



Australian Government

NWPIWS008 Monitor and conduct maintenance on rural irrigation assets

Release: 1

NWPIWS008 Monitor and conduct maintenance on rural irrigation assets

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 conduct maintenance on rural irrigation assets.

This includes monitoring asset and equipment performance, conducting maintenance on assets and equipment and compiling process records and reports. It also includes pipelines and associated fittings.

This unit applies to those working as field staff with the responsibility for monitoring the operation of flow control, measuring and regulating devices, conducting maintenance and ensuring problems and anomalies are rectified by specialist technicians. Those undertaking this unit would work under appropriate supervision, performing routine tasks and ensuring minimum damage to the environment, in a familiar context.

No licensing, legislative or certification requirements apply to this 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 Prepare for work | 1.1 Interpret work requirements for monitoring rural irrigation assets from plans, drawing specifications and instructions |
| | 1.2 Select and check equipment and tools to meet the safety requirements of the task and site |
| | 1.3 Select, fit and use required safety equipment, including personal protective equipment |
| | 1.4 Undertake risk assessment at worksite according to workplace procedures |
| 2 Monitor asset and equipment performance | 2.1 Identify rural irrigation assets and equipment |
| | 2.2 Check and interpret information and specifications on assets and equipment performance |
| | 2.3 Report on assets and equipment performance |
| 3 Conduct maintenance on assets and equipment | 3.1 Undertake routine maintenance according to maintenance schedule |
| | 3.2 Secure assets and equipment according to workplace procedures |
| | 3.3 Identify and report problems to relevant personnel for correction |
| | 3.4 Identify, select, place and join components and associated fittings |
| 4 Monitor asset and equipment performance | 4.1 Schedule and monitor routine inspections of system assets |
| | 4.2 Collect, analyse and report data on system asset performance and usage |
| 5 Compile process records and reports | 5.1 Identify process faults and monitor the operational condition of assets and equipment |
| | 5.2 Report on adjustment requirements according to 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 NWPIRR024 Monitor and conduct maintenance on flow control and metering devices.

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 NWPIWS008 Monitor and conduct maintenance on rural irrigation assets

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 and performance criteria on at least one occasion and includes:

- collecting and recording data on asset performance
- collecting and recording information on equipment performance
- conducting a risk assessment and identifying control measures
- conducting routine maintenance tasks and securing assets and equipment
- identifying and reporting on asset performance
- identifying and reporting operational problems
- inspecting rural irrigation assets and equipment
- interpreting plans and instructions
- interpreting policies, procedures and standards
- producing reports
- selecting appropriate equipment and tools, including 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:

- data collection and recording
- effects of weather and conditions on maintenance and assets
- equipment operation, capacity and limitations
- flow measurement procedures
- ground structure
- irrigation asset and equipment performance parameters
- lock out procedures
- relevant utilities and service bodies
- relevant legislation, regulations and workplace procedures
- risk factors, and potential hazards and control measures
- system hydraulics
- system layout

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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