



Australian Government

CPCPPS5024 Conduct a water audit and identify water-saving initiatives

Release: 1

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Modification History

- Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.
- Supersedes and is equivalent to CPCPPS5024A Conduct a water audit and identify water-saving initiatives. Updated to meet the Standards for Training Packages 2012.

Application

This unit specifies the skills and knowledge required to conduct water audits in residential buildings with a minimum of 50 units; commercial buildings with a minimum of 20 floors, including a commercial laundry for hospital or nursing home.

This unit also specifies the skills and knowledge required to propose types of water-saving devices that are appropriate where water use reductions are possible.

The role involves interaction with builders, suppliers, clients and relevant planning authorities and requires a sound understanding of applicable legislation, standards and codes.

This unit applies to experienced people such as hydraulic design consultants or persons in a supervisory capacity in relation to plumbing services on a new or existing site.

In some jurisdictions, this unit of competency may form part of accreditation, licensing, legislative, regulatory or certification requirements.

Pre-requisite Unit

Nil.

Unit Sector

Plumbing and Fire Services

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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|------------------------|--|
| 1 Calculate water use. | 1.1 Establish scope of work for conducting water audits. |
| | 1.2 Identify requirements from relevant Australian Standards, codes, plans, specifications, manufacturer |

- requirements and client brief.
- 1.3 Apply sustainability principles and concepts throughout water audit process.
 - 1.4 Specify types of flow and pressure-measuring devices including their location and use.
 - 1.5 Conduct flow and pressure tests and measure flows at outlets.
 - 1.6 Compare actual water use to ideal use and calculate the difference.
- 2 Identify excessive water and energy use.
- 2.1 Implement leak identification processes considering safety of system users or building occupants.
 - 2.2 Measure and evaluate flows against relevant standards and user requirements.
 - 2.3 Evaluate suitability of existing fixtures and fittings against new technology.
 - 2.4 Identify and compare water use times against optimal timing.
 - 2.5 Identify and analyse existing inefficient system conditions.
 - 2.6 Conduct pressure test and identify and compare consequences of high and low pressures to industry standards.
 - 2.7 Evaluate energy saving associated with reduction in water use.
- 3 Evaluate methods to conserve water and energy.
- 3.1 Identify flow restrictors, sensors, pressure-limiting devices and automatic systems for a range of applications.
 - 3.2 Evaluate alternative processes and practices for optimum water and energy savings.
 - 3.3 Evaluate alternative fixtures and fittings for optimum water and energy savings.

- 3.4 Apply rainwater harvesting techniques and processes.
 - 3.5 Design recycling and re-use processes.
 - 3.6 Design water metering strategies to monitor and problem solve water saving systems.
- 4 Report findings.
 - 4.1 Conduct a cost-benefit analysis including the investment return period.
 - 4.2 Prepare water and energy audit report.
 - 4.3 Identify and report resulting environmental benefits and water and energy savings.

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 CPCPPS5024A Conduct a water audit and identify water-saving initiatives.

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>