



Australian Government

NWPSOU022 Monitor and control dam operations

Release: 1

NWPSOU022 Monitor and control dam operations

Modification History

Release	Comments
1	This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to NWP319A Monitor and control dam operations. • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice • PC 1.2 and 1.3 removed • One new PC added to Element 1

Application

This unit describes the skills required to prepare for and implement dam operation plans, including inspection and testing of dam safety mechanisms.

This unit applies to those working as field and operational staff with a specific responsibility for the operation of ungated dams.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would work under supervision while performing routine tasks in a limited range of familiar contexts.

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

Competency Field

Source

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the	Performance criteria describe the performance needed to demonstrate

essential outcomes	achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Plan and prepare for dam operation	1.1 Check and apply guidelines and regulatory requirements for dam operation to operation plans. 1.2 Prepare for dam operations.
2. Implement dam operation plans	2.1 Follow dam operation plans. 2.2 Inspect and test plant and equipment. 2.3 Test and record dam safety mechanisms.
3. Compile and process operation reports	3.1 Collect operational data from measurement instruments, inspections and team members. 3.2 Process, evaluate, validate, record and store operational data. 3.3 Record and report structural, material and/or equipment problems. 3.4 Recommend remedial action.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning NA					Reading					Writing					Oral communication					Numeracy				

Performance variables:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Unit Mapping Information

This unit supersedes and is equivalent to NWP319A Monitor and control dam operations.

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 NWPSOU022 Monitor and control dam operations

Modification History

Release	Comments
1	These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages. • 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.

- identifying and investigating operational, access or security problems
- conducting inspections
- implementing operational activities
- interpreting plans, drawings, instructions, standard operating procedures, policies and standards
- using equipment, tools, machinery and personal protective equipment
- identifying safety hazards
- preparing for and implementing dam operation plans
- operating dams
- interpreting technical documentation
- collecting and analysing technical information
- preparing required reports

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.

- properties of stored water
- basic dam design principles
- risks to dams
- lessons from dam incidents

- dam safety emergency operations
- dam security issues
- dam access issues
- dam operation principles
- basic materials science
- communication systems
- basic principles of hydraulics
- system layout
- environmental aspects of operation and maintenance
- lock out procedures for mechanical and electrical installations
- control systems
- equipment operation
- relevant utilities and service bodies
- hazardous materials handling
- effects of weather and conditions on bulkwater assets
- risk management techniques
- WHS
- organisational and statutory requirements

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.

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