



Australian Government

Department of Education, Employment and Workplace Relations

NWP229B Repair minor structures

Revision Number: 2

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Modification History

NWP229B Release 2: Layout adjusted. No changes to content.

NWP229B Release 1: Primary release.

Unit Descriptor

This unit of competency describes the outcomes required to construct and repair minor structural assets of the water industry, such as meter pits, erosion barriers and small weirs.

Application of the Unit

This unit supports the attainment of skills and knowledge required for field and operational staff with specific responsibility for ensuring that small structural assets are constructed and repaired in a safe and timely manner.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Where <i>bold italicised</i> text is used, further information is detailed in the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Plan and prepare repair work.	<ul style="list-style-type: none">1.1 Determine work requirements from plans, specifications and instructions.1.2 Select and check <i>formwork, materials and equipment</i> required to ensure that safety requirements of task and site are met.1.3 Select, fit and use personal protective equipment.1.4 Conduct appropriate utility location activities prior to excavation according to <i>legislative and organisational requirements</i>.1.5 Arrange appropriate site boundary protection according to organisational requirements.
2 Repair minor structures.	<ul style="list-style-type: none">2.1 Inspect structures and determine appropriate <i>repair techniques</i>.2.2 Apply appropriate repair techniques according to manufacturer guidelines and legislative and organisational requirements.
3 Complete and record work outcomes.	<ul style="list-style-type: none">3.1 Check, maintain and store equipment, tools and materials according to manufacturer guidelines and organisational procedures.3.2 Restore work site to meet environmental and organisational requirements.3.3 Complete workplace records and process as required.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

- undertake minor repairs to structures
- interpret plans, instructions and standard operating procedures
- follow procedures and standards
- use safety equipment and personal protective equipment
- use tools and machinery
- lay concrete
- insert water stop or seal
- identify hazards
- perform work-related calculations
- give and receive instructions
- work effectively as part of a team
- communicate with customers and other employees
- use literacy skills in regard to verbal and written communication in the workplace
- apply lock-out and tag-out procedures

Required knowledge:

- OHS procedures
- personal work site safety procedures
- construction calculations
- risk factors and potential hazards of minor structure construction and maintenance
- equipment operation
- formwork preparation and positioning
- methods of repairing concrete, brick and stone structures
- concrete placement techniques, including compaction
- water to cement ratio of concrete

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The candidate should demonstrate the ability to repair work on minor structural assets of the water industry including:

- planning and preparing work site
- performing repair tasks according to manufacturer specifications and organisational requirements
- checking work, restoring work site, storing equipment and completing documentation

Context of and specific resources for assessment

Access to the workplace and resources including:

- documentation that should normally be available in a water industry organisation
- relevant codes, standards and government regulations

Where applicable, physical resources should include equipment modified for people with disabilities.

Access must be provided to appropriate learning and assessment support when required.

Assessment processes and techniques must be culturally appropriate, and appropriate to the language and literacy capacity of the candidate and the work being performed.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice
- a decision of competence should only be made when the assessor has complete confidence in the person's competence over time and in various contexts
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence
- where assessment is for the purpose of recognition (RCC/RPL), the evidence provided will need to be authenticated and show that it represents competency demonstrated over a period of time
- assessment can be through simulated project-based activity and must include evidence relating to each of the

elements in this unit

In all cases where practical assessment is used it will be combined with targeted questioning to assess the underpinning knowledge. Questioning will be undertaken in a manner appropriate to the skill levels of the operator and cultural issues that may affect responses to the questions, and will reflect the requirements of the competency and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording, if used in the performance criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Formwork, materials and equipment may include:

- formwork, such as:
 - steel formwork
 - timber formwork
- equipment, such as:
 - personal protective equipment
 - hand and power tools
 - ties
 - chains
 - props
 - jacks
 - drainage aggregate
 - pipes
 - lifting and winching equipment
 - mechanical excavation equipment
- pneumatic and motorised equipment, including:
 - compressors
 - pneumatic spades and attachments
 - motorised cutting equipment
 - cable ways
 - travellers
- gauging stations
- small control weirs
- communication equipment

Legislative and organisational requirements may include:

- relevant federal and state or territory legislation and regulations
- codes of practice, associated standards and guidance material
- documented organisational policies, manuals and induction programs
- relevant community planning and development agreements, such as land care agreements

Repair techniques may include:

- quick-set cement
- cementitious materials
- proprietary equipment

Unit Sector(s)

Not applicable.

Competency field

Common.