



Australian Government

CPCPPS5028 Design trade waste pre-treatment systems

Release: 2

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Modification History

Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 6.5.

Change to Performance Criteria 4.1.

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

Supersedes and is equivalent to CPCPPS5028A Design trade waste pre-treatment systems. Updated to meet the Standards for Training Packages 2012.

Application

This unit specifies the skills and knowledge required to design trade waste pre-treatment systems for commercial and industrial premises, such as commercial kitchens and laundries, mechanical workshops and commercial swimming pools, prior to discharge to authority's point of sewer connection.

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

The unit requirements are typically undertaken by experienced tradespeople 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 Evaluate design parameters. | 1.1 Establish scope of work for trade waste pre-treatment systems prior to discharge to authority's point of sewer connection. |
| | 1.2 Establish performance requirements considering safety of system users or building occupants. |
| | 1.3 Determine design requirements from relevant Australian Standards, codes, plans, specifications, authorities' requirements and client brief. |
| | 1.4 Apply sustainability principles and concepts as part of the design process. |
| | 1.5 Interpret manufacturer requirements and trade and technical manuals. |
| | 1.6 Conduct research to outline design parameters. |
| | 1.7 Analyse trade waste applications and conduct a cost-benefit analysis to compare a range of pipe materials and system designs. |
| 2 Plan and detail system components. | 2.1 Plan layout of pipework systems including type and location of fittings and controls. |
| | 2.2 Plan and detail solid removal systems. |
| | 2.3 Plan and detail grease and oil interceptors, neutralising chambers and wash-down areas incorporating stormwater exclusion. |
| | 2.4 Plan and detail diffused air flotation systems. |
| | 2.5 Detail bacterial treatment processes and combined and specialised treatment processes for a range of commercial and industrial applications. |
| | 2.6 Incorporate general housekeeping procedures to minimise discharge of trade waste. |
| | 2.7 Perform system calculations for a range of applications. |
| | 2.8 Size and detail pump well, pumps, controls and equipment requirements. |
| | 2.9 Design pipe supports for a range of applications. |

- 2.10 Specify approved materials, jointing methods and installation requirements for trade waste pre-treatment systems.
- 3 Design and size systems.
 - 3.1 Design and size trade waste pre-treatment systems for commercial and industrial premises.
 - 3.2 Design and size trade waste pre-treatment systems using calculations and local authorities and regulators' policies and requirements.
 - 3.3 Design flow monitoring systems for trade waste applications.
 - 3.4 Design venting of trade waste systems to comply with local authority requirements.
- 4 Prepare documentation.
 - 4.1 Produce a return client brief of the preferred design.
 - 4.2 Prepare plans and specifications for trade waste pre-treatment systems.
 - 4.3 Prepare testing and commissioning schedule.
 - 4.4 Produce operation and maintenance manual including information on how to properly and safely maintain the system.

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 CPCPPS5028A Design trade waste pre-treatment 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>