



Australian Government

Assessment Requirements for MSL977004 Develop or adapt analyses and procedures

Release: 1

Assessment Requirements for MSL977004 Develop or adapt analyses and procedures

Modification History

Release 1. Supersedes and is equivalent to MSL977004A Develop or adapt analyses and procedures

Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- developing or adapting at least one (1) method of analysis and all related methods and procedures to meet workplace and regulatory requirements
- interpreting briefs to determine testing requirements
- preparing authorised development proposals, including gap/deficiency analysis, details of development requirements, timelines and proposed methods and procedures
- applying theoretical concepts and practical principles to develop or adapt methods and procedures to meet requirements
- researching alternative methods
- evaluating existing testing methods and procedures against new testing requirements
- trialling and validating methods and procedures
- applying method performance measures, such as accuracy, precision, uncertainty, linearity, selectivity, range, limit of detection and matrix characteristics
- generating, recording and reporting data in formats which assist procedure writing
- recommending modifications of existing methods and procedures or development of new methods and procedures based on sound principles
- preparing and/or updating analytical methods and procedures
- documenting and issuing approved new method/procedure in accordance with workplace procedures
- following workplace safety and environmental management procedures.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- concepts relating to method and procedure development, including:
 - determining and defining development objectives
 - relating chemical and physical characteristic of sample to possible assay methods
 - evaluating criteria to choose appropriate analytical method
 - sample clean-up and preparation techniques
 - preparation, set-up and calibration of testing equipment
 - choice of appropriate detection system ensuring accuracy/precision criteria are achieved
 - optimisation of analysis conditions
- criteria for choice of method/procedure, including:
 - economic factors
 - safety considerations
 - resource factors, including equipment and personnel
 - regulatory, accreditation and registration considerations
- detailed theoretical and practical basis of tests/analyses relevant to job role
- operating principles and practices and characteristics, capabilities and limitations of testing equipment used
- relative advantages and disadvantages of different testing methods
- procedures and requirements for method and procedure development, validation and approval
- workplace and regulatory testing requirements
- relevant hazards, work health and safety (WHS) and environment requirements.

Assessment Conditions

- Judgment of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event.
- This unit of competency is to be assessed in the workplace or a simulated workplace environment. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept in each case).
- This unit of competency may be assessed with:
 - MSL925002 Analyse measurements and estimate uncertainties
 - MSL977001 Contribute to the development of products and applications
 - MSL977002 Troubleshoot equipment and production processes
 - MSL977003 Contribute to validation of test methods
- Holistic assessment methods include:
 - review of documentation completed by the candidate that provides details of gap/deficiency analysis, authorised development proposal, research and evaluation of alternatives, recommendations, validation of method/procedure and relevant records (e.g. approval, issuing of method/procedure)
 - feedback from supervisors about the candidate's ability to develop or adapt methods and procedures to meet workplace and/or regulatory requirements and prepare all relevant documentation for approval
 - oral or written questioning covering concepts, principles and processes for selection and development of methods/procedures, technical aspects of method/procedure, and validation and approval procedures.
- Access is required to instruments, equipment, materials, workplace documentation, procedures and specifications associated with this unit, including, but not limited to:
 - a standard laboratory equipped with appropriate equipment, instruments, reagents, samples and test methods, and SOPs
 - online data search facilities.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competence and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience.
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR

- having consulted with a laboratory about performing the competency being assessed within the last twelve months.

Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>