



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **LMTGN4013A Manage technical processes**

**Revision Number: 1**

## **LMTGN4013A Manage technical processes**

### **Modification History**

Not applicable.

### **Unit Descriptor**

**Unit descriptor** This unit covers the skills and knowledge required to manage the technical processes, particularly in the preparation of chemicals, monitoring production stages and measuring specified process parameters.

## Application of the Unit

### Application of the Unit

This unit applies to managing the technical processes for hide, skin and leather, fibres, yarns or fabrics and textile products including the handling, preparing, using and storing chemicals. Judgement may be required in planning and selecting appropriate processes or procedures for self and others.

Technical processes can relate to the following processes:

- tanning or processing hides, skins or leather
- manufacturing fibres, yarns or fabrics
- dyeing finishing or printing textile products

Work may be conducted in small to large scale enterprises and may involve individual and team activities. Work is performed within defined procedures under direct supervision.

This unit is applied according to workplace and OHS practices of the enterprise, which may include:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- standard operating procedures
- work instructions
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team/section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control and recycling

This unit requires the application of skills associated with planning and organising schedules and technical processes requirements for production.

This unit also requires an ability to evaluate processes and make adjustments or modifications to meet requirements. Initiative, enterprise and problem solving will be used to manage, facilitate process problem resolution and monitor process improvements.

## Licensing/Regulatory Information

Not applicable.

## **Pre-Requisites**

### **Prerequisites**

## **Employability Skills Information**

**Employability Skills** This unit contains employability skills.

## **Elements and Performance Criteria Pre-Content**

Not applicable.

## Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
1 Coordinate resource use	<p>1.1 Technical process requirements are interpreted in terms of resources and procedures</p> <p>1.2 Schedules and technical resources are confirmed with relevant personnel</p> <p>1.3 Process and safety requirements are clarified, where necessary</p>
2 Manage the process	<p>2.1 Roles and responsibilities are allocated as required</p> <p>2.2 Technical process is monitored and guidance provided where required</p> <p>2.3 <b>Process parameters</b> are monitored to ensure conformance to requirements</p> <p>2.4 Safety associated with the process, including chemical handling, is monitored</p>
3 Facilitate process problem resolution	<p>3.1 Methods to solve process problems are identified through facilitation of meetings or discussions</p> <p>3.2 Knowledge of process improvement and technical systems are used to assist in the systematic identification and resolution of process problems</p> <p>3.3 Preferred option to resolve the problem is recommended and documented</p> <p>3.4 Implementation of the recommended problem resolution option is facilitated</p>
4 Monitor process improvements and variations	<p>4.1 Improvements and variations to process are monitored to ensure outcome meets specifications, production schedule and workplace requirements</p> <p>4.2 Data is collated and analysed to evaluate the effectiveness of process improvements or variations</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit

Demonstrates knowledge of:

- industry and product and technical processes and equipment and resources
- technical and specified process parameters
- characteristics or raw materials and their properties
- processing, measurement, matches (dyes and finishes)
- monitoring processes and procedures
- quality standards and manual handling procedures
- safety and environmental aspects of relevant processes, including use of chemicals
- workplace procedures and reporting and documentation processes and procedures
- chemical processes relating to production
- OHS practices, including hazard identification and control measures
- recording and reporting practices

Demonstrates skills to:

- interpret requirements
- determine schedules and resources
- match personnel to tasks and roles
- facilitate problem solving associated with process variations
- analyse process parameters
- monitor process requirements
- communicate effectively within the workplace
- document, assess and transfer information
- read, interpret and follow information on work specifications, standard operating procedures and work instructions and other reference material
- maintain accurate records
- sequence operations
- meet specifications
- clarify and check task-related information
- carry out work according to OHS practices

## Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

<b>Critical aspects of evidence to be considered</b>	Demonstrates skills and knowledge to: <ul style="list-style-type: none"><li>• allocate tasks and roles to relevant personnel</li><li>• manage process</li><li>• solve problems and monitor process improvements</li></ul>
<b>Consistency in performance</b>	Consistently applies skills and knowledge when: <ul style="list-style-type: none"><li>• organising work</li><li>• completing tasks</li><li>• identifying improvements</li><li>• using workplace practices</li><li>• using OHS practices</li><li>• recording and reporting accidents and incidents</li><li>• assessing operational readiness of equipment used and work processes</li><li>• recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions</li><li>• completing work systematically with attention to detail without damage to goods and equipment</li></ul>
<b>Resource implications</b>	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
<b>Context for assessment</b>	Assessment may occur on the job or in an appropriately simulated environment.
<b>Interdependent Assessment</b>	This unit may be assessed independently or in combination with other relevant units.

## Range Statement

### RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Legislative/regulatory requirements All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.

Process parameters may include

- speed
- temperature
- pressure
- chemical values
- time
- volume
- quantities
- pH Baume (BE)
- concentration

Chemical processes may include:

- chemical preservation
- wool removal and skin pickle (wool off)
- soak, scour, bleach, pickle, sytan (wool on)
- chemical preparation
- tannage
- drum processes (bovine, hair off)
- preparation to crust (rewet, dyehouse processing)
- finishing leather and woolskin (coatings)
- dyeing and colouration
- application of finishes
- fabric formation
- textile finishing processes

Activities may include:

- work allocation
- process monitoring
- solving process problems
- reviewing and evaluating process
- monitoring safety

OHS practices OHS practices must include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and may include:

- manual handling techniques
- standard operating procedures



- personal protective equipment
- safe materials handling
- taking of rest breaks
- ergonomic arrangement of workplaces
- following marked walkways
- safe storage of equipment
- housekeeping
- reporting accidents and incidents
- other OHS practices relevant to the job and enterprise

## **Unit Sector(s)**

**Sector** All