



Australian Government

Department of Education, Employment and Workplace Relations

MSL933002A Contribute to the achievement of quality objectives

Revision Number: 1

MSL933002A Contribute to the achievement of quality objectives

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the development of a working knowledge of quality principles and their application in laboratory/field work.
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Application of the Unit

Application of the unit	<p>This unit of competency is applicable to samplers/testers, production operators and laboratory/field assistants working in all industry sectors. These personnel have defined roles and responsibilities within the enterprise's quality system which are set out in quality manuals and workplace procedures.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Apply quality control procedures	1.1. Record data for quality control purposes 1.2. Recognise and report non-conformances in keeping with job role and quality procedures
2. Contribute to quality improvements	2.1. Review own work practices for opportunities to continuously improve performance 2.2. Identify and report opportunities for improvements in procedures, processes and equipment in work area
3. Maintain commitment to enterprise quality standards in own work	3.1. Maintain an objective of 'right first time' 3.2. Conduct work in accordance with sustainable energy work practices 3.3. Minimise waste and rework in accordance with enterprise guidelines 3.4. Demonstrate 'job ownership' for whole tasks through a commitment to finish and follow-up 3.5. Ensure that personal actions conform with the code of ethics relevant to the workplace
4. Assist in maintaining customer relationships	4.1. Demonstrate an understanding of the business goals, products and services of the enterprise when dealing with customers in relation to own function 4.2. Communicate appropriately with customers in keeping with knowledge and authority limitations and quality requirements
5. Update knowledge and skills as required	5.1. Recognise own strengths and limitations and take advantage of opportunities for skill development

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- applying the required quality control procedures
- providing quality products and services to customers consistent with the job role
- resolving simple customer requirements
- minimising waste and rework
- contributing to improvements in productivity and quality through teamwork and commitment to personal work standards

Required knowledge

Required knowledge includes:

- concepts of metrology
- continuous improvement and waste minimisation principles
- enterprise procedures associated with the candidate's regular technical duties
- layout of the enterprise, divisions and laboratory
- lines of communication
- organisational structure of the enterprise
- products and services provided by the enterprise
- quality requirements of the candidate's job role and functions
- recording, reporting and document control requirements
- relevant health, safety and environment requirements
- role of internal and external audits
- role of laboratory services to the enterprise and customers
- scheduling of tests and procedures to meet customer requirements

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

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors should ensure that candidates can:

- apply the required quality control principles and procedures to their work
- contribute to improvements in productivity and quality
- maintain their personal commitment to quality objectives.

Context of and specific resources for assessment

This unit of competency is to be assessed in the workplace or simulated workplace environment.

This unit of competency may be assessed with:

- *MSL913001A Communicate with other people*
- technical units of competency dealing with sampling and testing.

Resources may include:

- enterprise quality manual and procedures
- standard operating procedures (SOPs).

Method of assessment

The following assessment methods are suggested:

- review of quality control data collected by the candidate
- review of quality improvements suggested by the candidate
- feedback from supervisors and peers
- oral or written questions about quality concepts and enterprise procedures
- flow charts or diagrams prepared by the candidate to describe work flows and workplace layout (alternatively, the candidate could explain existing charts or diagrams).

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly.

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	<p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.</p>
This competency in practice	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and show its relevance in a workplace setting.</p> <p>Manufacturing</p> <p>Laboratory assistants must have a good working knowledge of quality control procedures and how they contribute to the achievement of enterprise quality objectives. An assistant was measuring the moisture content of coke by a standard method. The SOP for this test stated that the limits for moisture should be between 2% and 5% by weight. The assistant obtained a result of 5.8%. The assistant had followed the SOP correctly and performed the determination in triplicate and had confidence in the precision of the result. The assistant recognised and reported the non-conformance to the laboratory supervisor. The production manager took corrective action and modified the drying process to reduce the moisture content and provide a product which met the customer's requirements.</p> <p>Biomedical</p> <p>A laboratory assistant working in the pathology department of a rural hospital was responsible for serum lithium estimations by flame photometry. When asked by the office staff when the lithium results would be ready, the assistant replied that the testing schedule of the laboratory meant that the test would not be done until the following week and asked why the office staff needed to know. The answer was that an outpatient clinic was being held, and the results were needed for a consultation. Although samples were often taken a week before the clinic was to be held, the assistant realised that results were not always ready for the clinic because of</p>

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the testing schedule of the laboratory. The assistant reported the situation to the laboratory supervisor. The supervisor rescheduled lithium testing to match the clinic times, so that results would always be ready for the clinic consultation. This pleased the clinic staff, the patient did not waste a visit, the office staff no longer got irate phone calls and the quality of service was improved overall.

Food processing

A fruit processing company produced many tonnes of solid vegetable waste annually. This was dumped as landfill at considerable cost and the local council was concerned that the method of disposal was not sustainable. The laboratory assistants at the company were included in a quality improvement team to investigate the problem. The team concentrated on alternative production methods to minimise waste yields and additional production methods that would enable the waste to be profitably utilised. They identified four potential uses of the waste: a source of pectin, alcohol and sugar and conversion of raw fruit peel to glazed peel.

A cost-benefit analysis was performed in consultation with supporting industries, including a local winery to assess the merits of these value adding activities. The outcome was that the amount of waste produced by the company was significantly reduced with much of the waste channelled into marketable products with full cost recovery. After some initial doubts, the laboratory personnel realised that they were able to make useful contributions to the project. As a result, they became part of an ongoing investigation of waste minimisation and value adding practices.

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.

Codes of practice

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

Standards, codes, procedures and/or enterprise requirements

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards, such as:
 - AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
 - AS/NZS ISO 9000 Set:2008 Quality management systems set
- Australia New Zealand Food Standards (ANZFS) Code
- Australian code of good manufacturing practice for medicinal products (GMP)
- customer specific requirements/standards
- National Association of Testing Authorities (NATA) Accreditation programs requirements
- principles of good laboratory practice (GLP)
- Therapeutic Goods Regulations 1009

Quality control procedures

Quality control procedures may include:

- standards imposed by regulatory and licensing bodies
- enterprise quality procedures
- working to a customer brief and associated quality procedures
- checklists to monitor job progress against agreed time, costs and quality standards
- the use of hold points to evaluate conformance
- the use of inspection and test plans to check compliance

Concepts of metrology

Concepts of metrology may include:

RANGE STATEMENT	
	<ul style="list-style-type: none"> • that all measurements are estimates • measurements belong to a population of measurements of the measured parameters • repeatability • precision • accuracy • significant figures • sources of error • uncertainty • traceability
Sustainable energy principles and work practices	<p>Sustainable energy principles and work practices may include:</p> <ul style="list-style-type: none"> • examining work practices that use excessive electricity • switching off equipment when not in use • regularly cleaning filters • insulating rooms and buildings to reduce energy use • recycling and reusing materials wherever practicable • minimising process waste
Reporting	<p>Reporting may involve:</p> <ul style="list-style-type: none"> • verbal responses • data entry into laboratory information management system (LIMS) or enterprise databases • brief written reports using enterprise proformas
Quality improvement opportunities	<p>Quality improvement opportunities that relate to the work of laboratory assistants could include:</p> <ul style="list-style-type: none"> • improved methods for sampling, testing and recording data • improved hygiene and sanitation procedures • minimisation of waste and rework • improved laboratory layout and work flow
Occupational health and safety (OHS) and environmental management requirements	<p>OHS and environmental management requirements:</p> <ul style="list-style-type: none"> • all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through

RANGE STATEMENT

	<p>state/territory or federal legislation - these requirements must not be compromised at any time</p> <ul style="list-style-type: none"> • all operations assume the potentially hazardous nature of samples and require standard precautions to be applied • where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health
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Unit Sector(s)

Unit sector	Maintenance
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		