



Australian Government

Assessment Requirements for MSL975051 Supervise geotechnical site investigations

Release: 1

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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 MSL975023 Supervise geotechnical site investigations. Changes to performance criteria. Range of conditions removed. Assessment requirements amended. Equivalent outcome.

Performance Evidence

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

- effectively supervised and directed at least 2 geotechnical site investigations.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- purposes and principles of geotechnical site investigations supervised and directed as part of job role
- principles of planning and project management
- identification and classification of materials
- engineering properties of soil and rock materials
- representative sampling and testing methods (both in situ and laboratory) conducted as part of geotechnical site investigations relevant to job role
- uses of engineering materials in civil construction
- civil construction techniques relevant to job role
- common site problems:
 - caving in of excavation walls
 - drilling difficulties
 - not knowing the requirements of the design engineer
 - not understanding the nature of the item being designed (e.g. retaining wall, piled structure and earthworks)
 - sample loss during retrieval
 - knowing when to stop a hole, or what and when to test and sample
 - misidentification of samples and sampling locations

- equipment breakdown and breakage
- environmental problems and issues, including site access, inclement weather, traffic, wildlife, vegetation and construction activities
- 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 geotechnical sites and relevant site documentation
 - workplace procedures, site plans, sampling and test methods/programs and equipment manuals
 - consumables; hand tools; field sampling and test equipment, such as dynamic cone penetration (DCP) testing, standard penetration testing (SPT), shear vane, pocket penetrometer and water level indicator, and sand replacement apparatus
 - levelling equipment (dumpy and automatic levels)
 - still/video camera, communication equipment
 - excavation equipment, such as hand and power augers, powered excavators, generators and jack hammers
 - safety clothing and equipment, including helmets, boots, gloves, earmuffs and glasses.

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

Links

Training Package Companion Volumes -

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