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## Overview

This standard identifies the competences you need to carry out corrective maintenance activities on workplace environmental control systems used in food and drink related operations, including heating and ventilation, air conditioning and ventilation, chillers, lighting, lifts, building/room access, fire systems and CCTV systems, in accordance with approved procedures. This will involve dismantling, removing and maintaining faulty or damaged components, including sensors, switches, thermostats, meters, thermocouples, transformers, timers, interlocks, electrical components and wiring, electronic boards and components, controller units, computer systems, peripheral devices and environmental monitoring and targeting software.

You will be able to apply a range of dismantling and assembly methods and techniques, to include marking/labelling of components to aid the reassembly, dismantling components by unplugging, de-soldering, removal of screwed, clamped and crimped connections, 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 able 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.

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## Performance criteria

*You must be able to:*

1. work safely at all times, complying with health and safety, environmental and other relevant food and drink regulations, directives and guidelines
2. obtain and use the correct issue of company and/or manufacturers drawings and maintenance documentation
3. plan and communicate the maintenance activities to cause minimal disruption to normal working
4. follow the relevant maintenance schedules to carry out the required work
5. carry out the maintenance activities in accordance with organisational procedures within the limits of your personal authority
6. isolate equipment (including mechanical, electricity, gas, steam, air or fluids) in accordance with organisational procedures
7. provide and maintain safe access and working arrangements for the maintenance area in accordance with organisational procedures
8. re-connect and return the system to service on completion of the maintenance activities
9. report any instances where the maintenance activities cannot be fully met or where there are identified defects outside the planned schedule
10. complete maintenance records and documentation in accordance with organisational requirements
11. dispose of waste materials in accordance with safe working practices and approved procedures

## Knowledge and understanding

### *You need to know and understand:*

1. the health and safety and environmental 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 equipment being maintained, including 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
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), Threat Assessment and Critical Control Points (TACCP), Vulnerability Assessment and Critical Control Points (VACCP) during the maintenance activities
7. what constitutes a hazardous voltage and how to recognise victims of electric shock
8. how to reduce the risks of a phase to earth shock (including insulated tools, rubber mating and isolating transformers)
9. the importance of wearing protective clothing and other appropriate safety equipment (PPE) during the maintenance process
10. hazards associated with carrying out maintenance activities on workplace environmental equipment/systems (including stored pressure/force/temperature, live electrical connections, using damaged or badly maintained tools and equipment, not following laid-down maintenance procedures), and how to minimise them to reduce any risks
11. how to obtain and interpret drawings, specifications, manufacturers' manuals and other documents needed in the maintenance process
12. the basic principles of how the equipment functions, its operation sequence, the working purpose of individual units/components and how they interact
13. 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

14. the procedure for obtaining replacement parts, materials and other consumables necessary for the maintenance activities, including their safe/hygienic storage before use
15. company policy on repair/replacement of components during maintenance process
16. the procedures and precautions to be adopted to eliminate electrostatic discharge (ESD) hazards
17. the sequence to be adopted for the dismantling/reassembly of various types of assemblies
18. the methods and techniques used to dismantle/assemble workplace environmental control equipment (including unplugging, de-soldering removal of screwed, clamped and crimped connections)
19. methods of checking that components are fit for purpose, how to identify defects and wear characteristics, and the need to replace 'lived' or consumable items (including batteries, lamps, filters, seals and gaskets)
20. how to make adjustments to components/assemblies to ensure they function correctly
21. methods of removing and replacing components and units without damaging the system and infrastructure
22. how to check that tools and equipment are free from damage or defects, are in a safe and usable condition, and are configured correctly for their intended purpose
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 cleaning requirements/policies in place before returning the equipment into full operational production
26. the generation of maintenance documentation and/or reports following the maintenance activity
27. the equipment operating and control procedures to be applied during the maintenance activity
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

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31. the extent of your own authority and to whom you should report if you have problems that you cannot resolve

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Maintain workplace environmental control systems used in food and drink operations



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