



**Australian Government**

# **CPCPIG2021 Design domestic urban irrigation systems**

**Release: 1**

# CPCPIG2021 Design domestic urban irrigation systems

## Modification History

Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.

Supersedes and is equivalent to CPCPIG2021A Design domestic urban irrigation systems. Updated to meet the Standards for Training Packages 2012.

## Application

## Pre-requisite Unit

CPCPCM2043 Carry out WHS requirements

## Unit Sector

Plumbing

## Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

- |                     |  |
|---------------------|--|
| 1 Prepare for work. | 1.1 Conduct site survey of proposed irrigation area according to client requirements.  |
|                     | 1.2 Adhere to work health and safety (WHS) and environmental requirements associated with design of domestic irrigation systems throughout the work. |
|                     | 1.3 Identify and adhere to quality assurance requirements according to workplace requirements.   |
|                     | 1.4 Plan and sequence tasks in conjunction with others involved in or affected by the work and statutory and regulatory authorities' requirements.   |
|                     | 1.5 Select and check tools and equipment for preparing basic irrigation designs and drawings for serviceability.                                     |

- 2 Identify drawing requirements.
  - 2.1 Identify areas requiring irrigation and system design components.
  - 2.2 Obtain information on the soil type, ground slope, contours and prevailing wind.
  - 2.3 Locate and note underground services, buildings, paths and other permanent structures.
  - 2.4 Determine and locate water supply and its influence on design requirements.
  - 2.5 Select appropriate emitters to suit function and design requirements.
  
- 3 Design irrigation system.
  - 3.1 Draw site plan to include structures, paths and property boundaries.
  - 3.2 Sketch garden areas to include locations of lawns, garden beds, trees, vegetable patches or ferneries.
  - 3.3 Sketch pipe runs and water emitters to design requirements.
  - 3.4 Calculate sizes of pipes using standard data and record information in required format.
  - 3.5 Compile list of materials to include number and type of water emitters, control valves, quantities of pipes, fittings and components.
  - 3.6 Apply sustainability principles and concepts throughout the design process.
  - 3.7 Submit drawing and design for approval.
  
- 4 Clean up.
  - 4.1 Clear work area and dispose of reused or recycled materials according to legislation, regulations, codes of practice and job specification.
  - 4.2 Clean, check, maintain and store tools and equipment according to manufacturer recommendations and workplace procedures.
  - 4.3 Complete documentation according to workplace

requirements.

## **Foundation Skills**

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## **Unit Mapping Information**

Supersedes and is equivalent to CPCPIG2021A Design domestic urban irrigation systems

## **Links**

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>