



Australian Government

NWPIRR011 Install devices for irrigation systems

Release: 1

NWPIRR011 Install devices for irrigation systems

Modification History

Release	Comments
1	This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to NWP216B Install basic metering equipment and flow control devices for irrigation systems. • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice • Unit title changed to better reflect unit outcomes • Elements 2 and 3 merged • Element 4 removed • Element 5 reworded • One new PC added to Element 5

Application

This unit describes the skills required to install devices for irrigation systems. These installations may occur in ground and surface water source irrigation systems.

This unit applies to those working as field and operational staff involved in the installation of water industry metering and flow control devices.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would work under supervision, while performing routine tasks in familiar context.

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

Competency Field

Irrigation

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Plan and prepare work	1.1 Apply work requirements for installation of flow control and metering devices in irrigation systems from plans, specifications and instructions. 1.2 Prepare work plans to ensure safety within the workplace. 1.3 Select and check equipment and tools to meet safety requirements of the task and site. 1.4 Select, fit and use personal protective equipment.
2. Install devices in irrigation systems	2.1 Carry out installation of device in irrigation systems. 2.2 Check that installed device meets specifications.
3. Restore site	3.1 Backfill with suitable material, moisture content and compaction to maximise compaction efficiency. 3.2 Restore the site to original site conditions.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning					Reading					Writing					Oral communication NA					Numeracy				

Performance variables:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Range of Conditions

Devices include:	• meters • flow control • regulating devices
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Unit Mapping Information

This unit supersedes and is equivalent to NWP216B Install basic metering equipment and flow control devices for irrigation systems.

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 NWPIRR011 Install devices for irrigation systems

Modification History

Release	Comments
1	These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages. • Assessment Requirements created drawing upon specified assessment information from superseded unit

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. The candidate must be assessed installing at least one type of device listed in the Range of Conditions. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- identifying and responding to operational problems
- producing reports and logs
- identifying control system or metering faults
- interpreting plans, specifications and instructions
- conducting routine inspections, maintenance and servicing of basic metering, flow control and regulating devices
- completing relevant workplace documentation

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- impact of the principles of hydraulics on the operation of flows
- system layout
- lock-out procedures for mechanical and electrical installations
- organisational communication systems
- effective workplace communication processes
- materials handling
- environmental, landscape and ground structure of work area
- risk factors and potential hazards

- equipment operation, capacity and limitations
- effects of weather and conditions on operation of system, site and plant
- flow measurement principles and procedures
- layout and performance of pipes and fittings
- operation of control systems

Assessment Conditions

Competency should be assessed in an actual workplace or in a simulated environment, with access to equipment and infrastructure appropriate to the outcome. Competency should be demonstrated over time to ensure the candidate is assessed across a variety of situations.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

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