



Australian Government

Assessment Requirements for NWPSOU024 Inspect and report on concrete dam safety

Release: 1

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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"> Assessment Requirements created drawing upon specified assessment information from superseded unit

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.

- planning and organising work schedules and responses to contingencies
- communicating with engineering professionals, team members and the public on concrete dam safety using clear and direct communication and identifying and confirming monitoring requirements
- recording and reporting information and interpreting a range of workplace documents
- making mathematical calculations to collect and process data from dam inspections
- identifying concrete dam faults and failure indicators
- assessing the importance and urgency of deficiencies
- collecting and processing concrete dam observation information
- reading and interpreting plans, drawings and charts
- producing inspection reports
- identifying safety hazards and implementing safety protocols
- using digital photography and equipment for determining location
- interpreting and applying relevant organisational and regulatory information and requirements to the planning of safety monitoring activities
- identifying inspection features and scheduling activities according to the required frequency
- conducting concrete 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.

- concrete dam types, elements, and failure modes
- historic information and lessons from previous concrete dam incidents
- properties of stored water
- concrete dam design and construction principles, including:
 - materials science
 - hydraulics
 - aging of concrete
 - concrete technology
 - treatment of foundations, grouting and drainage systems
 - post tensioning principles
 - principles of gravity action
 - principles of arch action
 - principles of buttress action
 - principles of roller compacted concrete
- uplift pressures and drainage systems
- concrete dam faults and change indicators
- dam performance history
- principles of concrete dam inspection
- work health and safety and personal work site safety in procedures and worksite specific requirements
- 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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