Australian Government

Department of Education, Employment and Workplace Relations

MTMPS5603C Develop, manage and maintain quality systems

Release: 1

ISC INDUSTRY SKILLS COUNCILS
Creating Australia's Future

MTMPS5603C Develop, manage and maintain quality systems

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the skills and knowledge required to establish, maintain and control an enterprise quality system. It also covers the skills and knowledge needed to lead people, manage systems and build quality into all enterprise systems and operations. The development and management of quality systems affects the ability of the enterprise to operate in specific markets and influences customer and consumer confidence in enterprise products.

Application of the Unit

Application of the unit	This unit is of particular interest to Quality Assurance (QA) managers and personnel, production managers and supervisors operating in a meat industry context. At this level individuals exercise considerable 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.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

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

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Establish *requirements of the quality system*	1.1. Policies expressing the organisation's commitment to the quality system and processes are developed. 1.2. Legislative requirements for enterprise quality systems are identified. 1.3. Scope and objectives of the quality system are determined, including links with all enterprise operations, customers, suppliers and contractors. 1.4. Quality performance standards, including customer and supplier service standards, are established consistent with the direction and goals of the enterprise. 1.5. Resource requirements are identified and included in financial, human resource and operational plans.
2. Design and prepare for the quality system	2.1. *Quality systems* are selected and designed to meet enterprise, customer and regulatory requirements. 2.2. Quality principles underpin all enterprise operations to achieve business goals and performance standards. 2.3. Responsibilities for development, implementation and operation of the system are clearly defined and communicated. 2.4. Personnel from all levels and areas of the organisation are involved in the development and implementation of the quality system. 2.5. *System components*, *procedures* and supporting *documentation* are developed and validated. 2.6. Consultative and communication strategies are developed to link the quality system with all aspects of enterprise operations. 2.7. Supplier or contractor service standards and *audit* requirements are determined and negotiated. 2.8. *Performance measures* and indicators are developed to measure performance against policies, goals and performance standards.
3. Implement and *monitor* the quality system	3.1. Implementation plan is prepared and resourced. 3.2. Training plans to provide personnel at all levels with quality concepts and skills are prepared and resourced. 3.3. Quality system requirements and customer focus are addressed in the establishment, operation and

ELEMENT	PERFORMANCE CRITERIA
	evaluation of all enterprise systems.
	3.4. Control and preventative action measures are identified and validated.
	3.5. Corrective action procedures are developed and monitored.
	3.6. Procedures for reporting, recording and responding to non-conformances and non-compliances are established.
	3.7. Customer and supplier service standards are monitored and documented.
	3.8. Quality data is collected and analysed, and implications reported.
	3.9. Quality costs and performance are monitored.
	3.10. Quality system is prepared for external review and approval by relevant authorities.
4. Continuously improve the quality system	4.1. Impacts of the quality system on enterprise operations are monitored and reviewed.
	4.2. Responses to customer complaints and requests are resolved and used to improve the system.
	4.3. Procedures for the ongoing identification and resolution of issues are established.
	4.4. Quality system is updated for changes in process, technical information, customer and regulatory requirements.
	4.5. *Stakeholders* are included in decision making and continuous improvement processes and strategies.
	4.6. Quality results, findings and conclusions are fed into improvement processes.
	4.7. Costs and benefits of the quality system are analysed.
	4.8. Quality goals and targets are continuously reviewed.
5. *Communicate quality outcomes*	5.1. *Certification* of product and processes consistent with quality outcomes is completed according to customer and regulatory requirements.
	5.2. Regulatory authorities and agencies are promptly notified of breaches and non-compliance incidents.
	5.3. Quality outcomes are used to promote public confidence in enterprise products and services.

AgriFood Skills Australia

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
Ability to: • analyse complex *statistical data* and prepare corrective responses to non-conformances and variations identified in the data, relevant to enterprise quality systems and operations • apply *quality* concepts and *tools* to problem solving and the development of quality data collection, *data management systems* and analysis strategies • apply substantial product and process knowledge to the development of the quality system and the *interpretation* of quality data • apply relevant *communication* and *mathematical skills* • communicate quality goals, requirements and findings to stakeholders in formats and styles appropriate to the context and purpose • develop quality policies for the enterprise in consultation with senior management and other stakeholders • develop consultative and feedback procedures and opportunities for identification and resolution of quality issues and problems • develop continuous improvement processes and team building using the 'plan, do, check, act cycle' • consult, negotiate with and report to regulatory authorities openly and promptly, consistent with enterprise ethical standards, including the notification of breaches and the preparation of non-compliance reports • develop workforce commitment, capability and responsibility for the quality system, including identifying, negotiating and scheduling training, inclusion of responsibilities and duties relating to quality system implementation and integration in all job descriptions and work instructions, clear communication of responsibilities and requirements, delegation of tasks and responsibilities and inclusion of the workforce in consultative and continuous improvement processes • ensure the quality system meets legislative and *regulatory requirements* • exercise judgement, pragmatism and quality knowledge in the management and resolution of quality issues and problems • identify and apply relevant *Occupational Health and Safety* (*OH&S*) and *workplace requirements* • identify appropriate *monitoring systems* and strategies to support the enterprise quality system • identify, research and update sources of quality information and advice, including technical and regulatory information to support enterprise quality system • lead personnel (e.g. Hazard Analysis Critical Control Point (HACCP) team, management, quality team, meat inspection team, laboratory, maintenance teams, processors and operators) in the implementation and improvement of the quality

REQUIRED SKILLS AND KNOWLEDGE

system
- monitor and analyse the *costs* of the quality system, including prevention costs, appraisal costs, total quality costs and failure costs
- monitor and certify processes and product to meet *third -party* requirements (e.g. importing country, public health requirements and customers)
- oversee *audit processes* (internal and external), act on audit findings and provide feedback to personnel for improvement of the system
- oversee the preparation for third party certification (where appropriate)
- plan and resource the enterprise training strategy, consistent with regulatory requirements, to assist personnel at all levels in the implementation of the quality system
- prepare and sign off quality policies, manuals and documentation for the enterprise, including the preparation and updating of preventative, corrective and responsive procedures and strategies, supplier criteria and specifications, supplier and contractor audit requirements
- prepare quality implementation plans, identifying goals, key personnel and areas, resources, strategies, timelines and milestones
- present reports according to legal and enterprise requirements
- resolve customer complaints promptly and provide corrective action responses
- use appropriate questioning, observation, listening and recording skills in the collection and monitoring of quality data
- where quality systems are based on HACCP principles or Good Manufacturing Practice (GMP), explain these principles and the implications for the enterprise quality system.

Required knowledge

Knowledge of:

- key concepts, philosophies and tools of quality management
- management and organisational structure of the enterprise and its impact on enterprise systems
- the role audits play in a quality system
- documentation requirements of the quality system, including levels, and their roles in the functioning of the system, including the requirement for effective and secure quality record keeping systems
- enterprise goals and directions and their implications for the quality system
- *process capability*
- applicable quality standards, regulations, codes, legislation and customer requirements for the quality system and explain the implications for the enterprise
- legal requirements for the establishment and maintenance of the enterprise QA system including responsibilities for reporting breaches to authorities and implementing audit findings
- principles and functions of hazard analysis and control, validation, including

REQUIRED SKILLS AND KNOWLEDGE

auditing, and verification in quality systems.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	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. These requirements are in addition to the requirements for valid, current, authentic and sufficient evidence. 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. All assessment must be conducted against Australian meat industry standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	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.

Context of and specific resources for assessment	Resources may include:
	
	• a real work environment
	• customer specifications
	• establishment's quality system, performance data
	• relevant documentation, such as:
	   • manufacturer instructions or operations manuals
	   • manufacturer requirements
	   • regulatory requirements
	   • workplace policy and procedures
	• relevant equipment and materials.

Method of assessment	Recommended methods of assessment include: • third party referee report of sustained performance at an appropriate level of authority and responsibility

AgriFood Skills Australia

EVIDENCE GUIDE	
	• assignment focusing on understanding and application of principles and theory to workplace operations • workplace projects which focus on the company environment and conditions. Assessment practices should take into account any relevant language or cultural issues related to Aboriginality or Torres Strait Islander, 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.
Guidance information for assessment	A current list of resources for this unit of competency is available from MINTRAC www.mintrac.com.au or telephone 1800 817 462.

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. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

| *Requirements of the quality system* may include: | • control of documents, data and quality records
• coverage of contracts, purchasing, supply, processing, handling, storage, packaging, preservation, storage and delivery of meat and meat products
• definition of management responsibilities
• design and process controls
• inspecting and testing, control of non-conforming product, preventative and corrective action, and auditing
• management of links and impacts on all systems within the enterprise
• production identification and traceability |

RANGE STATEMENT

	• training.
Quality systems may include:	• Australian, and Australian and New Zealand standards • food and meat safety • industry specific standards • international standards (e.g. ISO 9000 series) • Meat Safety Enhancement Program (MSEP) • Meat Safety Quality Assurance (MSQA) • Personal Qualities Assessment (PQA) • trade description and certification systems.
Systems components and procedures include:	• correction (e.g. disposition, corrective action, liability management and customer complaint resolution) • prevention (e.g. training, operator feedback, manuals, technology and equipment reliability and maintenance, statistical collection and information, supplier QA, Standard Operating Procedures (SOPs) and work instructions).
Where the quality system relates to food safety, relevant *documentation* may include:	• amendment registers • Critical Control Points (CCP) monitoring forms and additional monitoring requirements and supporting programs • critical control point work instructions • HACCP audit table • HACCP team register, product description and use • process flow charts, factory floor plan and hazard analysis table • schedules relating to hygiene, cleaning and sanitation procedures, work instructions, approved chemicals, calibration, pest control, training, and product identification and recall.
Audits of performance may include:	• compliance with regulatory requirements • external reviewers • human resource performance • QA, including meat and food safety • safety, energy and environment.
Performance measures for the total quality cost may include:	• quality cost per kg of product • quality cost per dollar of direct production costs.
Monitoring and analysis may be:	• periodic (e.g. hourly, daily and weekly)

AgriFood Skills Australia

RANGE STATEMENT

	• in real time (electronically).
Stakeholders may include:	• company owners, directors, shareholders and financiers • competitors • management and employees • suppliers, customers and consumers • unions and employer associations.
Systems for the *communication of quality outcomes* may include:	• development of quality teams • newsletters, bulletins and awards • problem-solving teams and sessions • quality meetings or circles • training.
Certification may include:	• AUS-MEAT certification • importing country requirements • Meat Standards Australia (MSA) certification • State, territory or public health requirements.
Statistical data analysis may include:	• correlation and regression analysis, bi-variate and multi-variate analysis • distribution • estimating and hypothesis testing • management • probability and statistical inference • process stability, capability and management • reliability planning • sampling • statistical process control requirements and charting applications • variations and variation monitoring.
Quality tools may include:	• cause and effect and fish bone diagrams • control charts • data points • flow charts • histograms • prioritisation matrices • process improvement models • process capability • pareto charts • team structures.
Data management systems may be manual or computerised, cover	• bar coding, identification, tagging and traceback systems

AgriFood Skills Australia

RANGE STATEMENT	
data collection, data monitoring and data analysis and interpretation, and may include:	• calculators • charting and graphing materials • computer software packages (e.g. spreadsheets and statistical analysis packages) • computerised equipment • manual measuring equipment (e.g. thermometers, pressure gauges and scales) • monitoring sheets and records.
Data analysis and *interpretation* may include:	• Acceptable Quality Level (AQLs) • Chemical Lean (CL) levels • microbiological analysis (e.g. Total Viable Counts (TVC) and e-coli counts) • process capability analysis • process variation analysis • product monitoring • statistical process control • temperature (e.g. cooling and chilling rates).
Communication may:	• be with culturally, ethnically and socially diverse individuals and groups • involve information and communications technology (e.g. databases, internet search and e-commerce services) • occur in a variety of sensitive, conflictive, collaborative and supportive environments • be formal or informal and involve face to face, technological and electronic methods • require analysis and presentation of complex concepts, technical information, mathematical information and other data in simple or complex formats • require preparation of reports which may be complex, contain information from a range of technical sources and include mathematical and graphic information and data.

Mathematical skills may relate to:	• complex actual and hypothetical technical and financial modelling
	• calculations and interpretation and analysis
	• mathematical information, such as:
	   • product and product quality
	   • financial operations
	   • personnel

AgriFood Skills Australia

RANGE STATEMENT

	• operations • sales and turnover • exports.
Regulatory requirements may include:	• animal welfare • commercial law, including fair trading and trade practices • consumer law • corporate law, including registration, licensing and financial reporting • environmental and waste management • Equal Employment Opportunity (EEO), anti-discrimination and sexual harassment • Export Control Act • hygiene and sanitation requirements • industrial awards and agreements • relevant regulations • state and territory regulations regarding meat processing • taxation.

OHS requirements may include:	• enterprise OH&S policies, procedures and programs
	• OH&S legal requirements
	• Personal Protective Equipment (PPE):
	   • coats and aprons
	   • ear plugs or muffs
	   • eye and facial protection
	   • head-wear
	   • lifting assistance
	   • mesh aprons
	   • 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 and codes of practice.

Workplace requirements may include:	• enterprise-specific requirements • OH&S requirements

AgriFood Skills Australia

RANGE STATEMENT

	• QA requirements • Standard Operating Procedures (SOPs) • the ability to perform the task to production requirements • work instructions.
Monitoring systems and strategies may include:	• audits and reviews • feedback from stakeholders • inspection and testing procedures and regimes, including chemical and microbiological testing procedures, for validation and verification • statistical collection and analysis.
Quality *costs* include:	• appraisal (e.g. design appraisal, inspection, depreciation of quality equipment, process control and end product testing) • failure (e.g. scrap and waste, reinspection or retesting, disposal, down time, product downgrading, product liability, loss of custom, returned product and complaints) • prevention (e.g. training, auditing, process control engineering, testing, reporting and recall systems).
Third-party certification may include:	• Australian Quarantine Inspection Service (AQIS) accountabilities and inspection stamps/seals • customer requirements and specifications, including importing country requirements • licensing or registration requirements • national or international quality endorsement • product description and certification.
Audit processes include:	• planning • establishing controls • developing the team • conducting entry/exit meetings • controlling caucus meetings • issuing corrective action requests • preparing reports • giving feedback and input into the improvement of the system.
Process capability includes:	• operational capability (e.g. resources, risks, opportunities and commitments) • technical capability (e.g. personnel,

AgriFood Skills Australia

RANGE STATEMENT	
	equipment, systems and suppliers).

Unit Sector(s)

Unit sector	

Co-requisite units

Co-requisite units		

Competency field

Competency field	

AgriFood Skills Australia