Title	Demonstrate knowledge of and install water meters into the headworks of a rural irrigation system				
Level	3	Credits	7		

Purpose	This unit standard is for people engaged in the installation of water meters into the headworks of a rural irrigation system.
	People credited with this unit standard are able to: demonstrate knowledge of water meters for rural irrigation systems; identify and describe the functions of the componentry of a rural irrigation system headworks; install a water meter into the headworks of a rural irrigation system; and check water meter installation and complete documentation.

Classification	Mechanical Engineering > Dairy Systems Engineering		

Available grade	Achieved

#### **Guidance Information**

# 1 Reference

Irrigation New Zealand Ltd 2015, *The New Zealand Water Measurement Code of Practice*. Available at <u>www.irrigationaccreditation.co.nz/watermeasurement</u>.

# 2 Definitions

*Enterprise procedures* – the documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, standards, guidelines, regulations, codes of practice, quality assurance procedures, housekeeping standards, charging of time and materials, management of drawings and documentation, procedures for the handling and disposal of materials and waste, procedures to comply with legislative and local body requirements.

*Headworks* – refers to the water input section of the irrigation distribution system. It contains exposed mainlines, pumps, valves, filters, meters, monitoring, and telemetry equipment necessary to run the system.

*Job specifications* – instructions relevant to the safe completion of a specific task, such as technical specifications, assembly instructions, drawings, parts lists, material specifications, standards, codes of practice, test and commissioning procedures, and verbal instructions.

*Manufacturers' specifications* – documents developed by the manufacturer that convey critical information about the installation and the performance of a water meter.

# Outcomes and performance criteria

# Outcome 1

Demonstrate knowledge of water meters for rural irrigation systems.

# Performance criteria

1.1 Water meters commonly used in New Zealand for rural irrigation systems are described in accordance with the code of practice and manufacturers' specifications.

Range may include but is not limited to – types, uses, limitations.

#### Outcome 2

Identify and describe the functions of the componentry of a rural irrigation system headworks.

#### Performance criteria

2.1 Components of the headworks of a rural irrigation system are identified.

Range may include but is not limited to – valves, filters.

2.2 The functions of the components of a rural irrigation system headworks are described.

# Outcome 3

Install a water meter into the headworks of a rural irrigation system.

# Performance criteria

- 3.1 The installation of a water meter is described in accordance with manufacturers' specifications, relevant standards and codes, and job specifications.
- 3.2 The water meter is installed in accordance with manufacturers' specifications, relevant standards and codes, and job specifications.

# Outcome 4

Check water meter installation and complete documentation.

# Performance criteria

4.1 Water meter installation is checked in accordance with enterprise procedures.

Range may include but is not limited to – correct fittings, correct torque, correct direction, tamper proofing.

4.2 Work site is remediated in accordance with enterprise procedures.

# 4.3 Water meter installation documentation is completed in accordance with enterprise procedures.

Planned review date	31 December 2023

#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 September 2018	N/A

Consent and Moderation Requirements (CMR) reference					0013	

This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.

# Comments on this unit standard

Please contact Competenz <u>qualifications@competenz.org.nz</u> if you wish to suggest changes to the content of this unit standard.