



Australian Government

MSL975032 Provide input to production trials

Release: 1

MSL975032 Provide input to production trials

Modification History

Release	Comments
Release 1	This version was released in <i>MSL Laboratory Operations Training Package Release 2.0</i>. Supersedes and equivalent to <i>MSL975012 Provide input to production trials</i>. Prerequisites removed. Range of conditions removed. Assessment requirements amended.

Application

This unit of competency describes the skills and knowledge to work closely with production personnel to conduct a routine trial to adjust formulations or develop products and processes following preliminary laboratory work. The unit covers monitoring critical process parameters, collecting and testing of samples, and analysing results. The unit does not cover the planning and management of the trial, development of product briefs or the troubleshooting of equipment and production processes.

This unit applies to laboratory technicians and technical officers working in the manufacturing, biotechnology, construction materials, pharmaceutical and food processing industry sectors. All operations must comply with relevant standards, appropriate procedures and/or workplace requirements.

No licensing or certification requirements exist at the time of publication. However, regulations and/or external accreditation requirements for laboratory operations exist, so local requirements should be checked. Relevant legislation, industry standards and codes of practice within Australia must also be applied.

Pre-requisite Unit

Nil

Competency Field

Testing

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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1 Prepare for the trial	1.1 Clarify trial objectives, specifications, documentation and reporting requirements 1.2 Identify the environmental, health, safety, and/or food safety hazards associated with the trial and the recommended control procedures 1.3 Determine the availability of resources and the need for any clearances, special safety and storage requirements 1.4 Review the recommended trial schedule to identify potential barriers/constraints and develop alternatives, as necessary 1.5 Communicate and confirm all laboratory requirements with plant operators and personnel in related work areas and functions
2 Participate in the trial	2.1 Reconfirm trial details with all relevant personnel 2.2 Identify any last minute changes and delays and make appropriate adjustments 2.3 Liaise closely with production personnel to conduct the trial safely and efficiently 2.4 Collect required product samples for laboratory analysis and/or reference 2.5 Monitor critical process parameters and record required data 2.6 Monitor data to identify problems, significant process variations and/or unacceptable product 2.7 Recommend changes to production processes as required 2.8 Leave plant in condition suitable for routine production to recommence
3 Assess and report	3.1 Arrange for, or conduct, testing of product samples to

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	trial outcomes		check specifications
		3.2	Analyse test results and relate properties of product samples to formulation details and processing methods
		3.3	Identify and investigate out-of-specification or unacceptable outcomes, as required
		3.4	Recommend possible modifications and/or opportunities for improvements within limits of role and responsibility
		3.5	Document and report trial outcomes in accordance with workplace procedures
4	Maintain a safe work environment	4.1	Use established safe work practices and personal protective equipment (PPE) to ensure personal safety and that of other personnel
		4.2	Minimise the generation of waste and environmental impacts
		4.3	Ensure the safe collection of laboratory and hazardous waste for subsequent disposal
		4.4	Care for and store equipment and reagents, as required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Equivalent to MSL975012 Provide input to production trials, Release 1.

Links

Training Package Companion Volumes -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>

Assessment Requirements for MSL975032 Provide input to production trials

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- safely and effectively conducting 2 different, routine production trials to adjust formulations or develop products and processes.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- terminology, principles and concepts relevant to the trial
- trial objectives, timelines, laboratory trial requirements, documentation and reporting requirements
- recipes and formulations, technical specifications and quality parameters for trial products
- effect on product properties of variations in recipes and formulations
- expected nature and condition of materials at each process stage
- causes and remedies for common processing problems associated with trial products
- product properties, process stages and unit operations involved in trials
- typical trial specifications
- sampling and test methods for trial products
- principles and purpose of test methods implemented (why they are used and what they demonstrate)
- technological advances that include automation
- awareness of environmental sustainability issues as they relate to the work task
- legal, ethical and work health and safety (WHS) requirements specific to the work task including traceability, confidentiality and security requirements of all client information, and laboratory data and records.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - access to operating plant or pilot plant for the duration of trials
 - workplace procedures for conducting production trials, sampling and testing
 - trial documentation, such as technical specifications, plant or production line layout, safety data sheets (SDS), trial request and result forms
 - sample containers and sampling equipment
 - test equipment, laboratory instruments and reagents.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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