

EM139 Maintain waste/foul water distribution systems and equipment used in food and drink operations

SQA Unit Code

HD61 04

Level 3

SCQF Level 6

Credit value 53

Unit Summary

This standard identifies the competences you need to carry out corrective maintenance activities on waste/foul water distribution systems and equipment used in food and drink operations, in accordance with approved procedures. You will be required to maintain distribution systems including foul, storm and waste water systems. This will involve dismantling, removing and replacing faulty or damaged components, including pumps, valves, couplings, traps, motors, pipework, cylinders, tanks, heaters, filters, gaskets/seals, faucets and other ancillary equipment. You will be expected to apply a range of dismantling and assembly methods and techniques, including marking/labelling of components to aid the reassembly, dismantling components requiring pressure techniques, torque loading and setting, and aligning and adjusting components. Food and drink operations is a term used in this standard to cover the following sub sectors of Meat, Drinks, Confectionery, Fresh Produce, Bakery, Seafood and Dairy.

You will be expected to work with minimal supervision, taking personal responsibility for your own actions, and for the quality and accuracy of the work that you carry out.

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.

You must be able to:	You need to show:
<p>1. Maintain waste/foul water distribution systems and equipment used in food and drink operations</p> <p>This means you:</p> <p>Work safely at all times, complying with health and safety and other relevant food and drink regulations, directives and guidelines</p> <p>Follow the relevant maintenance schedules to carry out the required work</p> <p>Carry out the maintenance activities within the</p>	<p>Evidence must be work-based, simulation alone is only allowed where shown in <i>bold italics</i></p> <p>Evidence of maintaining waste/foul water distribution systems and equipment used in food and drink operations as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.</p>

<p>limits of your personal authority</p> <p>Carry out the maintenance activities in the specified sequence and in an agreed timescale</p> <p>Report any instances where the maintenance activities cannot be fully met or where there are identified defects outside the planned schedule</p> <p>Complete relevant maintenance records accurately and pass them on to the appropriate person</p> <p>Dispose of waste materials in accordance with safe working practices and approved procedures</p>	
--	--

You need to know and understand:

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.

1. the health and safety requirements of the area in which the maintenance activity is to take place, and the responsibility these requirements place on you not to compromise food safety
2. the isolation and lock-off procedures or permit-to-work procedure that applies to the system, including the critical control points
3. the specific health and safety food and drink precautions to be applied during the maintenance procedure, and their effects on others (to include The Water Regulations Advisory Scheme (WRAS), The Prevention and Control of Legionellosis, and Safe working in Confined Spaces)
4. the requirements of the British Retail Consortium (BRC) guidelines and standards in relationship to the maintenance activities
5. the specific requirements of your customer/client specifications in relationship to the maintenance activities
6. your responsibilities in relationship to Hazard Analysis and Critical Control Points (HACCP, TACCP, VACCP) during the maintenance activities
7. hazards associated with carrying out maintenance on waste water distribution systems, and how to minimise them to reduce the risks
8. the importance of wearing protective clothing and other appropriate safety equipment (PPE) during the maintenance process
9. how to obtain and interpret drawings, specifications, manufacturers' manuals and other documents needed in the maintenance process
10. the procedure for obtaining replacement parts, materials and other consumables necessary for the maintenance activities
11. company policy on repair/replacement of components during the maintenance process, including their safe/hygienic storage before use
12. the sequence to be adopted for the dismantling/re-assembly of various types of

- assemblies
13. the methods and techniques used to dismantle/assemble mechanical equipment (including release of pressures/force, component identification, extraction, pressing, alignment)
 14. methods of checking that components are fit for purpose, how to identify defects and wear characteristics, and the need to replace 'lived' items (including seals, washers and gaskets)
 15. how to make adjustments to components/assemblies to ensure they function correctly
 16. the basic principles of how the equipment functions, its operation sequence, the working purpose of individual units/components and how they interact
 17. the principles of the equipment's design features for safe operation in a food or drink environment including minimising the chance of contaminants or foreign bodies in the final product
 18. the applications of the different types of pipework system (including iron, clay, plastic, stainless)
 19. the applications of the different types of coupling and their fittings (including bends, branches, reduction pieces)
 20. the different methods used to treat water supplies to meet user needs
 21. the applications of the different pipework and equipment cleaning procedures (including rod, water jet, steam, chemical, solvents)
 22. how to check that tools and equipment are free from damage or defects, and are in a safe, clean and usable condition
 23. the processes in place to segregate the tools and equipment used into high or low risk areas
 24. the checks required to ensure that all tools, materials and components are all accountable before operating the equipment
 25. the generation of maintenance documentation and/or reports following the maintenance activity
 26. the equipment operating and control procedures to be applied during the maintenance activity
 27. the cleaning requirements/policies in place before returning the equipment into full operational production
 28. how to use lifting and handling equipment correctly and safely in the maintenance activity
 29. the problems associated with the maintenance activity, and how they can be overcome
 30. the organisational procedure to be adopted for the safe disposal of waste of all types of materials including any spoiled food or drink products
 31. the extent of your own authority and to whom you should report if you have problems that you cannot resolve

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

