



Australian Government

**MSL974024 Undertake field-based,
remote-sensing monitoring**

Release: 1

MSL974024 Undertake field-based, remote-sensing monitoring

Modification History

Release	Comments
Release 1	<p>This version was released in <i>MSL Laboratory Operations Training Package Release 2.0</i>.</p> <p>Supersedes and equivalent to MSL974009 Undertake field-based, remote-sensing monitoring. Foundation skill information added. Range of conditions removed. Assessment requirements amended.</p>

Application

This unit of competency describes the skills and knowledge to organise and undertake defined field-based, remote-sensing monitoring activities. These may include assembling, setting up and checking appropriate monitoring equipment on-site, sampling, data collection and storage, equipment and system maintenance, and associated field testing and laboratory analysis. This unit of competency does not cover developing specific monitoring protocols or detailed design and/or construction of instruments, buildings, structures associated with the remote-sensing monitoring activities.

This unit applies to technical, field and environmental officers working in the environmental services, geotechnical, construction materials testing and mining industry sectors.

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.

- | | | | |
|---|----------------|-----|--|
| 1 | Confirm | 1.1 | Clarify the purpose, objectives and the preferred site for |
|---|----------------|-----|--|

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.
monitoring requirements with supervising staff		the remote-sensing activities
	1.2	Review all emergency and hazard/risk assessments, site safety and environmental requirements, and data quality procedures for the field activities
	1.3	Clarify details of all field parameters to be monitored and the preferred monitoring and data quality procedures
	1.4	Confirm final data formats will suit stakeholders who receive or use the data
	1.5	Clarify details of any statutory requirements that apply to the site and associated field activities
	1.6	Review existing remote-sensing monitoring protocols, and siting standards or associated in-house requirements which relate to the field activities
2 Assemble remote-sensing field monitoring system	2.1	Identify required instruments, equipment and consumables and associated maintenance and replacement procedures
	2.2	Identify site access, services and security requirements and any site constraints
	2.3	Complete all administrative requirements and obtain appropriate approvals
	2.4	Confirm required instrument calibration and data storage, handling and transfer systems
	2.5	Field-check site suitability for monitoring activities and define alternative sites as necessary
	2.6	Assemble remote-sensing monitoring system and check all components under laboratory conditions
3 Organise and establish the remote-sensing monitoring site	3.1	Identify, and confirm with senior staff, all resources required for operation of monitoring system in the field
	3.2	Confirm that all safety, emergency and risk assessment requirements and data quality procedures have been

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	correctly applied to the field activities
	3.3 Ensure correct packaging and transportation of equipment and instruments to defined field site
	3.4 Establish remote monitoring station
	3.5 Test operation of total system under field conditions
4 Operate and maintain monitoring site	4.1 Undertake regular or emergency inspections of the site according to set procedures
	4.2 Undertake calibration checks according to written instructions
	4.3 Inspect and maintain all instruments, equipment and data systems and organise replacement of defective items
	4.4 Perform all field and laboratory activities safely and with minimal impact on the environment
	4.5 Document all site visits and associated actions
	4.6 Review the total monitoring activity on a regular basis and implement any required modifications or improvements
5 Close down field monitoring activities	5.1 Confirm decision to close down site and finalise all data requirements with supervising staff
	5.2 Dismantle monitoring system and arrange checking, packaging and transportation of all equipment and instruments back to base
	5.3 Close down site in accordance with workplace and environmental requirements
	5.4 Hand back site and inform all relevant authorities
	5.5 Test, decontaminate, if required, and store all equipment appropriately
	5.6 Document all close-down actions

Foundation Skills

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

- Problem solving skills to respond effectively to changed or unforeseen circumstances
- Oral communication skills to effectively consult with clients face-to-face and by telephone and to effectively participate in meetings.

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

Unit Mapping Information

Equivalent to MSL974009 Undertake field-based, remote-sensing monitoring, Release 1.

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>