

MTMPS5607B Manage and improve meat industry plant operations

Unit descriptor This unit covers the skills and knowledge required to plan and monitor an enterprise's operations from the receipt of stock and material, through processing and manufacturing options, transport, distribution and storage, to delivery to the customer. It also includes the skills and knowledge to ensure that the operations are managed in a cost efficient and effective way.

Employability Skills The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this unit of competency is packaged, will assist in identifying Employability Skill requirements.

Application of the unit This unit is particularly suitable for operations managers, or production managers with plant or department level responsibility for operations within a meat *industry context*. It provides all production personnel with an integrated approach to operations management.

At this level individuals exercise considerable autonomy, responsibility and accountability within enterprise structures and are required to make primary contributions to the values, goals and operations of the enterprise. They will typically have responsibility for the establishment and review of systems for the site or department. They may work with the assistance of external experts to develop plans and strategies.

ELEMENT

Elements describe the essential outcomes of a Unit of Competency.

PERFORMANCE CRITERIA

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

1	Assess operational requirements	1.1	Enterprise directions, goals and <i>forecasts</i> are analysed to establish the parameters for enterprise operations.
		1.2	Industry, market and enterprise information is gathered and analysed to determine short and medium term implications for enterprise operations.
		1.3	<i>Operational budgets</i> and strategies to achieve forecasts are prepared and <i>resource</i> requirements obtained.

	1.4	Operational productivity and performance measures to meet enterprise goals are determined.
2 Plan operations for optimum efficiency and effectiveness	2.1	Work organisation and performance patterns are reviewed for safety, efficiency and to maximise team contribution and satisfaction.
	2.2	Systems and technologies are developed to facilitate cost efficient and effective operations and to meet production, quality, waste, environmental and safety targets.
	2.3	Product/process flows are reviewed for optimum performance.
	2.4	Systems monitoring and control procedures are established to maximise performance.
	2.5	Contingency plans are prepared.
	2.6	Operational assets are identified and asset management strategies are recommended.
	2.7	Action plans to implement change are prepared.
3 Manage operations	3.1	Operational requirements for inputs, personnel, equipment and transport are identified.
	3.2	Plans and schedules are prepared to meet customer requirements.
	3.3	Systems to control costs, energy consumption, waste, environmental impact, quality and food safety are implemented.
	3.4	Work organisation strategies are planned and reviewed in consultation with the workforce.
	3.5	Opportunities to maximise yield and gain commercial value from total production are identified and evaluated.
	3.6	Operations are monitored and adjusted, consistent with operational plans and budgets.
	3.7	Consultation and collaboration are used to identify and resolve problems promptly, efficiently and effectively.
4 Evaluate performance	4.1	Data is collected and analysed to determine achievement of operational performance targets.

- 4.2 Performance information and implications are conveyed to *stakeholders*.
- 4.3 Recommendations and outcomes are included in the review of enterprise business plans, directions and goals.
- 4.4 Systems and procedures are reviewed to facilitate the achievement of enterprise plans and goals.
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REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge required for this unit. Where bold italicised text is used, further information is detailed in the Range Statement.

- Analyse enterprise forecasts for orders, livestock and raw material availability and prices, and determine the operational requirements to achieve enterprise goals.
- Analyse performance data to determine achievement of profit, productivity and other targets.
- Analyse the implications of blockages or stoppages (eg breakdowns, no stock or materials, staff shortages) at particular points in the process flow, including up stream and down stream effects and costs.
- Apply methods and theories of workplace or work team organisation and job design, and review to enterprise operations.
- Apply relevant *communication* skills.
- Apply scheduling techniques and principles to enterprise operations.
- Assess current operational capability to achieve enterprise goals. This requires an analysis of current technology and configurations and mixes of personnel and processes, and a review of procedures to identify any gaps or shortfalls in capability of resources.
- Consult, collaborate and negotiate with personnel from all levels and areas of the plant.
- Demonstrate ability to maintain currency of knowledge through independent research and/or professional development.
- Describe the enterprise's *scope of operations*.
- Develop action plans to implement changes to improve performance.
- Evaluate and recommend strategies for achieving enterprise goals and *forecasts*. This requires assessment of alternative configurations/mixes of personnel, processes and work organisation structures. It also requires calculating the impact changes in operations have on the productivity of the enterprise/department and the preparation of resource proposals.
- Evaluate the costs, benefits, consequences and implications of adopting alternative risk management strategies and make recommendations to senior management.
- Identify and apply relevant *OH&S* and *workplace requirements*.
- Identify enterprise budget planning and management processes and cycles.
- Identify *regulatory requirements* affecting enterprise operations.
- Identify the potential impact of operational changes on personnel and develop strategies to minimise negative effects on individuals, the team and enterprise operations.

- Manage operations for area of responsibility. This includes developing operational strategies and schedules in response to short, medium and long term forecasts and plans for the enterprise; obtaining and scheduling required resources including raw materials, personnel, equipment, refrigeration, storage and transport; and monitoring product or process flow.
- Maximise value of enterprise operations. This includes identifying opportunities for gaining commercial value from co- and *by-products*, evaluating relative returns on enterprise products to determine overall impact on profitability, controlling waste and energy consumption.
- Minimise workplace conflict and build positive relationships using consultation, negotiation and problem-solving strategies.
- Monitor enterprise performance. This includes developing productivity and operational performance measures for enterprise operations, linking monitoring systems to quality requirements and performance measures, interpreting performance information and taking/authorising corrective action.
- Outline enterprise directions, goals and ethical standards and analyse the implications for enterprise operations.
- Outline the factors which affect the productivity of the enterprise including workforce costs, capital investment, materials, waste and overheads.
- Prepare and monitor operational budgets. This requires the identification of operational cost components, calculation of resource requirements, calculation of cost per unit of finished product (eg cost per kilogram dressed weight, processed weight), monitoring of costs, taking action to adjust budget variations, including budget requirements and projections in enterprise financial planning.
- Prepare contingency plans to minimise disruption to production.
- Present reports according to legal and enterprise requirements.
- Research and evaluate available technologies and systems for suitability for enterprise products and directions or plans.
- Take action to improve own work practice as a result of feedback from others, self-evaluation, or in response to changed work practices organisation or technology.
- Use detailed product knowledge to describe the processing or production requirements necessary to maintain the quality of enterprise products (eg handling, processing methods, equipment, storage for different species and breeds).
- Use *mathematical skills* to analyse performance relating to costs, waste, production levels, yields.
- Utilise available information and communications technology, eg productivity analysis and scheduling software.

RANGE STATEMENT

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments within the meat industry and situations that may affect performance. This includes 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. Bold italics wording in the Elements and Performance Criteria, and Required Skills and Knowledge, is detailed below.

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- Industry context** includes:
- cost centres or departments operating semi-autonomously within guidelines of the parent enterprise or company, eg retail meat departments, boning rooms, food service and meat retail
 - domestic and export establishments
 - medium and large enterprises.
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- Forecasting** methods may be:
- qualitative and include market research, customer surveys, executive team consensus, sales staff information and feedback
 - quantitative and include long range data from internal and external sources, statistical analysis methods of linear regression, moving averages, weighted moving averages, trend analysis.
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- And may include data relating to:
- livestock from contacts or cattle markets
 - manpower availability
 - prices, exchange rates, inflation
 - sales, consumption patterns
 - seasonality, cycles, growth patterns
 - other factors.
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- Operational budgets** and expenditure may include:
- asset management
 - capital expenditure
 - environmental management
 - equipment and technology
 - livestock, raw materials and ingredients, packaging and other supplies
 - replacement, repair and maintenance
 - risk management strategies
 - staffing levels
 - utilities.
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Operational budgets may be developed using activity based costing approaches, limited input approaches or global budget approaches.

- Resources** to support operations may include:
- administrative systems and procedures
 - buildings, plant and equipment, technology, energy and water supply
 - financial resources
 - human resources
 - stock ingredients and materials.
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- Enterprise **systems and technologies** include:
- customer service
 - food safety
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- production, processing, manufacturing or preparation
 - quality
 - resources, eg personnel, finances
 - waste and environmental management
 - workplace safety.
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- Stakeholders*** may include:
- company owners, directors, shareholders, financiers
 - competitors
 - management and employees
 - suppliers, customers, consumers
 - unions and employer associations.
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- Communication*** may:
- be formal or informal and involve face-to-face and technological or electronic methods
 - be with culturally, ethnically and socially diverse individuals and groups
 - involve the preparation of reports which may be complex, contain information from a range of technical sources and include mathematical and graphic information and data
 - require reading and interpreting workplace related documentation
 - occur in a variety of sensitive, conflictive, collaborative and supportive environments
 - require analysis and presentation of complex concepts, technical information, mathematical information and other data in simple or complex formats
 - require persuasion, negotiation and assertiveness skills.
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Scope of operations may include interactions with producers and suppliers, meat processing, further processing including smallgoods manufacture, food service operations and wholesale and retail operations, storage, transport and distribution, and customers.

- OH&S requirements*** may include:
- enterprise OH&S policies, procedures and programs
 - hygiene and sanitation requirements
 - OH&S legal requirements
 - Personal Protective Equipment (PPE) which may include:
 - coat and apron
 - ear plugs or muffs
 - eye and facial protection
 - head-wear
 - lifting assistance
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- protective boot covers
 - protective hand and arm covering
 - protective head and hair covering
 - uniforms
 - waterproof clothing
 - work, safety or waterproof footwear

- requirements set out in standards, codes of practice etc.
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Workplace requirements may include:

- enterprise-specific requirements
 - OH&S requirements
 - Quality Assurance requirements
 - Standard Operating Procedures
 - the ability to perform the task to production requirements
 - work instructions.
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Regulatory requirements may include:

- animal welfare
 - commercial law including fair trading, trade practices
 - consumer law
 - corporate law, including registration, licensing, financial reporting
 - environmental sustainability and waste management
 - equal opportunity, anti-discrimination and sexual harassment
 - Export Control Act
 - industrial awards, agreements
 - relevant regulations
 - state regulations regarding meat processing
 - taxation.
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By-products include:

- fellmongery skins and hide processing
 - food ingredients and processing, eg gelatins
 - pharmaceutical and medical products, eg valves, organs, collection and processing of foetal blood
 - rendered products including meat meal, tallow etc.
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Mathematical skills may:

- be complex and relate to product and product quality, financial operations, personnel, operations, sales and turnover, exports, etc
 - relate to complex actual and hypothetical technical and financial modelling, calculations and interpretation or analysis.
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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 this Training Package.

Overview of assessment	<p>The meat industry has specific and clear requirements for evidence. A minimum of three forms of evidence is required to demonstrate competency in the meat industry. This is specifically designed to provide evidence that covers the demonstration in the workplace of all aspects of competency over time.</p> <p>These requirements are in addition to the requirements for valid, current, authentic and sufficient evidence.</p> <p>Three forms of evidence means three different kinds of evidence – not three pieces of the same kind. In practice it will mean that most of the unit is covered twice. This increases the legitimacy of the evidence.</p> <p>All assessment must be conducted against Australian meat industry standards and regulations.</p>
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Competency must be demonstrated through sustained performance over time, at an appropriate level of responsibility and authority under typical operating and production conditions for the enterprise.</p>
Context of and specific resources for assessment	<p>Resources may include:</p> <ul style="list-style-type: none">• a real work environment• relevant documentation such as:<ul style="list-style-type: none">— manufacturer’s instructions and operations manuals— regulatory requirements— workplace policy and procedures• relevant equipment and materials.
Method of assessment	<p>Recommended methods of assessment are:</p> <ul style="list-style-type: none">• a third party referee report of sustained performance at appropriate level of authority and responsibility• assignment focusing on understanding and application of principles and theory to workplace operations• workplace projects with focus on company environment and conditions. <p>Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender, or language backgrounds other than English. Language and literacy demands of the assessment task should not be higher than those of the work role.</p>

Guidance information for
assessment

Resource materials available from MINTRAC, telephone
1800 817 462.

AS/NZS ISO 9001:2000 Quality management systems
(www.saiglobal.com).

AS/NZS ISO 19011:2003 Guidelines for quality and/or
environmental management systems auditing
(www.saiglobal.com).

BSI Global (www.bsi-global.com/index.xalter) – develops
UK standards; certifies accredited management systems;
develops products to meet regulations.

International Organization for Standardization (www.iso.org).

Joint Accreditation System of Australia and New Zealand
(www.jas-anz.com.au) – accreditation body that certifies
management systems, products and personnel.

Juran Institute (www.juran.com) – ‘provides a wide range of
training and consulting services designed to improve overall
business performance and attain quality leadership’.

Meat and Livestock Australia (www.mla.com.au):

- *Energy Management Brochures* (1998)
- *Speaking a common language – CD* (2003) SCM 003.

Sashkin, M & Kiser, KJ 1993, *Putting Total Quality
Management to Work*, Berrett-Koehler Publishers, California.

Standards Australia (www.standards.org.au) – develops
Australian Standards.
