



Australian Government

MSS027024 Select, commission and maintain environmental monitoring instruments

Release: 1

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Modification History

Release 1. Unit code changed. Application changed. Performance criteria changed. Range of conditions removed. Assessment requirements changed. Supersedes and is equivalent to MSS027011 Select, commission and maintain environmental monitoring instruments.

Application

This unit describes the skills and knowledge required to provide fully functioning environmental monitoring instruments to implement a workplace's environmental management plan and monitoring programs. Personnel are required to identify the need for specific kinds of instruments, determine the suitability of available instruments, procure and commission instruments, check their serviceability and calibration, perform routine maintenance, train staff to operate instruments correctly and maintain relevant records.

This unit applies to environmental site coordinators, environmental managers and senior environmental officers working in all industry sectors. The term 'manager' is used to refer to management of a function, project and /or program and does not necessarily imply line management.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

Nil.

Competency Field

Environmental management

Unit Sector

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. Procure suitable instruments	1.1	Determine the types and specifications of instruments required by the workplace to implement the environmental management plan or monitoring program

	1.2	Research and read information about the features of suitable instruments and their suppliers
	1.3	Liaise with suppliers and conduct tests to compare the stated performance of available instruments against workplace specifications
	1.4	Seek assistance with evaluating instruments beyond own technical competence
	1.5	Select the most suitable instruments and arrange for their procurement
2. Commission new instruments	2.1	Read and interpret manufacturer documentation to determine instrument operation, functional test procedures, routine instrument checks and maintenance requirements
	2.2	Check the instrument is calibrated for intended use
	2.3	Conduct component checks and test measurements to confirm instrument performance for intended use
	2.4	Enter all required information about the new instrument in the workplace information management system
	2.5	Develop and document clear procedures for operating, caring for and maintaining the instrument
3. Train instrument operators	3.1	Identify the knowledge and skills required to operate the instrument safely and reliably in the workplace and to interpret the environmental parameters measured
	3.2	Write a training program for instrument operators using established adult learning principles
	3.3	Train each operator to use the instrument competently for the required measurement applications
	3.4	Record all training outcomes in accordance with regulator's requirements and workplace procedures
	3.5	Audit operator's use of instruments at regular intervals to ensure their ongoing competence
4. Maintain instruments fit for	4.1	Conduct regular instrument checks and minor maintenance in accordance with workplace procedures

purpose	4.2	Check instrument calibration using specified standards and procedures and record all required information
	4.3	Troubleshoot basic faults and determine whether local repair and maintenance is technically possible and economic
	4.4	Arrange for repairs and servicing in accordance with workplace procedures
	4.5	Check instrument performance after repairs and services before approving it for use
	4.6	Complete all required instrument records accurately and legibly and secure in accordance with workplace procedures

Foundation Skills

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

Range of Conditions

Unit Mapping Information

Supersedes and is equivalent to MSS027011 Select, commission and maintain environmental monitoring instruments.

Links

The MSS Sustainability Companion Volume Implementation Guides are available from VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS027024 Select, commission and maintain environmental monitoring instruments

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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:

- selected, commissioned and maintained at least 2 environmental monitoring instruments
- trained at least 2 operators to use a monitoring instrument correctly, safely and reliably.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- environmental monitoring terms and concepts, and measurement parameters used in job role
- workplace procedures and methods for conducting surveys, monitoring, sampling and in-situ measurements used in job role
- instrumentation terms and concepts, including operating voltage, accuracy, response time, sensitivity, detection limit, linearity and instrument uncertainty
- characteristics, capabilities, limitations, function of key components and operating principles for monitoring instruments used in the workplace
- role and importance of regular calibration and pre-use checks and maintenance
- common instrument faults, troubleshooting, recommended remedial actions and repairs
- common instrument operator errors
- adult learning principles
- instrument hazards, health, safety and workplace emergency response procedures.

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:
 - environmental management plan
 - environmental monitoring instruments, specifications and manuals
 - workplace procedures for procurement of equipment and materials
 - background information

- workplace information management systems.

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

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