

Purpose

To ensure that appropriate facilities and procedures are in place to control the potential risk of chemical or physical contamination of the product.

Scope

The control of both physical and chemical contamination at Central Production Units

Central Production Unit details:

Procedure responsibilities

It is the responsibility of production colleagues and supervisory leadership teams to ensure this process is correctly and continuously implemented operationally, and effectively communicated and trained out to all relevant operational colleagues.

Reporting

All instances that occur on site where the product has been contaminated, or is at immediate risk of contamination, to include supplier raw materials must be recorded on AIR3. In the event of an incident on site, production in the area must cease immediately and the area sectioned off for investigation. Any product potentially affected must be put on hold while an investigation is carried out. Where foreign bodies are found in the raw material, the foreign body must be retained, investigated and the source identified.

Three-tier approach

The three-tier approach should be used when assessing risk factors associated with physical and chemical contamination, specifically, in order of a tiered hierarchy, seek to eliminate, prevent and detect sources of contamination.

Chemical Contamination

Controls must be in place regarding the use, storage, and handling of non-food chemicals to prevent the potential for contamination and taint to product. To prevent chemical contamination, the following controls should be in place:

- An approved chemicals list
- Material Safety Data Sheets (MSDS) and technical specifications for approved chemicals
- Confirmation of suitability for use
- Suitable, secure and bunded chemical storage
- Chemical training
- Chemical spill procedures

Approved chemicals

An approved chemical list should be maintained to prevent unauthorised chemicals from being purchased.

Suitability for use

Formal assessment of all chemicals which come into contact with product or product contact surfaces must be completed. The chemical MSDS and technical specification must be used to confirm that the chemical:

- Is suitable for use in a food processing environment

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- Is suitable for the application for which it will be used
- Is compliant with BS EN requirements
- Is not strongly scented
- Does not contain allergens

Where strongly scented chemicals are necessary for building work, procedures must be in place to avoid the risk of taint contamination of products

Material Safety Data Sheets & technical specifications

MSDSs and technical specifications must be provided by the supplier. These documents must be up-to-date and confirm that the chemicals are suitable for use with food. The MSDS provides health and safety information. The technical specification contains information on how the chemical needs to be used and applied to be effective. MSDS and technical specifications must be accessible at all times.

Chemical use

The MSDS and technical specification must be used to establish the required method for use, to ensure that the chemical is effective for the application. This includes the required instructions for dilution. Where possible, cleaning chemicals should be provided for use, already diluted, through dosing systems. Manual and automatic chemical dilution is checked routinely by chemical suppliers as part of an established PPM programme.

Chemical labelling

Chemicals must be labelled, at all times, and must not be decanted into non-authorised containers to prevent:

- Use in the product by mistake
- Use by personnel who aren't trained to handle chemicals

Chemical storage

A separate locked cabinet / area must be available to store cleaning and maintenance chemicals, segregated from food products. Access to the storage area should be restricted to authorised personnel. Chemicals must be stored in closed containers and bulk chemicals must be banded and stored safely to ensure:

- Acid and alkaline chemicals are stored apart
- Powders are stored above liquids
- All containers / drums are always clearly labelled and identifiable
- All drums hooked up to dosing units are locked and secured in cages and only changed by authorised persons

Chemical training

Colleagues must only be authorised chemical products that they have been training to use. The training must include:

- Safe handling of chemicals
- Chemical labelling
- Chemical storage
- Effective use of cleaning chemicals

Spillage procedure & safe disposal

Where a chemical spill occurs, ensure that the contamination risk is contained and removed.

Empties collection

Any out of date or obsolete chemicals should be collected by approved waste service provider under hazardous waste collection. For out-of-date chemicals, or chemical spill kits the Compass Environment team should be contacted to support suitable collection and disposal.

Glass, ceramic and brittle container contamination

The glass, brittle plastics and ceramics that are covered by the scope of this procedure, are items:

- In facilities where product is stored or processed
- On equipment in product areas
- In non-product areas where breakages could get transferred into product areas (for example on shoes or wheels)

Glass policy

Glass must not be brought onto site, by colleagues or external personnel, with the exception of spectacles or personal items which have glass or plastic screens, such as mobile phones

Personal items must not be taken into product or production areas. Colleagues who have spectacles should be instructed to report loss or damage immediately to a supervisor or manager. External personnel should be supervised at all times and advised to report damage or loss to their host. Company issues phones / tablets taken into production areas for operations purposes should be routinely checked to ensure they are intact and do not pose a risk to the product.

Factory & equipment design

Facilities and equipment in product areas, should be designed, where practicable, to limit the use of glass, brittle plastics, and ceramics, wherever this is possible. Where these materials cannot be avoided, they must be protected to prevent breakages.

Register of items

All glass, brittle plastics, and ceramics in scope, is listed on a register, which provides enough information to allow each piece to be located and checked, including:

- Description of the item location
- The number of items
- The type of material; glass, brittle plastic, or ceramic
- The frequency of checks

Condition-based checks

Each item on the register must be checked at the frequency identified through the risk assessment. The condition-based checks must assess the item for damage, recording the outcome of the check, even where the item is found to be in good condition.

Corrective action

Where the condition-based checks identifies that the item is broken or missing, corrective action must be taken to:

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- Prevent product that could be already contaminated, from being dispatched
- Prevent further product from becoming contaminated

Where an item is protected behind a cover (for example, glass bulbs used as indicators on control panels) and the protective cover becomes broken or is missing, then the item behind should be removed where possible to prevent possible cross contamination. The corrective action and the time for completion, must be reflective and representative of the potential risk of contamination.

Maintenance

Maintenance and cleaning of glass items (such as light bulbs or EFK bulbs) must be carried out in a way that minimises the risk of breakage. Where there are materials beneath such items, they should be moved or covered to prevent the potential for contamination in the event of a breakage during maintenance or cleaning.

Staples, paper clips and similar metallic Items

Staples, paperclips and drawing pins are not permitted in production areas. Packaging of raw material ingredients should be reviewed prior to use to avoid potential contamination risks, wherever possible. Any raw material Ingredients with staples in the outer packaging should, where reasonably practicable be avoided.

Risk assessment

All glass, brittle plastics and ceramics in scope must be checked for integrity. A risk assessment should be used to determine the frequency of these condition-based checks. Confirmation of checks are captured on daily pre-production checks.

Register

All sharps and metal items should be listed on a register that identifies the location, unique identifier, and number of each item in the operation.

Controls

Metal sharps will be checked at the frequency based on risk. The condition-based checks can be specific for the purpose, or part of pre-production checks. All metal sharps must be marked so that they can be identified.

Handling metal sharps

Metal sharps must:

- Be stored in a secure and designated place (such as a locked toolbox or shadow board)
- Not be left unattended, when not in use
- Only be used for the purpose for which they are designed

Wood contamination

Exposed wood must not be used in open product areas. Wood should not be used in product areas, but where it cannot reasonably be avoided it must be:

- Properly sealed, smooth, and impervious to enable effective cleaning
- Kept clean and in good sound condition

Wooden pallets

Wooden pallets must not enter open food production areas. Pallets must only be used if they are dry, clean and in good condition. Any pallets identified in poor condition must be segregated and discarded.

Contamination from Raw Materials

Prior to packaged materials and bulk material containers movement into open food product areas, the outer packaging must be visually checked for contamination. Where the outer packaging is contaminated, it must be cleaned prior to entry into open food product areas.

Finished product packaging

Metal staples or other similar packaging closures used to pack finished product, which might become a foreign body should be avoided. Where these closures cannot reasonably be avoided, they should be adequately controlled to ensure that they do not contaminate product.

Stationery controls

Stationery used in open product areas must be controlled, so that it does not pose a risk of contamination.

Rubber and soft plastic

Where gaskets, seals, rubber impellers and other equipment made of similar materials are in place, where they can wear or deteriorate they must be:

- Listed on a register
- Risk assessed to determine the frequency of condition-based checks
- Covered by the planned preventive maintenance programme
- Replaced at a set frequency based on the manufacturer's recommendations

PPE and personal clothing

Colleagues and the clothes and PPE worn can present potential foreign body contamination to the finished product. PPE should be company issue and provided, with colleagues trained in the correct process of applying and wearing PPE to reduce the potential contamination of product.

Metal tools

Only business approved tools and equipment may be used in production handling areas. Where tools are required, the following process applies:

- Tools must not be left out when not in use
- Tools must be stored in a secure and designated place (e.g., a locked toolbox)
- Tools must only be used for the purpose for which they were designed
- All other sharp metal items and metal tools, which are not designed for use in food product areas must be stored away from the product and locked away to prevent unauthorised access and use

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Chemical & Physical Product Contamination Control Procedure

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