



**Australian Government**

**Assessment Requirements for NWPSOU025  
Inspect and report on embankment dam  
safety**

**Release: 1**

# Assessment Requirements for NWPSOU025 Inspect and report on embankment dam safety

## Modification History

Release	Comments
1	<p>These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages.</p> <ul style="list-style-type: none"><li>• Assessment Requirements created drawing upon specified assessment information from superseded unit</li></ul>

## Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- following instructions, standard operating procedures, policies and standards for embankment dam safety
- planning and organising work schedules and responses to contingencies
- communicating with engineering professionals, team members and the public on dam safety using clear and direct communication
- making mathematical calculations to collect and process data from dam inspections
- identifying embankment dam faults and failure indicators
- assessing the importance and urgency of deficiencies
- applying safety hazards protocols
- using digital photography and locational equipment
- reporting on embankment dam safety inspection
- interpreting and applying relevant organisational and regulatory information and requirements to the planning of inspection activities
- identifying inspection features and scheduling activities according to the required frequency
- conducting embankment dam inspection activities
- gathering and recording data
- identifying faults, changes and failure indicators
- reporting on inspection and monitoring outcomes, with recommendations for action

## Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- embankment dam types including:
  - concrete faced rock fill dams
  - elements, zones
  - risks and failure modes
- historic information and lessons from previous embankment dam incidents
- potential earthquake effects and damage
- properties of stored water
- embankment dam design and construction principles, including basic understanding of:
  - materials science (in particular soil and rock properties)
  - hydraulics and erosion by water
  - principles of filters, piping and embankment stability
  - treatment of foundations, grouting and drainage system
  - pore pressures
  - causes of cracks and settlement
  - dam performance history
  - principles of embankment dam inspection
- WHS and personal work site safety relevant to worksite and working with dams including working in confined spaces
- organisational policies, procedures, guidelines and requirements relevant to the work site and dam safety monitoring

## Assessment Conditions

Competency should be assessed in an actual workplace or in a simulated environment, with access to equipment and infrastructure appropriate to the outcome. Competency should be demonstrated over time to ensure the candidate is assessed across a variety of situations.

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

## Links

Companion Volume implementation guides are found in VETNet -

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

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