



Australian Government

UEPOPS328 Undertake dam safety surveillance

Release: 1

UEPOPS328 Undertake dam safety surveillance

Modification History

Release 1. This is the first release of this unit of competency in the UEP Generation Training Package.

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.

Note: Workplace practice

The application of the skills and knowledge described in this unit may require a licence or training permit to practice in the workplace where work is carried out on gas and electrical installations. Additional conditions may apply under state and territory legislative and regulatory licensing requirements.

Pre-requisite Unit

There are no prerequisite units.

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

1 Plan and prepare for work

- 1.1** Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations, legislative requirements, industry standards, codes of practice, manufacturers' specifications, environmental obligations and workplace procedures are identified, applied and monitored
- 1.2** Work requirements are identified from work order and are confirmed with appropriate personnel or by 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 are selected and implemented, in accordance with workplace procedures
- 1.5** Work is sequenced and prioritised, in accordance with workplace procedures and site requirements

2 Conduct dam safety surveillance

- 2.1** Surveillance of dam structures is conducted, in accordance with workplace procedures and guidelines
- 2.2** Recordings of dam leakage are reported to appropriate personnel and external authorities, in accordance with workplace procedures and legislative requirements
- 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 appropriate equipment and techniques, in accordance with workplace procedures
- 3.2** Water testing is performed using laboratory or field equipment, in accordance with workplace procedures
- 3.3** Water test results are recorded and abnormal results are communicated to appropriate 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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS328B 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 UEPOPS328 Undertake dam safety surveillance

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, performance criteria and range of conditions on at least two separate occasions and includes:

- 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 legislation, industry standards, codes of practice and regulations
- 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, performance criteria and range of conditions and includes knowledge of:

- dam types and characteristics
- early warning signs and causes of dam failures
- legislation, industry standards, codes of practice and regulations
- surveillance of hydroelectric dams and associated equipment
- typical arrangements of hydroelectric generation plant
- water sampling collection and testing
- WHS/OHS legislated requirements including:
 - emergency procedures

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

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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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.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

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 currently used in industry
- applicable documentation including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

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