



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **NWP321B Inspect and operate groundwater regulation**

**Revision Number: 2**

## NWP321B Inspect and operate groundwater regulation

### Modification History

NWP321B Release 2: Layout adjusted. No changes to content.

NWP321B Release 1: Primary release.

### Unit Descriptor

This unit of competency describes the outcomes required to perform inspection, regulation, operation, measurement and reporting of groundwater systems.

### Application of the Unit

This unit supports the attainment of skills and knowledge required for field and operational staff with a specific responsibility for inspecting and checking groundwater sources.

### 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 <b><i>bold italicised</i></b> 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                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Inspect and report on source performance and usage.</b> | <p>1.1 Carry out routine <i>inspections</i> of groundwater bores in accordance with <i>organisational and statutory requirements</i>.</p> <p>1.2 Collect and record data on groundwater usage and/or bore levels according to organisational requirements</p> <p>1.3 Collect and record water samples according to organisational requirements.</p> <p>1.4 Correctly select, fit and use required safety equipment, including personal protective equipment.</p> |
| <b>2 Check pumps and meters.</b>                             | <p>2.1 Test bore pumps and check flow meters to determine accuracy.</p> <p>2.2 Adjust pumps and flow meters to conform to the allocation permit.</p>                                                                                                                                                                                                                                                                                                             |
| <b>3 Operate and coordinate processes.</b>                   | <p>3.1 Measure and record extraction volumes.</p> <p>3.2 Check extraction volumes for compliance with entitlement.</p>                                                                                                                                                                                                                                                                                                                                           |
| <b>4 Complete documentation.</b>                             | <p>4.1 Record inspection results according to organisational requirements.</p> <p>4.2 Report source data to meet organisational requirements.</p>                                                                                                                                                                                                                                                                                                                |

## Required Skills and Knowledge

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

### Required skills:

- solve operational problems
- produce reports
- calculate flows
- undertake source inspections
- follow standard operating procedures
- communicate with employees and customers
- use communication equipment
- give and receive instructions
- identify control system faults
- use safety equipment and personal protective equipment
- identify potential sources of contamination

### Required knowledge:

- properties of stored water
- communication systems
- principles of hydraulics
- system layout
- control systems
- equipment operation
- relevant utilities and service bodies
- hazardous materials handling
- effects of weather and conditions on bulkwater assets
- principles of soil mechanics
- concrete structure, strengths and deterioration
- construction procedures
- risk management techniques
- occupational health and safety
- personal work site safety
- organisational and statutory requirements

## 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 perform inspection, regulation, operation, measurement and reporting of groundwater systems including:

- inspecting groundwater bores
- collecting and recording data
- collecting samples
- testing and adjusting pumps and flow meters to produce required flows
- recording extraction volumes and checking for compliance
- completing relevant 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/or 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 only taken at the point 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, any cultural issues that may affect responses to the questions, and reflecting 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.

***Inspection*** may require:

- interaction and communication with other employees, other authorities and the general public
- visual observation
- implementation of reporting procedures that may also include procedures for the implementation of by-laws, organisational policies and statutory requirements

***Organisational and statutory requirements*** may include:

- by-laws and organisational policies
- standard operating procedures
- environment protection
- occupational health and safety
- hazardous substances
- mines and subsidence
- road signage
- electrical
- dangerous goods
- World Health Organisation and National Health and Medical Research Council (NHMRC) guidelines

## Unit Sector(s)

Not applicable.

## Competency field

Collection and distribution.