Central Production Unit Food Safety & Quality Management System

Water Supply and Monitoring

Purpose

Utilities used within food production and storage areas should be monitored to effectively control the risk of product contamination. The water used by the Central Production Unit must be controlled and monitored to ensure it does not constitute a contamination risk to the finished product.

Responsibilities

Responsible person (s)	Responsibility
Site manager	To ensure this procedure is accurate, regularly reviewed and kept up to date. To ensure this procedure is fully implemented across the Central Production Unit and communicated to all relevant personnel. To ensure the provisions and resources are available to ensure this procedure can be and is implemented. To ensure this procedure is fully trained out to all relevant personnel. To ensure this procedure is periodically reviewed and updated as, when or if required.

Water supply

All water supplies at Central Production Units must be provided in sufficient quantities (e.g. for cleaning operations), pose no contamination risk (e.g. be potable).

Water testing

As all water supplied to a site / Unit must be potable, with testing in place to demonstrate such, either through the local authority or a competent approved third-party for example a UKAS accredited laboratory. It is the responsibility of the Site Manager to retain water quality reports, and review water testing areas and frequency, ensuring these are based on risk assessment and reviewed annually.

Water distribution

An up-to-date schematic diagram should be available that details the distribution system of water across the site. The diagram should be maintained by the sites engineering teams and used to assess potential hazards in the distribution system such as dead-legs, allowing for identified hazards to be mitigated. The source of water (mains and / or private supply) should also be included in the diagram, and the diagram used when assessing appropriate water sampling points.

Risk based assessment

The frequency of water analysis is based on risk and includes the following.

- Legislative requirements for testing.
- Historical site information and water testing results.
- The source of water (mains supply, private, bore-hole etc).
- Specific site factors (e.g., hard water area increasing limescale build up).
- Any treatments given to the water (e.g., water softener unit).
- Water usage (e.g., used as a raw material ingredient in the finished good).

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The water risk assessment should be reviewed annually as a minimum, and it should be the responsibility of the Site Manager to review. When conducting the water risk assessment, a detailed review of site maps, historical testing data, supplier water quality reports, tap areas and usage must all be considered to ensure all information is correct, up-to-date, and accurate. Central Production Unit water points should be assessed to determine high, medium, and low risk areas, following the methodology outlined in the table below.

High Risk	Water that comes into direct contact or is used as an ingredient in the finished good	**6 Monthly**
Medium Risk	Water that encounters people or equipment but is not in direct contact with food i.e., hand washing, cleaning	**Annually**
Low Risk	Water that is not directly related to the manufacturing operation	**Supplying Company Analysis**

The site-specific Water risk assessment and schedule should detail the location of site waterpoints, the level of risk and the testing frequency. Where the risk assessment deems sampling is required, samples are taken by competent parties. Testing covers basic microbiological as defined in this procedure. In the event of any out of specification test results, additional sampling must be conducted using an enhanced testing suite, as outlined in this procedure.

Maintenance

Sites must have competent resource available, to ensure all routine maintenance on water systems and ancillary equipment is conducted correctly and efficiently on any equipment that requires a plumbed water supply. Competent contractors and / or on-site engineers must also ensures that the sites water plans and schematic diagrams and water testing logbooks are accurate and kept fully up to date.

Out of specification results

In the event of an out of specification result a full deep clean of the area must be conducted and any scale build up around the tap or outlet removed. A second sample must then be taken using an increased testing suite. In the event of a second fail a full investigation must be conducted with the wider team, and if required outside contractors engaged to establish root cause and implement suitable corrective actions, underpinned by satisfactory test results.

Laboratory testing suites

Sampling Method		
Organism	**Target (cfu/ml)**	**Action (cfu/ml)**
Legionella spp.	<100	>100

Sampling Method		
Organism	**Target (cfu/ml)**	**Action (cfu/ml)**
TVC's @36°C 44 h	<1000	>1000
TVC's @22°C 68 h	<1000	>1000
Total Coliforms	0	>1
E. Coli	0	>1

Sampling Method		
Organism	**Target (cfu/ml)**	**Action (cfu/ml)**
TVC's @36°C 44 h	<1000	>1000
TVC's @22°C 68 h	<1000	>1000
Total Coliforms	0	>1
E. Coli	0	>1
Faecal Steptococci (Enterococci)	0	>1
Sulphite Reducing Clostridia	0	>1
Pseudomonas spp.	0	>1

Note: Colony Forming Unit (CFU) and testing suites can be agreed with external competent water testing service providers, for example UKAS accredited laboratories.

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