CONTROL PLANS IN FOOD SAFETY MANAGEMENT SYSTEMS

BRC, IFS & FSSC2200
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Different standards of food safety throughout the years have evolved to ensure that food operators to develop their activities in order to provide consumers with safe products.

Within this aim is the development of the plan of analysis, allergen control ... for each of them.

It can be said that there is a more restrictive scheme in relation to the criteria surrounding the analysis plan if each of the rules themselves set out specific requirements, which sometimes complement each other.

That is why out is to make an assessment of the requirements for each of the standards currently certified in our days; being the incorporation of the BRC requirements v7 new in it.
## PRODUCT INSPECTION AND LABORATORY TESTING

### BRC v6 vs V7

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<th>BRC FOOD v6</th>
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<td><strong>5.5</strong> Product inspection and laboratory testing</td>
<td><strong>5.6</strong> Product inspection and laboratory testing</td>
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<tr>
<td>The company shall undertake or subcontract inspection and analyses which are critical to confirm product safety, legality and quality, using appropriate procedures, facilities and standards.</td>
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<tr>
<td><strong>5.5.1.1</strong> There shall be a scheduled programme of testing covering products and the processing environment which may include microbiological, chemical, physical and organoleptic testing according to risk. The methods, frequency and specified limits shall be documented.</td>
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<td><strong>5.5.1.2</strong> Test and inspection results shall be recorded and reviewed regularly to identify trends. Appropriate actions shall be implemented promptly to address any unsatisfactory results or trends.</td>
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<td><strong>5.5.1.3</strong> The company shall ensure that a system of on-going shelf-life assessment is in place. This shall be based on risk and shall include microbiological and sensory analysis as well as relevant chemical factors such as pH and aw. Records and results from shelf life tests shall validate the shelf life period indicated on the product.</td>
<td><strong>5.6.1.3</strong> The company shall ensure that a system of on-going shelf-life assessment is in place. This shall be based on risk and include microbiological where applicable and sensory analysis as well as relevant chemical factors such as pH and aw. Records and results from shelf life tests shall verify the shelf life period indicated on the product.</td>
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<th><strong>5.5.2</strong> Laboratory testing</th>
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<tr>
<td><strong>5.5.2.1</strong> Pathogen testing shall be subcontracted to an external laboratory or, where conducted internally, the laboratory facility shall be fully segregated from the manufacturing site and have operating procedures to prevent any risk of product contamination.</td>
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<tr>
<td>Where routine testing laboratories are present on a manufacturing site, they shall be located, designed and operated to</td>
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eliminate potential risks to product safety. Controls shall be documented, implemented and shall include consideration of the following:

- design and operation of drainage and ventilation systems
- access and security of the facility
- movement of laboratory personnel
- protective clothing arrangements
- processes for obtaining product samples
- disposal of laboratory waste.

5.5.2.2 Where the company undertakes or subcontracts analyses which are critical to product safety or legality, the laboratory or subcontractors shall have gained recognised laboratory accreditation or operate in accordance with the requirements and principles of ISO 17025. Documented justification shall be available where accredited methods are not undertaken.

5.5.2.3 Procedures shall be in place to ensure reliability of laboratory results, other than those critical to safety and legality specified in 5.5.2.3. These shall include:

- use of recognised test methods, where available
- documented testing procedures
- ensuring staff are suitably qualified and/or trained and competent to carry out the analysis required
- use of a system to verify the accuracy of test results, e.g. ring or proficiency testing
- use of appropriately calibrated and maintained equipment.

5.6.2.2 Where the company undertakes or subcontracts analyses which are critical to product safety or legality, the laboratory or subcontractors shall have gained recognized laboratory accreditation or operate in accordance with the requirements and principles of ISO17025. Documented justification shall be available where accredited methods are not undertaken. The results of external testing shall be formally reviewed.

5.6.2.3 Procedures shall be in place to ensure reliability of laboratory results, other than those critical to safety and legality specified in 5.5.2.3. These shall include:

- Use of recognized test methods, where available.
- Documented testing procedures
- Ensuring staff are suitability qualified and/or trained and competent to carry out the analysis required
- Use of a system to verify the accuracy of tests results, e.g. ring or proficiency testing
- Use of appropriate calibrated and maintained equipment.
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<tr>
<td>5.6.1</td>
<td>There shall be procedures ensuring that all specified product requirements are met, including legal requirements and specifications. Microbiological, physical and chemical analysis required for that purpose shall be performed internally and/ or subcontracted.</td>
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<tr>
<td>5.6.2</td>
<td>Analyses, which are relevant for food safety, shall preferably be performed by laboratories having appropriate accredited programs/ methods (ISO 17025). If the analyses are performed by a factory internal or a laboratory not having appropriate accredited programs/ methods, the results shall be verified on a regular basis by laboratories accredited on these programs/ methods (ISO 17025).</td>
</tr>
<tr>
<td>5.6.3</td>
<td>Procedures shall exist which ensure the reliability of the internal analysis results on the basis of official recognised analysis methods. This shall be demonstrated by ring tests or other proficiency tests.</td>
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<tr>
<td>5.6.4</td>
<td>A test plan shall be drawn up for internal and external analysis, based on hazard analysis and assessment of associated risks, which covers raw materials, semi-processed and finished products as well as processing equipments and packaging materials, and where necessary environmental tests. The test results shall be documented.</td>
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<tr>
<td>5.6.5</td>
<td>Results of analysis shall be evaluated promptly. Appropriate corrective measures shall be introduced for any unsatisfactory results. The analytical results shall be reviewed regularly in order to identify trends. Trends indicating potential unsatisfactory results shall be taken into consideration.</td>
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<tr>
<td>5.6.6</td>
<td>Where internal analysis is undertaken, qualified and trained personnel shall be in place, as well as appropriate equipment and premises.</td>
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<tr>
<td>5.6.7</td>
<td>For verification of finished product quality, internal organoleptic tests shall be carried out regularly. These tests shall be in accordance with specifications and related to the impact on respective parameters of product characteristic. The results of these tests shall be documented.</td>
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<tr>
<td>5.6.8</td>
<td>Based on hazard analysis, assessment of associated risks and on any internal or external information on product risks which may have an impact on food safety and/or quality (incl. adulteration and fraud), the company shall update its control plan and/ or take any appropriate measure to control impact on finished products.</td>
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The requirements associated with the plan of analysis are:

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<th>ISO22000:2005</th>
<th>7.8 Verification planning</th>
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<td>Verification planning shall define the purpose, methods, frequencies and responsibilities for the verification activities. The verification activities shall confirm that</td>
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<tr>
<td>a. The PRP(s) are implemented (see 7.2),</td>
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<td>b. Input to the hazard analysis (see 7.3) is continually updated,</td>
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<tr>
<td>c. The operational PRP(s) (see 7.5) and the elements within the HACCP plan (see 7.6.1) are implemented and effective,</td>
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<tr>
<td>d. Hazard levels are within identified acceptable levels (see 7.4.2), and</td>
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<tr>
<td>e. Other procedures required by the organization are implemented and effective.</td>
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<td>The output of this planning shall be in a form suitable for the organization’s method of operations.</td>
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<td>Verification results shall be recorded and shall be communicated to enable the analysis of the results of the verifications activities (see 8.4.3).</td>
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<td>If system verification is based on testing of end product samples, and where such tests samples show nonconformity with the acceptable level of the food safety hazard (see 7.4.2), the affected lots of product shall be handled as potentially unsafe in accordance with 7.10.3</td>
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<tr>
<th>ISO/TS22002-1</th>
<th>5.5 Laboratory Facilities</th>
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<td>In-line and on-line tests facilities shall be controlled to minimize risk of product contamination.</td>
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<tr>
<td>Microbiology laboratories shall be designed, located and operated so as to prevent contamination of people, plant and products. They shall not open directly on to a production area.</td>
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- Inventory food safety legislation applicable to their business
- All services (transport, maintenance, etc.) conform to specified requirements, based on risk assessment
- Effective supervision of staff in implementing hygiene criteria
- Critical analysis of food safety parameters performed in laboratories accredited ISO17025
The new changes are introduced into the system BRC certification in relation to the analysis plan are in need that although the external laboratory is accredited to ISO17025 should carry out a formal review of the results.

That means the need to formally review the results? The answer involves a thorough review not only that the laboratory is accredited to ISO17025 otherwise than in accordance checking technique used corresponds to the proven technique.

Throughout audit certification schemes BRC, IFS i FSSC 22000 we have met on numerous occasions given this type of nonconformity.

The following identifies some of nonconformities type detected in relation to this requirement:

| It has been observed that Bi…l Laboratory used by microbiological analysis (modifying and pathogenic agents) does not have ISO17025 certification for those test |
| Detects that the A…A laboratory does not have certification ISO17025 for agri-food sector. A….OL analyses are underway with the technique not accredited for determinations of pathogens |
| Is detected that while the external laboratory has ISO17025 accreditation for different parameters, however detected that not all determinations of pathogens is carried out under the analysis (eg ISO17025 accredited. Determination of e. coli) |
### MANAGEMENT OF ALLERGENS

#### BRC v6 vs BRC v7

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<th>Management of allergens</th>
<th>5.3</th>
<th>Management of allergens</th>
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<tr>
<td>The company shall have a developed system for the management of allergenic materials which minimises the risk of allergen contamination of products and meets legal requirements for labelling.</td>
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#### 5.2.1

The company shall carry out an assessment of raw materials to establish the presence and likelihood of contamination by allergens (refer to glossary). This shall include review of raw material specifications and, where required, obtain additional information from suppliers, for example through questionnaires to understand the allergen status of the raw material, its ingredients and the factory in which it is produced.

#### 5.2.2

The company shall identify and list allergen-containing materials handled on site. This shall include raw materials, processing aids, intermediate and finished products and any new product development ingredients or products.

#### 5.2.3

A documented risk assessment shall be carried out to identify routes of contamination and establish documented policies and procedures for handling raw materials, intermediate and finished products to ensure cross-contamination is avoided. This shall include:

- consideration of the physical state of the allergenic material, i.e. powder, liquid, particulate
- identification of potential points of cross-contamination through the process flow
- assessment of the risk of allergen cross-contamination at each process step

#### 5.3.1

The company shall carry out an assessment of raw materials to establish the presence and likelihood of contamination by allergens (refer to glossary). This shall include review of raw materials specifications and, where required, obtain additional information from suppliers, for example through questionnaires to understand the allergen status of the raw material, its ingredients and the factory in which it is produced.

#### 5.3.2

The company shall identify and list allergen-containing materials handled on site. This shall include raw materials, processing aids, intermediate and finished products and any new product development ingredients or products. A list shall be available of products which do not contain allergens and therefore need to be protected from contamination.

#### 5.3.3

A documented risk assessment shall be carried out to identify routes of contamination and establish documented policies and procedures for handling raw materials, intermediate and finished products to ensure cross-contamination is avoided. This shall include:

- consideration of the physical state of the allergenic material, i.e. powder, liquid, particulate
- identification of potential points of cross-contamination through the process flow
- assessment of the risk of allergen cross-contamination at each process step
- identification of suitable controls to reduce or eliminate the risk of cross-contamination.
identification of suitable controls to reduce or eliminate the risk of cross-contamination.

Documented procedures shall be established to ensure the effective management of allergenic materials to prevent cross-contamination into products not containing the allergen. This shall include as appropriate:

- physical or time segregation whilst allergen-containing materials are being stored, processed or packed
- the use of separate or additional protective over clothing when handling allergenic materials
- use of identified, dedicated equipment and utensils for processing
- scheduling of production to reduce changes between products containing an allergen and products not containing the allergen
- systems to restrict the movement of airborne dust containing allergenic material
- waste handling and spillage controls

5.3.4 Documented procedures shall be established to ensure the effective management of allergenic materials to prevent cross-contamination into products not containing the allergen. This shall include as appropriate:

- physical or time segregation whilst allergen-containing materials are being stored, processed or packed
- the use of separate or additional protective over clothing when handling allergenic materials
- use of identified, dedicated equipment and utensils for processing
- scheduling of production to reduce changes between products containing an allergen and products not containing the allergen
- systems to restrict the movement of airborne dust containing allergenic material
- waste handling and spillage controls

5.2.5 Where rework is used, or reworking operations carried out, procedures shall be implemented to ensure rework containing allergens is not used in products that do not already contain the allergen.

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5.2.6 Where the nature of the production process is such that cross-contamination from an allergen cannot be prevented, a warning shall be included on the label. National guidelines or codes of practice shall be used when making such a warning statement.

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5.2.7 Where a claim is made regarding the suitability of a food for allergy or food sensitivity sufferers, the company shall ensure that the production process is fully validated to meet the stated claim. This shall be documented.

5.3.7 Where the nature of the production process is such that cross-contamination from an allergen cannot be prevented, a warning shall be included on the label. National guidelines or codes of practice shall be used when making such a warning statement.

5.2.8 Equipment or area cleaning procedures shall be designed to remove or reduce to acceptable levels any potential cross-contamination by allergens. The cleaning methods shall be validated to ensure they

5.3.8 Equipment or area cleaning procedures shall be designed to remove or reduce to acceptable levels any potential cross-contamination by allergens. The cleaning methods shall be validated to ensure they
are effective and the effectiveness of the procedure routinely verified. Cleaning equipment used to clean allergenic materials shall either be identifiable and specific for allergen use, single use, or effectively cleaned after use.

5.2.9 All relevant personnel, including engineers, temporary staff and contractors, shall have received general allergen awareness training and be trained in the company’s allergen-handling procedures.

5.2.10 An effective system of documented checks shall be in place at line start-up, following product changeover and changes in batches of packaging to ensure that the labels applied are correct for the products packed.

**IFS v6**

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<th>4.20</th>
<th>Allergens and specific conditions of production</th>
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<tr>
<td>4.20.1</td>
<td>Raw material specifications identifying allergens requiring declaration that are relevant to the country of sale of the finished product shall be available. The company shall maintain a continuously up to date listing of all raw materials containing allergens used at its premises, which also identifies all blends and formulas to which such raw materials containing allergens are added.</td>
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<tr>
<td>4.20.2</td>
<td>The manufacturing of products which contain allergens requiring declaration shall be carried out as to ensure cross contamination is minimised as far as possible.</td>
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<td>4.20.3</td>
<td>Finished products containing allergens requiring declaration shall be declared in accordance with current legal requirements. For the adventitious or unintentional presence, the labelling of legally declared allergens and traces shall be based on hazard analysis and assessment of associated risks.</td>
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<tr>
<td>4.20.4</td>
<td>Where customers specifically require that products are “free from” certain substances or ingredients (e.g. gluten, pork, etc), or that certain methods of treatment or production are excluded, verifiable procedures shall be in place.</td>
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</table>
When selecting and/or establishing PRP(s), the organization shall consider and utilize appropriate information [e.g. statutory and regulatory requirements, customer requirements, recognized guidelines, Codex Alimentarius Commission (Codex) principles and codes of practices, national, international or sector standards].

NOTE Annex C gives a list of relevant Codex publications.

The organization shall consider the following when establishing these programmes:

a. construction and lay-out of buildings and associated utilities;

... 

g. measures for the prevention of cross contamination;

...

Verification of PRP(s) shall be planned (see 7.8) and PRP(s) shall be modified as necessary (see 7.7). Records of verifications and modifications shall be maintained.

Documents should specify how activities included in the PP(s) are managed.

Allergens present in the product, either by design or by potential manufacturing cross-contact, shall be declared. The declaration shall be on the label for consumer products, and on the label or the accompanying documentation for products intended for further processing.

Products shall be protected from unintended allergen cross-contact by cleaning and line change-over practices and/or product sequencing.

NOTE Manufacturing cross-contact can arise from either:

1. traces of product from the previous production run which cannot be adequately cleaned from the product line due to technical limitations: or

2. when contact is likely to occur, in the normal manufacturing process, with product or ingredients that are produced on separate lines, or in the same or adjacent processing areas

Rework containing allergen(s) shall be used only:

a. in products which contain the same allergens(s) by design; or

b. through a process which is demonstrated to remove or destroy the allergenic material.

NOTE For general rework requirements, see Clause 14

Employees handling food should receive specific training in allergen awareness and associated manufacturing practices.
It is necessary to establish appropriate procedures to avoid cross-contamination with allergens and establish appropriate mechanisms for verification.

They are currently legislated quantitative values of 2 to 12 indicating the current legislation Directive 2003/89 / EC

But that means for other allergens no acceptable limits to consider? It should set limits and control parameters.

Regulation (EU) No 1169/2011 on food information to consumers amending considerably existing legislation on food labeling, including information and requirements for allergens. The new rules will apply from 13 December 2014.

The regulation describes the requirements concerning the compulsory indication allergen labeling of certain substances or products causing allergies and intolerances, additional information voluntary and labeling of unpackaged food allergens.

Substances or products causing allergies should indicate unpackaged foods. Each ingredient or processing aid from a substance or product that causes allergies or intolerances should:

- Indicated in the list of ingredients with reference to the name of the substance or product as listed in Annex II.

The substance or product that cause allergies or intolerances should be highlighted by a typeface that sets you apart from the rest of the ingredients list. If no list of ingredients, the substance or product causing allergies or intolerances should be indicated by the word "contains + the name of the [substance (s) / product (s)]".

When the name of the food clearly refers to the substance or products causing allergies or intolerances, it is not necessary to label the substance or product concerned.

The European Commission systematically re-examine and, if necessary, update the list of substances or products causing allergies or intolerances.

The Commission shall establish measures for the implementation of voluntary indication of the words "may contain".

Then mention of some of the anomalies in the various certification audits in relation to allergen control plan is:

The presence of allergen nuts, is identified by cross-contamination by chocolate coated products and as an ingredient in biscuit reference. While is an appropriate cleaning, senses that don’t carry out analysis of allergen product or surfaces.
Although there are an allergen management policy and generally is considered the management of allergens is suitable is detected that the values of allergens that can have the product that contains the statement have not been identified “may contain traces of…”

Even though is the claim that the product may contain traces of allergen “lactose”, detects that the value reference of the allergen as such has not been identified. As well as either the value of soybeans has been identified as such.

It is detected that he is being promptly made reprocessing of NUGGETS pizza PANCAKES. Nuggets products use egg like ingredient, nevertheless the pizza pancakes does not use egg like ingredient.

Is detected that while there has been a validation in relation to final (for lactose and gluten) product; is detected that not been a validation in relation to the cleaning of equipment for different allergens (eg. Fish).

The validation of allergen from the past 14.02.2012. A minimum frequency of allergen as such control has not been established.
For more information, please don’t hesitate to contact with:

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