



Australian Government

MSL975059 Supervise sampling, inspections and testing at construction sites

Release: 1

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Modification History

Release 1. Supersedes and equivalent to MSL975031 Supervise sampling, inspections and testing at construction sites. Minor changes to Performance Criteria. Minor changes to improve clarity and reduce duplication in Performance Evidence, Knowledge Evidence and Assessment Conditions.

Application

This unit of competency describes the skills and knowledge to supervise and direct the placement of materials, such as soil, concrete and asphalt, at a construction site. The unit involves confirming the requirements of the inspection and testing plans, liaising with site personnel, organising sampling and testing activities, collecting reliable data and reporting results. Personnel are also expected to interpret results in the field, provide reliable advice to construction personnel, and to recognise and rectify obvious errors or unexpected results.

This unit applies to technical officers working in the construction materials testing sector. This unit of competency is typically performed by experienced technicians or engineering paraprofessionals who often supervise or direct less experienced technical personnel.

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

MSL954007 Obtain representative samples in accordance with sampling plan

MSL973021 Conduct field-based acceptance tests for construction materials

Competency Field

Testing

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare for on-site operations	1.1 Identify the job, consult with the client and obtain required drawings, specifications and information about level of supervision required

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Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	1.2 Select equipment and materials required for the job 1.3 Identify site hazards and personal protective equipment (PPE) and safety procedures specified for job 1.4 Organise any required site induction for self and support personnel in accordance with workplace procedures 1.5 Record description of the job to be undertaken, compare with specification and resolve any variations 1.6 Select suitable transport for site access 1.7 Brief support personnel on job-specific requirements
2. Establish on-site operations	2.1 Determine methods of communication, roles, responsibilities and expectations of each party, and identify potential site problems, through consultation with site supervisor 2.2 Set up facilities for supervision, testing and sample storage in accordance with site procedures 2.3 Inspect the site to determine the job characteristics and survey control points 2.4 Design inspection, sampling and testing program in accordance with specifications
3. Supervise materials placement	3.1 Conduct inspection and direct sampling and testing in accordance with job requirements 3.2 Direct and advise site supervisor based on test results and observations 3.3 Record test data and observations in accordance with workplace practices 3.4 Follow procedures for sending any required samples to the base laboratory for testing 3.5 Clean equipment in manner that does not cause environmental damage 3.6 Supervise the removal of equipment and materials from site in accordance with site procedures
4. Analyse data and report to client	4.1 Report test results to site supervisor at specified intervals 4.2 Analyse data and provide reports to client in the agreed format and at agreed times
5. Maintain workplace	5.1 Ensure site results are documented in accordance with workplace

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records	practices 5.2 Maintain security and confidentiality of workplace information 5.3 Prepare and issue preliminary report or summary detailing supervision and testing undertaken
6. Promote a safe work environment	6.1 Promote the use of safe work procedures and protective equipment 6.2 Minimise environmental impacts of testing or sampling and generation of waste 6.3 Promote the collection and disposal of all waste in accordance with workplace procedures

Foundation Skills

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

- Numeracy skills to:
 - record and store reliable data, observations and project information
 - accurately interpret test results and observations
- Oral communication skills to:
 - provide timely advice for construction personnel
 - communicate effectively on operational issues and resolve site problems constructively with appropriate personnel
- Problem solving skills to recognise, troubleshoot and rectify obvious errors and unexpected results.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Supersedes and is equivalent to MSL975031 Supervise sampling, inspections and testing at construction sites.

Links

MSL Laboratory Operations Companion Volume Implementation Guide is available from VETNet - -

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

Assessment Requirements for MSL975059 Supervise sampling, inspections and testing at construction sites

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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:

- designed and effectively supervised at least 1 inspection, sampling and testing program in accordance with specifications and inspection and testing plans
- collaborated with the personnel at a construction site on at least 2 occasions.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principles of planning and project management
- identification and classification of construction materials
- engineering properties of civil construction materials relevant to different types of investigations or jobs
- techniques and plant and equipment used in civil construction relevant to job role
- principles and purpose of laboratory and in-situ test methods relevant to the job role (why they are used and what they demonstrate)
- roles and responsibilities for different levels of site supervision
- typical site problems and recommended corrective actions
- 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 construction sites and relevant site documentation

- workplace procedures, site plans, sampling and test methods/programs and equipment manuals
- sampling and testing equipment and consumables
- communication equipment
- safety equipment, including personal protective equipment.

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

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