

3083 Principles of efficient water usage in a food environment

SQA Unit Code

H3GP 04

Level 3

SCQF Level 6

SCQF Credit value 6

Unit Summary

This unit is about understanding the principles of efficient use of water in food manufacture or supply. It includes understanding water usage in a food environment and measures that can be put in place to reduce waste and improve efficiency.

This unit is for you if you work in food and drink operations and your job requires you to have responsibility for the efficient use of water in a food environment. You may also have management responsibilities for an operational team.

In order to be assessed as competent you must demonstrate to your assessor that you can consistently perform to the requirements set out below. Your performance evidence must include at least one observation by your assessor.

Evidence of knowledge and understanding should be collected during observation of performance in the workplace. Where it cannot be collected by observing performance, other assessment methods should be used.

You need to know and understand:

1. the legal requirements that control water extraction, consumption, treatment and discharge
2. government targets for sustainable water usage
3. the impact of water usage on the environment and sustainability
4. how water usage impacts on environmental issues such as climate change
5. the benefits of efficient water usage to the organisation
6. water usage in support of all organisational activities including embedded water
7. water supply availability, treatment methods and quality in respect to organisational water supplies
8. how to establish current levels of water usage in respect to all organisational activities
9. how to analyse organisational water usage data
10. the value of water metering and monitoring in a food environment
11. the principles of benchmarking as a method of identifying opportunities for improving efficient water usage
12. the processes used to support water treatment, recycling, reuse and discharge control
13. the factors that limit organisational water recycling and reuse
14. water discharge including, treatment methods and quality specifications
15. the potential causes and sources of water pollution and its associated implications in

- a food environment
16. the opportunities available to the organisation for reducing water usage and improving water efficiency across all activities
 17. the barriers that can limit the impact of water efficiency and how these barriers can be overcome
 18. how process and product design can impact on efficient water usage
 19. how effective process control and quality assurance can support efficient water usage
 20. how to complete an organisational cost/benefit analysis in respect to water usage
 21. methods for promoting efficient water usage
 22. how to monitor, control and maintain water usage
 23. how to define and allocate roles and responsibilities for all those involved in improving efficient water usage across all the activities undertaken by the organisation
 24. how to identify training needs and organise staff training to support efficient water usage
 25. how to evaluate the impact of measures to improve efficient water usage

Evidence of performance may employ examples of the following assessment:

- observation
- written and oral questioning;
- evidence from company systems (e.g. Food Safety Management System)
- reviewing the outcomes of work
- checking any records of documents completed
- checking accounts of work that the candidate or others have written