



Australian Government

NWPCAD013 Conduct and report dam safety instrumentation monitoring

Release: 1

NWPCAD013 Conduct and report dam safety instrumentation monitoring

Modification History

Release 1. This is the first release of this unit of competency in the NWP National Water Training Package.

Application

This unit involves the skills and knowledge required to conduct and report dam safety instrumentation monitoring.

It includes planning, conducting and reporting dam safety instrumentation monitoring. It also includes implementing and reporting on the monitoring of instrumentation installed in dams to provide assurance of their ongoing safety.

This unit applies to those working as field and operational staff with responsibility for monitoring the safety of a dam and reporting faults or trends. Those undertaking this unit would work under appropriate supervision, while performing routine tasks in a limited range of familiar contexts.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

Catchment and Dams

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- | | |
|--|---|
| 1 Prepare for dam safety monitoring | 1.1 Identify workplace procedures and guidelines for dam safety monitoring |
| | 1.2 Identify and apply operational procedures determining the techniques, methods and equipment used for dam safety monitoring |
| | 1.3 Organise work activities according to workplace requirements and data collection equipment and methods |
| 2 Conduct dam safety monitoring | 2.1 Implement dam safety monitoring procedures and practices including unusual events |
| | 2.2 Ensure equipment is functioning and fit for purpose |
| | 2.3 Record dam instrumentation readings according to workplace procedures |
| | 2.4 Recognise and report monitoring data outside the expected range to relevant personnel |
| 3 Report on dam safety monitoring | 3.1 Add newly recorded information on dam behaviour to historical monitoring information |
| | 3.2 Prepare and submit monitoring instrumentation data |
| | 3.3 Report deviations outside approved limits including potential causes and make recommendations for follow up action |
| | 3.4 Report faulty monitoring equipment to relevant personnel |

Foundation Skills

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

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to NWPSOU029 Conduct and report dam safety instrumentation monitoring.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>

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Assessment Requirements for NWPCAD013 Conduct and report dam safety instrumentation monitoring

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and includes:

- collecting and processing data
- following instructions, operating procedures, policies and standards for dam safety monitoring and instrumentation
- identifying faults, changes and failure indicators
- inspecting and operating monitoring equipment and instruments
- interpreting a range of workplace documents
- preparing monitoring activity
- producing dam instrumentation monitoring reports
- reading and interpreting plans, drawings and charts
- recording and reporting monitoring and safety information
- reporting deviations and faults in equipment and data
- reporting on dam safety monitoring outcomes
- setting up relevant instrumentation
- using mathematical calculations to collect and process data on dam safety

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and includes knowledge of:

- dam safety performance indicators
- faulty equipment or instruments
- instructions for the operation of monitoring equipment
- principles of dam design and construction
- purpose of monitoring and instrumentation used and linkage to dam safety
- relationship between the impact of unusual events on dam safety and monitoring post event
- relationship of monitoring and causes of dam failures and incidents
- relevant legislation, regulations and workplace procedures
- requirements for installation of instruments and instrument failure
- statutory requirements and workplace procedures related to monitoring and reporting dam

safety

- types of instrumentation and their application
- WHS procedures related to dam monitoring

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

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.

Resources for assessment must include access to:

- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including legislation, regulations, codes of practice, workplace procedures and operation manuals.

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