



Australian Government

NWPIWS010 Monitor and control rural water distribution operations

Release: 1

NWPIWS010 Monitor and control rural water distribution operations

Modification History

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

Application

This unit involves the skills and knowledge required to monitor and control rural water distribution operations.

It includes coordinating rural water flow, scheduling and reporting on rural water distribution, including irrigation, domestic and stock supply systems. It also includes identifying faults, gathering data, interpreting technical information and operating technical equipment.

This unit applies to those working as field staff with responsibility for monitoring and operating rural water distribution systems. Those undertaking this unit would work under appropriate supervision, while performing routine tasks and ensuring minimum damage to the environment, in a familiar context.

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

Pre-requisite Unit

Not applicable.

Competency Field

Irrigation Water Supply

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

- | | |
|---|---|
| 1 Monitor water delivery systems | 1.1 Perform routine inspections of channel flow rates, regulations and delivery according to demand, statutory requirements and workplace procedures |
| | 1.2 Gather and record system performance data |
| | 1.3 Identify and correct system problems according to plans and service standards |
| | 1.4 Undertake risk assessment at worksite according to workplace procedures |
| | 1.5 Select, fit and use required safety equipment, including personal protective equipment |
| 2 Control processes | 2.1 Calculate, determine and apply system adjustments required to meet water delivery demands |
| | 2.2 Initiate and coordinate system adjustments required for delivery or channel flow rates |
| | 2.3 Integrate processes to improve the delivery network performance |
| 3 Analyse data and compile reports | 3.1 Conduct analysis of actual performance against planned system performance using system data and historical records |
| | 3.2 Compile reports from system performance data and report to relevant personnel |

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 NWPIRR032 Monitor and control rural water distribution

operations.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>

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Assessment Requirements for NWPIWS010 Monitor and control rural water distribution operations

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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 includes:

- adjusting system to meet demand
- analysing system performance
- calculating water flows
- completing required documentation
- conducting system inspections
- gathering and recording system performance data
- identifying and correcting system faults
- identifying risks
- interpreting and following plans, instructions and standard operating procedures
- monitoring, controlling and coordinating rural water flow, scheduling and delivery
- solving operational problems
- using safety equipment and personal protective 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 includes knowledge of:

- coordination processes
- effects of weather and conditions on operation of rural water distribution systems
- environmental aspects of rural distribution systems
- equipment operation, capacity and limitations
- gravity and control systems
- inspection of rural distribution systems
- relevant legislation, regulations and workplace procedures
- relevant utilities and service bodies
- risk factors and potential hazards
- system layout and processes
- 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:

- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including legislation, regulations, codes of practice, workplace procedures and operation manuals.

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