



Australian Government

UEPOPS144 Undertake dam safety surveillance

Release: 1

UEPOPS144 Undertake dam safety surveillance

Modification History

Release 1. This is the first release of this unit of competency in the UEP Electricity Supply Industry – Generation Sector Training Package Release 2.0.

Application

This unit involves the skills and knowledge required to conduct ongoing surveillance of water storage facilities to ensure structural integrity and water quality is maintained.

Hydropower relies on water stored in dams to create electricity, therefore, the structural integrity of dams is essential to the smooth operation of hydro power generation systems and plant.

Competency in this unit requires the ability to plan and prepare for work, undertake dam safety surveillance, sample and record water quality, and complete work. Individuals will, in general, work as an operator, in a power generation facility.

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

Pre-requisite Unit

There are no prerequisite units

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan and prepare for work 1.1

PERFORMANCE CRITERIA

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

Work health and safety (WHS)/occupational health and safety (OHS) regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, environmental requirements and

	workplace procedures are identified, applied and monitored
	1.2 Work requirements are identified from relevant personnel and site inspection in accordance with workplace procedures
	1.3 Resources are obtained and inspected for compliance in accordance with workplace procedures
	1.4 Potential hazards are identified and risk control measures selected and implemented in accordance with workplace procedures
	1.5 Work is sequenced and prioritised in accordance with workplace procedures
2 Conduct dam safety surveillance	2.1 Surveillance of dam structures is conducted in accordance with workplace procedures
	2.2 Recordings of dam leakage are reported to relevant personnel and external authorities in accordance with workplace procedures
	2.3 Special inspections are undertaken following abnormal dam events in accordance with workplace procedures
3 Sample and record water quality	3.1 Water samples are collected using relevant equipment and techniques in accordance with workplace procedures
	3.2 Water testing is performed using laboratory and field equipment in accordance with workplace procedures
	3.3 Water test results are recorded and abnormal results communicated to relevant personnel in accordance with workplace procedures
4 Complete work	4.1 Documentation is updated in accordance with workplace procedures
	4.2 Test equipment and tools are maintained and stored in accordance with workplace procedures

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 UEP Electricity Supply Industry – Generation Sector Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS328 Undertake dam safety surveillance.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>

Assessment Requirements for UEPOPS144 Undertake dam safety surveillance

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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 two separate occasions and include:

- applying work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - emergency procedures
 - risk control measures
 - safe working practices
- communicating with personnel
- completing work
- identifying early warning signs and causes of dam failures
- implementing regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- planning and preparing for work
- recognising early warning signs and causes of dam failures
- sampling, testing and recording water quality
- selecting and utilising equipment and materials to perform work
- undertaking dam safety surveillance, including using associated equipment.

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:

- arrangements of hydroelectric generation plant
- dam types and characteristics
- early warning signs and causes of dam failures
- regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- water sampling collection and testing
- WHS/OHS requirements, including:
 - emergency procedures

- risk control measures
- safe working practices
- workplace documentation
- workplace policies and procedures.

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:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>