



Australian Government

NWPGEN034 Operate and maintain flood warning sites

Release: 1

NWPGEN034 Operate and maintain flood warning sites

Modification History

Release 1. This is the first release of this unit of competency in the NWP National Water Training Package.

Application

The unit involves the skills and knowledge required to operate and maintain flood warning sites.

It includes preparing for site requirements, inspecting overall site conditions and testing equipment on site. It also includes undertaking onsite maintenance and completing documentation and reports.

This unit applies to those responsible for the operation and maintenance of flood warning sites.

Those undertaking this unit would work in small teams, autonomously or under supervision, while performing complex tasks in a broad range of contexts that could be unpredictable, including remote, confined spaces, near water and/or at heights.

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

Pre-requisite Unit

Not applicable.

Competency Field

General

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for site requirements

PERFORMANCE CRITERIA

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

1.1 Gather appropriate test and maintenance equipment required for flood warning site

- 1.2 Obtain and check personal protective equipment (PPE) relevant for site requirements
 - 1.3 Obtain and review historic recorded data from the remote warning site using relevant software as part of pre-visit function test
 - 1.4 Use relevant communications software, noting any abnormal readings requiring further investigation
 - 1.5 Complete relevant risk assessment applicable to work environment
 - 1.6 Comply with work health and safety (WHS) requirements according to relevant legislation and workplace procedures
 - 1.7 Arrange for traffic control, as required
 - 1.8 Prepare relevant reports from historical data, as required
- 2 **Inspect overall site conditions**
 - 2.1 Select, fit and use PPE and outlay signage according to site requirements
 - 2.2 Undertake a visual inspection and note observations and irregularities for remediation
 - 2.3 Complete site inspection forms with appropriate details, including digital photos
- 3 **Test equipment on site**
 - 3.1 Check independent water level, compare with instrument reading and take appropriate action, as required
 - 3.2 Perform routine maintenance, as required
 - 3.3 Complete onsite checklist for water level equipment
 - 3.4 Clean, test and calibrate rainfall equipment according to manufacturer instructions, as required
 - 3.5 Conduct test to ensure power supply is working within specified ranges and isolate power, as required
 - 3.6 Maintain and assess camera equipment, if applicable
 - 3.7 Check functionality of automatic warning systems, if applicable

4 Undertake onsite maintenance	4.1	Maintain area around onsite equipment according to workplace procedures
	4.2	Inspect site for structural integrity issues and organise for repairs, as required
5 Complete documentation and reports	5.1	Take pre- and post-photos of site to record as future evidence
	5.2	Complete checklists and record future maintenance according to workplace procedures
	5.3	Store reports and send to appropriate agencies, as required

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 NWP National Water Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This is a new unit. No equivalent unit.

Links

Companion Volume Implementation Guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>

Assessment Requirements for NWPGEN034 Operate and maintain flood warning sites

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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 one occasion and include:

- completing instrument maintenance and testing
- completing reports and sharing with relevant agencies
- completing work health and safety (WHS) preparation and risk assessments
- confirming correct operation of water level and rainfall equipment
- determining the correct personal protective equipment (PPE) for work requirements, including road safety signage
- identifying system components
- interpreting information from agencies, including relevant infrastructure standards purpose for flood warning sites
- reading datums and interpreting benchmarks
- testing and maintenance of direct current (DC) power supply
- using communication systems to interpret and determine work requirements.

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 includes knowledge of:

- asset ownership
- camera specifications
- datums and Australian Height Datum (AHD) benchmarks
- different designs of gauging stations
- different types of communication/telemetry systems
- different types of tipping bucket rain gauges
- different types of water level monitoring technologies
- electronic communication systems
- relevant information from agencies, including infrastructure standards purpose for flood warning sites
- relevant WHS legislation
- relevant workplace procedures

- traffic management signage.

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 suitable workplace operational situations. Where this is not appropriate, assessment must occur in suitable simulated workplace operational situations reflecting actual 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:

- relevant and appropriate materials, tools, facilities, equipment and PPE currently used in industry
- applicable relevant documentation, including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

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