PEX), A1/PEX composites, polyvinylidene fluoride (PVDF) and chlorinated PVC (CPVC) pressure pipeline components. The end applications include pipelines used for transmission of water based fluids at elevated temperatures.

Specifications include national standards for materials (AS/NZS 2642, AS/NZS 2492 and AS/NZS 4176), workplace specifications and instructions, and government codes and regulations.

This competency requires the use of:

- v measurement devices including pressure gauges, times, temperature probes, calipers, and computer based monitors
- v calculators
- v relevant safety equipment
- v comprehensive work instructions.

Typical hazards include:

- v hazardous cleaning fluids
- v pipe material handling
- v heavy stationary and moving machinery, cutting and heating components
- v high pressure fluids.

Routine problems include:

- v variable material, or as supplied pipes and components
- v variable field site conditions
- v limitations in available data on specific job requirements.

All operations are required to be performed in accordance with standard procedures and work instructions.

### **EVIDENCE GUIDE:**

#### **Essential knowledge and enterprise requirements:**

Knowledge and understanding of PB, PP, PEX A1/PEX, PVDF and CPVC materials and pipeline components as described in national standards to recognise suitability for specific application, and to establish work instructions.

Knowledge of detailed work instructions necessary to design high pressure pipelines, and to implement requirements to attain required quality outcomes.

Competence includes the ability to:

- v identify individual types of materials and components being used
  - v establish specific job needs
  - v establish product selection
  - v set up and maintain safe working environment
  - v establish installation requirements
- 
- v identify and rectify fault causes arising from application and component variability
  - v establish completion test requirements
  - v establish and maintain quality records
- as relevant for the practical completion of work required.



**Critical aspects:**

It is essential that the procedures are known and followed, and the importance of critical factors is understood. Competence must be demonstrated to recognise situations requiring remedial action, and to implement such actions within required time frames.

Consistent output achievement of required quality standards needs to be demonstrated.

**Language, literacy and numeracy requirements:**

Read material which is sequenced for instructions, explanations, information or opinions.

Write short and simple messages about routine tasks or activities, or complete forms.

Use hands-on real-life materials and pictures/diagrams based on personal experience and prior knowledge.

Use several pieces of related mathematical information.

Read, write and speak whole numbers and money sums, recognise and interpret simple fractions, decimals and percentages, use simple data, grid references.

Uses simple grammatical forms and vocabulary to give instructions, give explanations, ask questions and express viewpoints.

Clarify intended meaning by asking for repetition when listening, and varying speed and changing tone or emphasis when speaking.

Use strategies such as providing verbal and non-verbal feedback in order to show interest or attitude.

**Assessment method and context:**

Current competence in this unit may be assessed by the combination of:

- v completion of a short answer questionnaire
- v selection of in-course calculation exercises
- v in-course workshop style discussions

**Resource implications:**

**Hardware** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include suitable powered workshop facilities, and class room space with visual support aids, specialised jointing machines, service connection and repair equipment, measuring and monitoring control devices for pressure, temperature and time, together with necessary plastics pipeline product component samples and material ancillaries.

**Software** This section should be read in conjunction with the range of variables for this unit of competency. Resources required include comprehensive training resource manuals and support visual aids derived from field experience activities. Presenters require specialised training and field experience in plastics materials, pipeline components, application and limitation of component performance, field installation and materials testing.

KEY COMPETENCIES						
<b>1</b> Collect, analyse & organise information	<b>2</b> Communicate ideas and information	<b>3</b> Plan and organise activities	<b>4</b> Work with others & in teams	<b>5</b> Use mathematical ideas and techniques	<b>6</b> Solve problems	<b>7</b> Use technology
2	1	2	1	2	2	2

