Caring For Our Water – Course Outline

Determine Water Conservation Measures

This unit specifies the competency required to develop skills in effectively increasing water sustainability and care and improving the management of the water cycle.

Work associated with this unit is undertaken within the plumbing and services sector in accordance with relevant US standards.

It is a pre-requisite that all participants seeking accreditation of the ‘Course in Green Plumbers Environmental Solutions’ are required to be licensed and or registered plumbing practitioners with a regulatory authority.

Nominal Hours - 8

Performance Criteria

Performance criteria specify the level of performance required to demonstrate achievement of the element.

1. Identify the water cycle process

   1.1 Define the urban water cycle management process.

   1.2 Identify the extent of the local supply system, operated and managed by the local authority.

   1.3 Identify key functions of the networked water supply system.

   1.4 Identify the extent of the local drainage and treatment operated and managed by the local authority.

   1.5 Outline the government’s policy on water sustainability.

2. Determine standards of water quality.
2.1 Identify sources of potable water from local catchments for urban use.

2.2 Specify stages of water treatment process

2.3 Assess potential problems of maintaining water quality

2.4 Outline monitoring and testing procedures for maintaining network water quality

2.5 Categorize the water quality of different classes of water and determine their ‘fit for purpose’ applications

3. Compile information on water consumption methods

3.1 Differentiate the sectors that consume water and the effect on local water restrictions/limitations.

3.2 Estimate levels of water usage using appropriate water consumption methods.

3.3 Document water and energy savings using inspection report process.

4. Select potable water efficient products.

4.1 Identify water efficient products for the variety of sectors that consume water. (Water closets, Shower heads, kitchen and lavatory faucets, washing machines, irrigation, etc)

4.2 Identify water conservation rating programs and labeling for selected water efficient products.

4.3 Discuss the testing and performance standards on water efficient products to the customer.

4.4 Locate and comply with local incentive programs for the uptake of water efficient products.

5. Install a range of alternative water sources.

5.1 Determine suitable alternatives water sources for possible installation

5.2 Determine alternative water plumbing pipework and installation methods.

5.3 Recommend the appropriate system to ensure safe water use (fit for purpose water)
5.4 Identify the installation and reuse of alternative water

5.5 Demonstrate duty of care and safety requirements for installation.

6. **Provide advice on domestic waste water treatment**

   6.1 Select a range of domestic onsite water treatment processes and products and their applications

   6.2 Identify potential health and environment problems in maintaining an effective domestic water treatment system and possible solutions.

7. **Advise health and environmental best practices to customer**

   7.1 Select a range of environmentally friendly plumbing installation products taking into consideration Occupational and Health and Safety issues.

   7.2 Identify potential problems in maintaining an effective storm water drainage system to ensure the integrity of the system.

   7.3 Identify potential problems in maintaining an effective sewerage system and determine alternative solutions to ensure the integrity of the system.

   7.4 Develop recommendations to the consumer regarding environmental friendly plumbing installations products taking into consideration health and environmental issues.

   7.5 Develop recommendations to the consumer using the Inspection Report process regarding home improvement areas.