



Australian Government

NWPCAD024 Implement dam safety plans

Release: 1

NWPCAD024 Implement dam safety plans

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 implement dam safety plans.

It includes planning, scheduling, implementing and reporting on dam safety surveillance.

This unit applies to those working as staff with a specific responsibility for managing the safety surveillance of large dams. Those undertaking this unit would work autonomously, usually with supervisory responsibilities, while performing complex tasks in a range of 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.

1 Prepare for dam safety surveillance

PERFORMANCE CRITERIA

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

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| 1.1 | Access and apply relevant legislation and documentation |
| 1.2 | Implement safety surveillance policies, plans and procedures |

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| | 1.3 | Access and interpret historical, design and operational information |
| | 1.4 | Assess and document dam behaviour and potential failure modes |
| | 1.5 | Determine instrumentation requirements and data collection methods |
| 2 | Implement dam safety surveillance plans | |
| | 2.1 | Inform stakeholders of policies and plans |
| | 2.2 | Develop inspection programs and implement inspection and monitoring procedures |
| | 2.3 | Communicate workplace procedures for the collection and recording of information to field staff |
| | 2.4 | Collate, process, validate, record and store data from instruments and personnel |
| | 2.5 | Review data and determine, record and evaluate structural, material and behavioural problems and report to relevant stakeholders |
| | 2.6 | Ensure dam safety emergency plans are current and regularly exercised |
| | 2.7 | Develop, resource and implement operational and maintenance plans |
| 3 | Complete safety surveillance reports | |
| | 3.1 | Prepare and distribute reports to meet dam owner, stakeholder and regulatory requirements |
| | 3.2 | Include recommendations for remedial action |
| | 3.3 | Undertake cost estimates and work schedules according to enterprise requirements |

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 NWPSOU026 Implement dam safety plans.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for NWPCAD024 Implement dam safety plans

Modification History

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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:

- analysing and processing data
- completing safety surveillance reports
- conducting dam safety emergency exercises
- implementing dam safety surveillance, operational and maintenance plans
- inspecting and operating instruments
- planning, scheduling, implementing and reporting on dam safety surveillance

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 include knowledge of:

- communication systems
- composition and behaviour structures
- construction procedures
- dam design principles
- maintenance and operational practices
- materials science
- methods to prepare cost estimates
- principles of dam surveillance
- principles of geomechanics
- principles of hydraulics and hydrology
- relevant legislation and workplace procedures
- relevant stakeholders
- risk management techniques

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.

Links

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