

# Implementing an FSSC 22000 Version 6 Compliant Food Safety Management System

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# **FSSC 22000 Certification Scheme**

FSSC 22000 was developed to facilitate broader acceptance of <u>ISO 22000 Food</u> safety management systems - Requirements for any organization in the food <u>chain</u> and recognition by the Global Food Safety Initiative (GFSI).

The FSSC 22000 Food Safety System Certification Scheme provides a framework for food safety management based on ISO Standards.

The FSSC 22000 Scheme was first published in 2009 and there are currently over 34,000 FSSC 22000 certified organizations worldwide.

Source: https://www.fssc.com/schemes/fssc-22000/



# **FSSC 22000 Certification Scheme**

In order to clarify the requirements for PRPs and to allow for recognition by the Global Food Safety Initiative (GFSI) of the Consumer Goods Forum, industry stakeholders have developed detailed technical specifications covering sector pre-requisite programs (PRPs) which are used in addition to ISO 22000.

FSSC 22000 provides a certification scheme for such industry sectors where such a technical specification for sector PRPs has been integrated into the category scope.



## **FSSC 22000 SCHEME VERSION 6**

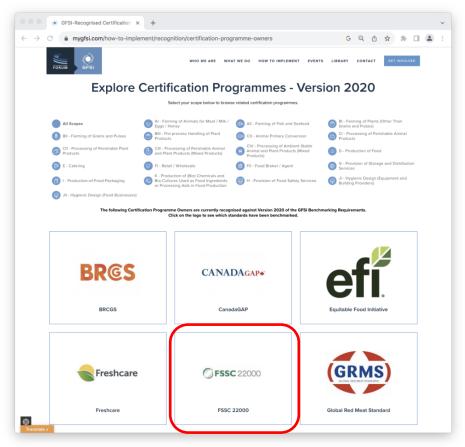
The audit requirements for FSSC 22000 certification consist of:

- 1) ISO 22000:2018 food safety management system requirements;
- 2) sector specific prerequisite program (PRPs) requirements
- (ISO/TS 22002-x series or other specified PRP standard) and;
- 3) FSSC 22000 Additional requirements.

FSSC 22000 Additional requirements fill the gaps between the GFSI Benchmark requirements and ISO 22000/ISO/TS 22002-x standards thus enabling the FSSC 22000 Certification Scheme to be recognised by GFSI.



## **FSSC 22000 SCHEME VERSION 6**



The FSSC 22000 Certification Scheme is recognised by GFSI.





# FSSC 22000 Requirements - Prerequisite programmes for Supply Chain Sector

ISO/TS 22002-1:2009 Prerequisite programmes on food safety -- Part 1: Food manufacturing

ISO/TS 22002-2:2013 Prerequisite programmes on food safety -- Part 2:

Catering

ISO/TS 22002-3:2011 Prerequisite programmes on food safety -- Part 3:

Farming (Note: Category A Farming removed from Scope of FSSC 22000 V6)

ISO/TS 22002-4:2013 Prerequisite programmes on food safety -- Part 4: Food packaging manufacturing

ISO/TS 22002-5:2019 Prerequisite programmes on food safety -- Part 5:

Transport and storage

ISO/TS 22002-6:2016 Prerequisite programmes on food safety -- Part 6: Feed and animal food production

BSI/PAS 221:2013 Prerequisite programmes for food safety in food retail

## **FSSC 22000 Certification Scheme**



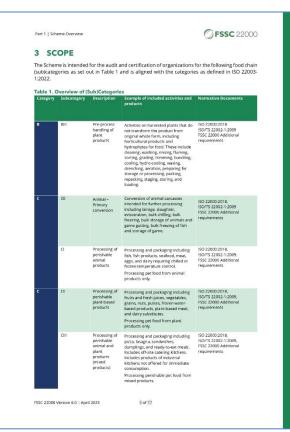
The FSSC 22000 Scheme Version 6 was published in April 2023.

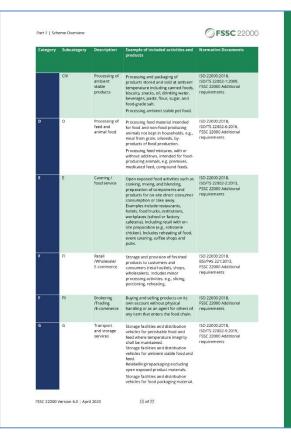
The FSSC 22000-Quality program is being discontinued.

From 1 April 2024, no further FSSC 22000-Quality audits shall be delivered.



# **FSSC 22000 Food Categories**



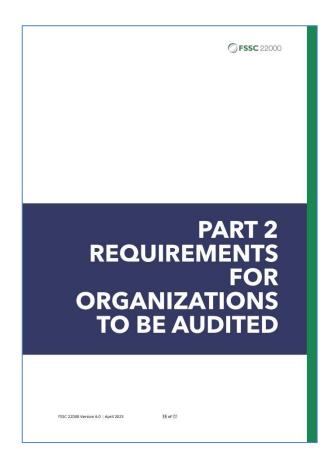




(Note: Category A Farming removed from the Scope of FSSC 22000 V6)



# FSSC 22000 SCHEME VERSION 6 | APRIL 2023



Part II: REQUIREMENTS
FOR ORGANIZATIONS TO
BE AUDITED



# FSSC 22000 SCHEME VERSION 6 Part II: REQUIREMENTS FOR ORGANIZATIONS TO BE AUDITED

### **2 REQUIREMENTS**

2.1 GENERAL

The audit requirements for FSSC 22000 certification consist of:

- 1) ISO 22000:2018 food safety management system requirements;
- 2) sector specific prerequisite program (PRPs) requirements (ISO/TS
- 22002-x series or other specified PRP standard) and;
- 3) FSSC 22000 Additional requirements.



# **FSSC 22000 Version 6 Requirements**

ISO/TS 22002-1 Prerequisite programmes on food safety -- Part 1: Food manufacturing is applicable to Food Sector Categories/Sub-categories:

**BIII Pre-process handling of plant products** 

**CO Animal – Primary conversion** 

**CI Processing of perishable animal products** 

**CII Processing of perishable plant-based products** 

CIII Processing of perishable animal and plant products (mixed products)

**CIV Processing of ambient stable products** 

K Production of Bio/chemicals

TECHNICAL SPECIFICATION

ISO/TS 22002-1

First edition

Prerequisite programmes on food safety —

Part 1: Food manufacturing

Programmes prérequis pour la sécurité alimentaire —



# What is ISO 22000?

ISO 22000 is an international standard that specifies requirements for a food safety management system where an organization in the food chain needs to demonstrate compliance with food safety requirements.

INTERNATIONAL ISO 22000

Second edition 2018-06

Food safety management systems — Requirements for any organization in the food chain



# **About ISO 22000**

ISO 22000 combines generally recognized key elements to ensure food safety along the food chain:

- ✓ Interactive Communication
- ✓ HACCP Principles
- ✓ System Management
- ✓ Prerequisite programmes





## **Interactive Communication**

Clear communication along the food chain is essential to ensure that all relevant food safety hazards are identified and adequately controlled at each step.

INTERNATIONAL STANDARD

ISO 22000

Second edition 2018-06

Food safety management systems — Requirements for any organization in the food chain



# **HACCP Principles**

ISO 22000 combines the Codex Alimentarius HACCP (Hazard Analysis and Critical Control Points) principles and application steps, developed by Codex Alimentarius, with prerequisite programmes.

INTERNATIONAL ISO STANDARD 22000

Second edition 2018-06

Food safety management systems — Requirements for any organization in the food chain



# **Prerequisite Programmes**

The effective production of safe products requires a detailed Hazard Control Plan and the integration of Prerequisite Programmes.





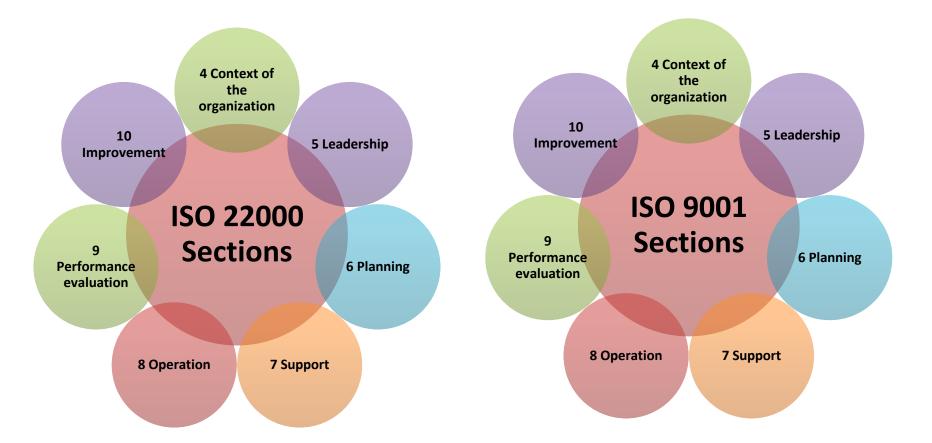
# Management Principles common to ISO Management System Standards

In addition, ISO 22000 is based on management principles that are common to ISO management system standards:

- ✓ Customer Focus
- ✓ Leadership
- ✓ Engagement of People
- ✓ Process Approach
- ✓ Improvement
- ✓ Evidence-Based Decision Making
- Relationship Management









# System Management ISO 22000 aligned with ISO 9001

ISO 22000 is aligned with the requirements of ISO 9001 in order to enhance the compatibility of the two standards and to ease their joint or integrated implementation.

INTERNATIONAL SO 9001

Fourth edition 2008-11-15

Corrected version 2009-07-15

Quality management systems — Requirements





### ISO 9001:2015 Quality management systems — Requirements vs. ISO 22000:2018 Food safety management systems — Requirements for any organization in the food chain

International ISO Standard 9001:2015 Quality management systems — Requirements vs. International ISO Standard 22000: 2018 Food safety management systems —

Requirements for any organization in the food chain							
ISO 9001:2015	ISO 22000:2018						
4 Context of the organization	4 Context of the organization						
4.1 Understanding the organization and its context	4.1 Understanding the organization and its context						
4.2 Understanding the needs and expectations of interested parties	4.2 Understanding the needs and expectations of interested parties						
4.3 Determining the scope of the quality management	4.3 Determining the scope of the food safety management system						
4.4 Quality management system and its processes	4.4 Food safety management system						
5 Leadership	5 Leadership						
5.1 Leadership and commitment	5.1 Leadership and commitment						
5.1.1 General							
5.1.2 Customer focus							
5.2 Policy	5.2 Policy						
5.2.1 Establishing the quality policy	5.2.1 Establishing the food safety policy						
5.2.2 Communicating the quality policy	5.2.2 Communicating the food safety policy						
5.3 Organizational roles, responsibilities and authorities	5.3 Organizational roles, responsibilities and authorities						
6 Planning	6 Planning						
6.1 Actions to address risks and opportunities	6.1 Actions to address risks and opportunities						
6.2 Quality objectives and planning to achieve them	6.2 Objectives of the food safety management system and planning to achieve them						
6.3 Planning of changes	6.3 Planning of changes						
7 Support	7 Support						
7.1 Resources	7.1 Resources						
7.1.1 General	7.1.1 General						
7.1.2 People	7.1.2 People						
7.1.3 Infrastructure	7.1.3 Infrastructure						
7.1.4 Environment for the operation of processes	7.1.4 Work environment						
7.1.5 Monitoring and measuring resources	7.1.5 Externally developed elements of the food safety management system						

7.1.6 Control of externally provided processes, products or services

7.1.6 Organizational knowledge

# ISO 9001:2015 Quality management systems — Requirements vs. ISO 22000:2018 Food safety management systems — Requirements for any organization in the food chain

ISO 9001:2015	ISO 22000:2018
7.2 Competence	7.2 Competence
7.3 Awareness	7.3 Awareness
7.4 Communication	7.4 Communication
	7.4.1 General
(8.2.1 Customer communication)	7.4.2 External communication
	7.4.3 Internal communication
7.5 Documented information	7.5 Documented information
7.5.1 General	7.5.1 General
7.5.2 Creating and updating	7.5.2 Creating and updating
7.5.3 Control of documented information	7.5.3 Control of documented information
8 Operation	8 Operation
9 Performance evaluation	9 Performance evaluation
9.1 Monitoring, measurement, analysis and evaluation	9.1 Monitoring, measurement, analysis and evaluation
9.1.1 General	9.1.1 General
9.1.2 Customer satisfaction	
9.1.3 Analysis and evaluation	9.1.2 Analysis and evaluation
9.2 Internal audit	9.2 Internal audit
9.3 Management review	9.3 Management review
9.3.1 General	9.3.1 General
9.3.2 Management review inputs	9.3.2 Management review input
9.3.3 Management review outputs	9.3.3 Management review output
10 Improvement	10 Improvement
10.1 General	
10.2 Nonconformity and corrective action	10.1 Nonconformity and corrective action
10.3 Continual Improvement	10.2 Continual improvement
	10.3 Update of the food safety management system

# ISO 9001:2015 Quality management systems — Requirements vs. ISO 22000:2018 Food safety management systems — Requirements for any organization in the food chain

#### ISO 9001:2015

- 8 Operation
- 8.1 Operational planning and control
- 8.2 Requirements for products and services
- 8.2.1 Customer communication
- 8.3 Design and development of products and services
- (8.5.2 Identification and traceability)
- 8.4 Control of externally provided processes, products and services
- 8.5 Production and service provision
- 8.5.1 Control of production and service provision
- 8.5.2 Identification and traceability
- 8.5.3 Property belonging to customers or external providers
- 8.5.4 Preservation
- 8.5.5 Post-delivery activities
- 8.5.6 Control of changes
- 8.6 Release of products and services
- 8.7 Control of nonconforming outputs



# ISO 22000:2018 Section 8 Operation

8 Operation	8.5.3 Validation of control measure(s) and combinations of control
8.1 Operational planning and control	measures
8.2 Prerequisite programmes (PRPs)	8.5.4 Hazard control plan (HACCP/OPRP plan)
8.3 Traceability system	8.5.4.1 General
8.4 Emergency preparedness and response	8.5.4.2 Determination of critical limits and action criteria
8.4.1 General	8.5.4.3 Monitoring systems at CCPs and for OPRPs
8.4.2 Handling of emergencies and incidents	8.5.4.4 Actions when critical limits or action criteria are not met
8.5 Hazard control	8.5.4.5 Implementation of the hazard control plan
8.5.1 Preliminary steps to enable hazard analysis	8.6 Updating the information specifying the PRPs and the hazard contro
8.5.1.1 General	plan
8.5.1.2 Characteristics of raw materials, ingredients and product contact materials	8.7 Control of monitoring and measuring
8.5.1.3 Characteristics of end products	8.8 Verification related to PRPs and the hazard control plan
8.5.1.4 Intended use	8.8.1 Verification
8.5.1.5 Flow diagrams and description of processes	8.8.2 Analysis of results of verification activities
8.5.1.5.1 Preparation of the flow diagrams	8.9 Control of product and process nonconformities
8.5.1.5.2 On-site confirmation of flow diagrams	8.9.1 General
8.5.1.5.3 Description of processes and process environment	8.9.2 Corrections
8.5.2 Hazard analysis	8.9.3 Corrective actions
8.5.2.1 General	8.9.4 Handling of potentially unsafe products
8.5.2.2 Hazard identification and determination of acceptable levels	8.9.4.1 General
8.5.2.3 Hazard assessment	8.9.4.2 Evaluation for release
8.5.2.4 Selection and categorization of control measure(s)	8.9.4.3 Disposition of nonconforming products
	8.9.5 Withdrawal/recall

# Plan Do Check Act Cycle

Overall framework of the Food Safety Management System and corresponding ISO 22000:2018 Sections

### Plan

4 Context of the organization
5 Leadership
6 Planning
7 Support \*

Act

10. Improvement

Do

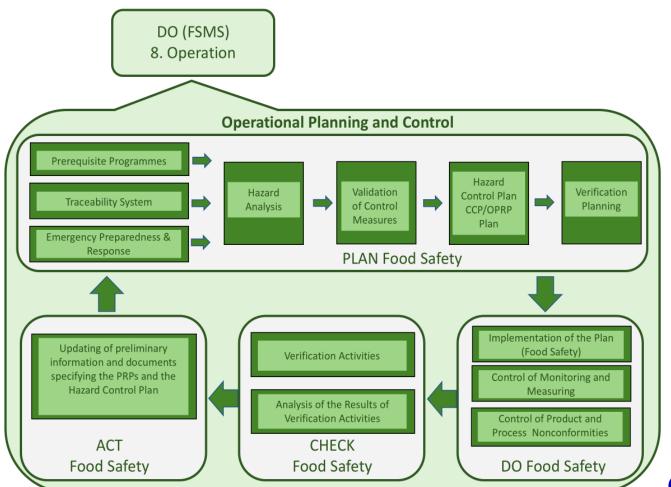
8. Operation \*\*

- \* Plus control of external processes, products & services
- \*\* See Operational PDCA Cycle

### Check

9. Performance evaluation







# ISO 22000 Section 4 Context of the organization

### 4.1 Understanding the organization and its context

1	Organizational Risk Analysis							
2 3	Area of Issue   Description		Internal External	Positive Negative	International National Regional Local	Risk Level	Proposed Action	Timescale Priority
4	Legal	Issues complying with FSMA	Internal	Negative	▼ National	High	Bring in external resource to assist in FSMA compliance	Priority
5	Technological	Technology out of date	Internal	Negative	International	Medium	Renew out of Date Technology	
6	Competition	Lack of Competition	External	Positive	Regional	Low	Increased Marketing	
7	Market	Only Short Term Customer Contracts	External	Negative	International	High	Seek Longer Term for Customer Contracts	Priority
8	Cultural	Product of Religious, ethical or moral significance	External	Negative	Local	Low	Also look to Products not of Religious, ethical or moral significance	
9	Social	Need for Seasonal Workers	Internal	Negative	Local	High	Contract Seasonal Workers	Priority
10	Economic environments	Harvest Failure	External	Negative	National	Medium	Look for Alternative Supplies	
11	Food fraud	Economically motivated adulteration (EMA)	External	Negative	International	Medium	Increased Supplier Assurance & Product Testing	
	Food defence, Cybersecurity & Intentional contamination	Premises located in a politically or socially sensitive area	Internal	Negative	Local	High	Increase Security Short Term. Long Term look to relocate.	Priority
13	Knowledge (Organization)	Lack of Technical Skills	Internal	Negative	Local	Medium	Recruit Technical Skills	
14	Performance (Organization)	Unreliable Operations	Internal	Negative	Local	High	Project Implementation Operational Efficiency	Priority
Organization Analysis Types of Risk Sheet2 Sheet3 Sizet4 Sheet5 +								



# ISO 22000 Section 4 Context of the organization



#### Food Safety & Quality Management System

#### 4.1 Understanding the organization and its context

The company has determined internal and external issues that are relevant to its purpose and that affect its ability to achieve the intended result(s) of its FSQMS. In order to achieve this aim Top Management have carried out an Organization Analysis considering external and internal issues, including legal, technological, competitive, market, cultural, social and economic environments, cybersecurity and food fraud, food defence and intentional contamination, knowledge and performance of the organization.

Organization Analysis								
Area of Issue	Description	Internal External	Positive Negative	International National Regional Local				
Legal								
Technological								
Competition								
Market								
Cultural								
Social								
Economic								
environments								
Cybersecurity								
Food fraud								
Food defence								
Intentional								
contamination								
Knowledge								
(Organization)								
Performance								
(Organization)				1				

Top management are responsible for identifying, reviewing and updating information related to these external and internal issues.

Document Reference FSMS 4.1 Understanding the organization and its context Revision 0 7th November 2023 Owned by: Technical Manager Authorised By: General Manager



### **Section 4 Context of the organization**

- 4.1 Understanding the organization and its context
- 4.2 Understanding the needs and expectations of interested parties



Category	Food Safety Requirement	International National Regional Local
Statutory		International
Statutory		National
Statutory		Regional
Statutory		Local
Regulatory		International
Regulatory		National
Regulatory		Regional
Regulatory		Local
Customer 1		International
Customer 2		National
Customer 3		Regional
Customer 4		Local
Customer 5		

Top management are responsible for identifying, reviewing and updating information related to the interested parties and their requirements.

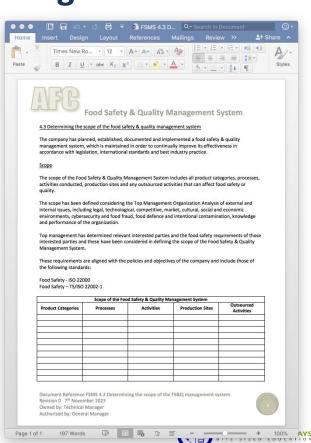


# ISO 22000 Section 4 Context of the organization

### **Section 4 Context of the organization**

4.3 Determining the scope of the food safety management system – Also considering 4.1 & 4.2





# 4.4 Food safety management system

FSMS 4.4 Food Safety Management System - Update [Compatibility Mode]



#### Food Safety & Quality Management System

#### 4.4 Food Safety & Quality Management System

The company has planned, established, documented and implemented a Food Safety & Quality Management System, which is maintained and updated in order to continually improve its effectiveness in accordance with legislation, international standards and best industry practice. The company has planned and developed the processes needed and their interactions that contribute to meeting the defined requirements of the Food Safety & Quality Management System and producing safe, quality

The scope of the Food Safety & Quality Management System includes all product categories, processes, activities conducted, production sites and any outsourced activities that can affect food safety or

#### Due diligence

The Food Safety & Quality Manual demonstrates due diligence of the company in the effective development and implementation of the Food Safety & Quality Management System, These documents are fully supported by the completion of the records specified in this manual for the monitoring of planned activities, maintenance and verification of control measures and by taking effective actions when non-conformity is encountered.

#### Food Safety & Quality

The company is committed to supplying safe, quality products for consumption. As part of this commitment, all products and processes used in the manufacture of food products are subject to hazard analysis based on the Codex Alimentarius guidelines for the application of a HACCP system and ISO 22000 requirements. All food safety hazards, that may reasonably be expected to occur, are identified by this process and are then fully evaluated and controlled so that our products do not represent a direct or indirect risk to the consumer. New information regarding food safety hazards is continually reviewed by the Food Safety Team to ensure that the Food Safety Management System is continually updated and complies with the latest food safety requirements.

Should the company be required to outsource any process that may affect product conformity to the defined standards of the Food Safety & Quality Management System then the site will assume control over this process. This is fully defined in all Sub-Contract Agreements.

Document Reference FSMS 4.4 Food Safety & Quality Management System Revision 0 7th November 2023 Owned by: Technical Manager





#### Food Safety & Quality Management System

#### Communication

The company has established and documented clear levels of communication for suppliers, contractors, customers, food authorities and staff within the Food Safety & Quality Management System.

Detailed communication arrangements and food safety/quality communication responsibilities for all levels of management are contained in the Food Safety & Quality Manual. The scope of the communication procedures applies to all members of staff, both full time and temporary.

The Management Representative for Food Safety & Quality and the Food Safety & Quality Team Leader is the Technical Manager, who retains responsibility and authority for external communication and liaison regarding the Food Safety & Quality Management System. This responsibility for communication extends to ensuring there is sufficient information relating to food safety throughout the food chain. This communication includes documented agreements, contracts, specifications, product information, food safety leaflets, allergen advice and reports.

The Food Safety & Quality Management System processes and their interaction are documented within this manual and its procedures. 22000 Food Safety & Quality Management System

4 Context of the organization
FSMS 4.1 Understanding the organization and its context
FSMS 4.2 Understanding the needs and expectations of interested parties
FSMS 4.3 Determining the scope of the food safety & quality management system
FSMS 4.4 Food safety management system
5 Leadership
FSMS 5.1 Leadership and commitment
FSMS 5.1 Food Safety Culture Planning
FSMS 5.2 Policy
FSMS 5.3 Organizational roles, responsibilities and authorities
6 Planning
FSMS 6.1 Actions to address risks and opportunities

Document Reference FSMS 4.4 Food Safety & Quality Management System Revision 0 7th November 2023 Owned by: Technical Manager

Authorised by: General Manager





and Safety & Quality Management System

FSMS 6.3 Planning of changes				
	7 Support			
	7.1 Resources			
	7.1.1 General			
	7.1.2 People			
	7.1.3 Infrastructure			
FSMS 7 Support	7.1.4 Work environment			
	7.1.5 Externally developed elements of the fo			
	safety management system 7.1.6 Control of externally provided processes			
	products or services			
	7.2 Competence			
	7.3 Awareness			
	7.4.1 General			
FSMS 7.4 Communication	7.4.2 External communication			
	7.4.3 Internal communication			
	7.5.1 General			
FSMS 7.5 Documented information	7.5.2 Creating and updating			
	7.5.3 Control of documented information			
	8 Operation			
FSMS 8.1 Operational planning and control				
FSMS 8.1 Product Development Module/Fo	lder			
FSMS 8.2 Prerequisite programmes (PRPs)				
FSMS 8.3 Traceability system				
FSMS 8.4 Emergency preparedness and resp	ponse			
8.5	Hazard control			

Document Reference FSMS 4.4 Food Safety & Quality Management System Revision 0 7th November 2023 Owned by: Technical Manager

Authorised by: General Manager

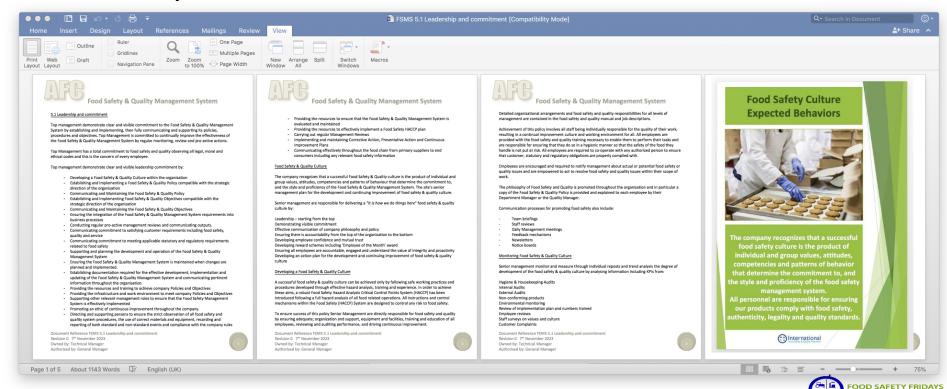






# **ISO 22000 Section 5 Leadership**

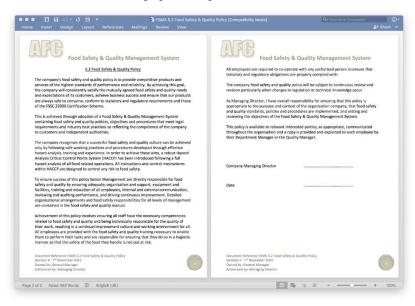
### 5.1 Leadership and commitment



# **ISO 22000 Section 5 Leadership**

### **Section 5 Leadership includes:**

- **5.2 Policy**
- 5.2.1 Establishing the food safety policy
- 5.2.2 Communicating the food safety policy







#### Food Safety & Quality Management System

#### 5.3 Organizational roles, responsibilities and authorities

The company has established and documented clear levels of responsibility and authority and communication for staff within the Food Safety & Quality Management System, Detailed organisational arrangements and food safety and quality responsibilities for all levels of management are contained in the Food Safety & Quality Manual.

The scope of the defined responsibility and authority and communication includes all staff, both full time and temporary. Staff responsibilities include contributing to achieving site objectives and continuous improvement. The level of responsibility and authority of sub-contractors is defined in the procedure for the control of sub-contractors.

Top management assign the responsibility and authority for ensuring that the FSMS conforms to the requirements of the standard; reporting on the performance of the FSMS to top management and designating persons with defined responsibility and authority to initiate and document action(s).

Responsibilities and authorities of all personnel are communicated to them via induction and role

The site organisational chart shows the company structure with deputies for each management position. The identity of deputies is communicated to all employees.

All Managers have agreed and signed job descriptions for their individual roles which include responsibility and authority.

General Job descriptions including levels of responsibility and authority are available for all roles on site. All personnel are required to sign the relevant general job description which is held with their individual training records. Responsibility for reporting any problems with the Food Safety & Quality Management System are detailed in individual job descriptions, all personnel have the responsibility to report problem(s) with regards to the Food Safety & Quality Management System to their immediate Manager. Job descriptions include details of staff responsibility and authority to initiate and record corrective actions.

Specific responsibilities for key processes are documented within operational procedures.

Site and Departmental Annual Objectives and targets are agreed and documented in the Management Review minutes. Individual objectives are cascaded in staff appraisals.

Document Reference Section 5.3 Organizational roles, responsibilities and authorities Revision 0 7th November 2023 Owned by: General Manager Authorised by: Managing Director



#### Food Safety & Quality Management System

#### Food Safety & Quality Team Leader

Top Management has appointed the Technical Manager as Food Safety & Quality Team Leader. The Technical Manager retains responsibility and authority for:

- Ensuring that Food Safety & Quality Management Systems are established, implemented, maintained and updated
- Reporting directly to senior management regarding system performance and suitability
- Presenting FSQMS information for senior management review so that actions for
- improvement can be determined
- Managing the food safety and quality team and organising its work
- Ensuring that the Food Safety & Quality team are fully qualified and trained to meet the company requirements
- Promotion of the awareness of customer requirements throughout the company
- External communication and liaison regarding the management systems

#### References

Site Organisational chart Site Job Descriptions and Deputies QMR 001 Management Review minutes Site and Departmental Annual Objectives and targets Appendix 1 Site Management Teams Appendix 2 Food Safety & Quality Responsibilities Appendix 3 Key Personnel and Nominated Deputies

Document Reference Section 5.3 Organizational roles, responsibilities and authorities Revision 0 7th November 2023 Owned by: General Manager Authorised by: Managing Director



#### Food Safety & Quality Management System

Senior Management Team

#### Appendix 1 Site Management Teams

	Senior Managem	ent ream			
Job Title	Name	Role	e in Team		
Managing Director		Chairman			
General Manager		Deputy Chair			
Operations Manager		Operati	ons Reporting		
Technical Manager		Food Safety and Quality Reporting Management Representative			
Planning Manager		Planning and	Capacity Reporting		
Distribution Manager		Distribu	tion Reporting		
Maintenance Manager		Services and E	ngineering Provision		
Finance Manager		Financ	ial Reporting		
Human Resources Manager		Resou	rce reporting		
Food	Safety & Quality Ma	nagement Team			
FSMS Team Member	Name	Position	Qualification		
FSMS Team Leader					
FSMS Assistant Leader					
FSMS Team Members					

Document Reference Section 5.3 Organizational roles, responsibilities and authorities Revision 0 7th November 2023 Owned by: General Manager Authorised by: Managing Director





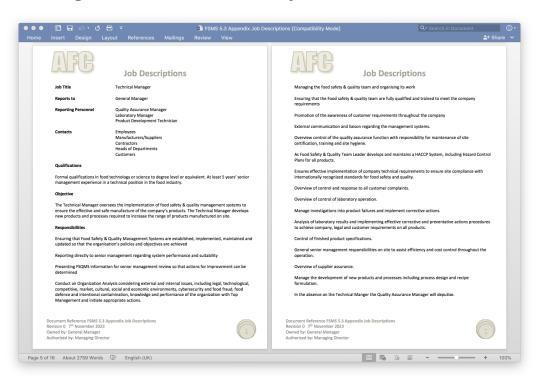
# **ISO 22000 Section 5 Leadership**

SmartArt Basic

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### **Section 5 Leadership includes:**

5.3 Organizational roles, responsibilities and authorities







# **ISO 22000 Section 6 Planning**

### **Section 6 Planning includes:**

- **6.1 Actions to address risks and opportunities**
- 6.2 Objectives of the food safety management system and planning to achieve them
- **6.3 Planning of changes**

1		Organizational Risk Analysis								
2	Area of Issue	Description	Internal External	Positive Negative	International National Regional Local	Risk Level	Proposed Action	Timescale Priority		
4	Legal	Issues complying with FSMA	Internal	Negative	▼ National	High	Bring in external resource to assist in FSMA compliance	Priority		
5	Technological	Technology out of date	Internal	Negative	International	Medium	Renew out of Date Technology			
6	Competition	Lack of Competition	External	Positive	Regional	Low	Increased Marketing			
7	Market	Only Short Term Customer Contracts	External	Negative	International	High	Seek Longer Term for Customer Contracts	Priority		
8	Cultural	Product of Religious, ethical or moral significance	External	Negative	Local	Low	Also look to Products not of Religious, ethical or moral significance			
9	Social	Need for Seasonal Workers	Internal	Negative	Local	High	Contract Seasonal Workers	Priority		
10	Economic environments	environments Harvest Failure		Negative	National	Medium	Look for Alternative Supplies			
11	Food fraud	Economically motivated adulteration (EMA)	External	Negative	International	Medium	Increased Supplier Assurance & Product Testing			
12	Food defence, Cybersecurity & Intentional contamination	Premises located in a politically or socially sensitive area	Internal	Negative	Local	High	Increase Security Short Term. Long Term look to relocate.	Priority		
13	Knowledge (Organization)	Lack of Technical Skills	Internal	Negative	Local	Medium	Recruit Technical Skills			
14	Performance (Organization)	Unreliable Operations	Internal	Negative	Local	High	Project Implementation Operational Efficiency	Priority		
15										



#### Food Safety & Quality Management System

#### 6.1 Actions to address risks and opportunities

Top Management are responsible for establishing and planning the implementation, maintenance and updating of the Food Safety & Quality Management System in order to ensure it meets customer, statutory and regulatory requirements and the requirements of international standards.

#### Scope

When planning the Food Safety & Quality Management System all product categories, processes, activities conducted, production sites and any outsourced activities that can affect food safety or quality are considered.

#### Procedure

When planning the Food Safety & Quality Management System, Top Management consider the issues and requirements referred to in:

- 4.1 Understanding the organization and its context
- 4.2 Understanding the needs and expectations of interested parties; and
- 4.3 Scope of the Food Safety & Quality Management System

As a result, Top Management determines the risks and opportunities that need to be addressed to ensure that the FSMS can achieve its intended result(s); enhance any desirable effects; whilst preventing or reducing undesired effects and achieve continual improvement.

Top Management plan actions to address these risks and opportunities and evaluate the effectiveness of these actions whilst considering the impact on food safety requirements, the conformity of food products and services to customer requirements; and requirements of interested parties in the food chain.

In order to integrate and implement the actions into the Food Safety & Quality Management System processes, Top Management identifies the processes needed for product realization and plans the food safety & quality management system accordingly. The product realization process involves the planning, development, manufacture, and delivery of the end product. In planning product realization processes, all of the objectives and requirements for the product including the provision of the necessary resources for product realization are included. The Food Safety & Quality Management System includes a comprehensive approach to getting from the product concept to the finished product.

Food Safety & Quality Management System planning takes into consideration the following:

 product requirements including customer, regulatory, statutory and industry codes of practice

Document Reference FSMS 6.1 Actions to address risks and opportunities

Revision 0 7<sup>th</sup> November 2023 Owned by: Technical Manager Authorised by: General Manager





# **ISO 22000 Section 6 Planning**

### 6.2 Objectives of the food safety management system and planning to achieve them

The objectives of the FSMS shall:

- a) be consistent with the food safety policy;
- b) measurable
- c) take into account applicable food safety requirements, including statutory, regulatory and customer requirements;
- d) monitored and verified;
- e) communicated;
- f) maintained and updated



Owned by: General Manager Authorised by: Managing Director



# **ISO 22000 Section 6 Planning**

### 6.2 Objectives of the food safety management system and planning to achieve them

When planning how to achieve its objectives for the FSMS, the organization shall determine:

- a) what will be done;
- b) what resources will be required;
- c) who will be responsible;
- d) when it will be completed;
- e) how the results will be evaluated.





# **ISO 22000 Section 6 Planning**

FSMS 6.3 Planning of changes [Compatibility Mode]

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	Foo	d Safety	& Qualit	y Managen	nent Syste	em
6.3 Planning of	changes					
Top Management determines the need for changes to the Food Safety & Quality/Management system and plans those changes. When changes are made, Top Management consider:  - the purpose of the changes and their potential consequences  - the availability of resources to effectively implement the changes  - the allocation or re-allocation of responsibilities and authorities  Top Management are responsible for ensuring that the changes are carried out in a planned manner and effectively communicated.  Changes are subject to Process Change Approval and a Process Change Approval Form is completed:				manner and		
		Pro	cess Change A	pproval		
	Pr	ocess Change I	Proposed		Prop	oser
Descript	ion					
Reason for C	Change					
		Pro	cess Change C	ategory	_	
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Recipe		Personnel	0	Customer 🗆	New Pro	duct 🗆
Full details of p			•		Prop	oser
Document Refe Revision 0 7 <sup>th</sup> Owned by: Tec Authorised by:	November 20 hnical Manag	)23 er	f changes		1	



**Process Change Review** 

Details

Document Reference FSMS 6.3 Planning of changes Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

Packing Equipment

Requirement

Reviews Held Prior To

Agreement for Full

Production to Confirm

That the Site Can Meet

the Changes Agreed



Food Safety & Quality Management System

The Need for New or Revised HACCP Plans Is Reviewed			Technical Manager
Technical Manager Authorises the Process Changes			Technical Manager
Operations Manager Authorises the Process Changes			Operations Manager
New Specification Created			Technical Manager
Finished Product Specifications Are Authorized by The Technical Manager			Technical Manager
	Process Change Approved		
Name	Signature	Date	General Manager

For new products and customers, the Food Safety & QualityManagement System includes a comprehensive approach to getting from the product concept to the finished product.

### Product realization includes the following:

- product requirements including customer, regulatory and industry codes of practice creation of the processes, documents, and resources needed for product realization
- required validation, verification, monitoring, inspection, and test activities
- records to be maintained.

Manager

Responsibility

Development

Manager

The Senior Management team conduct full contract reviews at specific contract review meetings. The Senior Management team consider the site capability to meet the customer, statutory and regulatory requirements where applicable with the current resources available. Requirements related to the product as specified by the customer, including the requirements for delivery and those not stated by the customer but necessary for specified or intended use are determined. At this stage, any additional requirements considered applicable to the product are determined. These include maintenance or warranty provision and contractual requirements such as green services (recycling or final disposal) or other supplementary services. Any additional resources required are approved by the General Manager in principle prior to proceeding.

Document Reference FSMS 6.3 Planning of changes Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



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# **Section 7 Support includes:**

- 7.1 Resources
- 7.1.1 General
- **7.1.2** People
- 7.1.3 Infrastructure
- 7.1.4 Work environment
- 7.1.5 Externally developed elements of the food safety management system
- 7.1.6 Control of externally provided processes, products or services



Food Safety & Quality Management System

#### Support

Top Management are responsible for considering the capability of existing internal resources, any requirement for external resources, in ensuring adequate resources are provided to establish, implement, maintain, udate and continually improve the Food Safety & Quality Management System.

#### People

The company has established, implemented maintains and updates a Food Safety & Quality
Management System for the site. A requirement of this system is the review and provision of human
resources and training. In the process of establishing the Food Safety & Quality Management System the
Too Management team has established and provided the resources required.

The scope for the provision of human resources includes processes, activities conducted, production sites and any outsourced activities that can affect product quality or safety. The company ensures that all employees carrying out work that can affect product quality and safety are adequately qualified, trained, instructed and supervised commensurate with their activity and are demonstrably competent to carry out their tasks.

Senior management team identify and provide the human resources and training needed to maintain the food safety and quality systems, meet site policies and objectives, and to meet customer requirements. Careful consideration is given to the amount of competent trained personnel required whilst also ensuring there are also adequate infrastructure and a suitable work environment.

#### Competence

Resource to identify staff competence levels required, provision of training, periodic evaluation of its effectiveness and staff awareness training is provided. It is company policy that all personnel, including temporary staff, affecting conformity to product requirements shall be competent on the basis of appropriate education and training, and/or where applicable, on the basis of skills and experience and be adequately supervised. A training programme and adequate supervision is put in place for all new personnel until they have been assessed as competent.

More specifically the Food Safety Team and personnel that can affect food safety are required to be competent and have the appropriate level of education, training skills and experience. The Technical Manager is responsible for ensuring that the food safety team has a combination of multi-disciplinary knowledge and experience in developing and implementing the FSMS (including the products, processes, equipment and food safety hazards).

Document Reference FSM5 7 Support Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





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FSMS 7 Support [Compatibility Mode]





## Food Safety & Quality Management System

### 7 Support

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English (UK)

Document Reference FSMS 7 Support Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





## Food Safety & Quality Management System

Specific training of personnel whose activities have an impact on food safety such as monitoring critical control points is compulsory. These personnel are also made aware of the important contribution of effective internal and external communication.

Top Management team identify the skills and competences required for personnel who can affect food safety and provide the appropriate education and/or training. Personnel responsible for monitoring food safety processes are trained in monitoring techniques and the corrective action to be taken when results are outside critical limits and there is a loss of control. Documented supervisory procedures are in place for all critical control point monitoring.

Records of all training are maintained, including those of induction, on-the-job, refresher and external training. Training schedules and records are located in the relevant departments, where the following records are available:

- Training register
- Operator training review
- Training matrix
- Department training matrix
- Individual Training record
- Identifying the competencies needed for specific roles
- Reviewing and auditing the implementation and effectiveness of the training and the competency of the trainer with a view to taking action to improve the training.

The department training matrix is an essential tool in assessing the resource available in the department, any further training needs of the department and for programming refresher training. Where appropriate, consideration is given to using the native language of the trainees.

The company ensures that all personnel that can impact on food safety or quality are supervised at a level based on the risk to the product.

Management is responsible for arranging internal/external training and for reviewing the effectiveness of the training given. It is the responsibility of the Department Manager to maintain the training matrix.

Department Managers are responsible for periodic individual reviews with all staff to yet progress and identify further training needs.

Where external experts are used, they are subject to the supplier approval procedure and Top Management are responsible for ensuring that contracts define the competency, responsibility and authority of any external experts used by the organization.

Ref: QMR 002 Training Record/Training Matrix

Document Reference FSMS 7 Support Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



## Food Safety & Quality Management System

#### Awareness

Basic elements of employee training include the food safety & quality policy, relevant FSMS objectives, hygiene requirements and awareness of the relevance and importance of their activities in maintaining food safety & quality, contributing to the effectiveness of the FSQMS and the implications of not conforming with the FSQMS requirements.

### Infrastructure

The company has established, documented and implemented a Food Safety & Quality Management System for the site, as part of this system the management are committed to identifying and providing the necessary infrastructure required to meet policies and objectives

The scope of the Food Safety & Quality Management System includes all product categories, processes, activities conducted, production sites and any outsourced activities that can affect food safety or

Infrastructure within the scope of this procedure includes:

- buildings including temporary buildings
- workspace layout
- process equipment
- supporting services - information systems

The Senior Management team identify and provide the infrastructure and required to:

- Maintain food safety and quality systems
- Comply with site policies
- Meet site objectives
- Meet customer requirements
- Meet legislation requirements

The standard of infrastructure required is a prerequisite for product manufacture and the requirements are specified in detail in Prerequisites for Infrastructure and Maintenance.

The Engineering Manager ensures that resource is provided to ensure that the infrastructure is maintained effectively.

Document Reference FSMS 7 Support Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager









# **Section 7 Support includes:**

- 7.2 Competence
- 7.3 Awareness
- 7.4 Communication
- 7.4.1 General
- 7.4.2 External communication
- 7.4.3 Internal communication



### **Food Safety Management System**

#### Competence

Resource to identify staff competence levels required, provision of training, periodic evaluation of its effectiveness and staff awareness training is provided, it. Evanopura policy that all personnel, including temporary staff, affecting conformity to product requirements shall be competent on the basis of appropriate education and training, and/or where applicable, on the basis of staff and experience and be adequately supervised. A training programme and adequate supervision is put in place for all new rearonal until the Varbo here has exserved as commenters.

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Document Reference FSMS 7 Support Revision 1 22<sup>nd</sup> June 2018 Owned by: Technical Manager Authorised By: General Manager



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### Food Safety Management System

The department training matrix is an essential tool in assessing the resource available in the department, any further training needs of the department and for programming refresher training. Where appropriate, consideration is given to using the native language of the trainees.

The company ensures that all personnel that can impact on food safety are supervised at a level based on the risk to the product.

Management is responsible for arranging internal/external training and for reviewing the effectiveness of the training given. It is the responsibility of the Department Manager to maintain the training matrix.

Department Managers are responsible for periodic individual reviews with all staff to vet progress and identify further training needs.

Where external experts are used, they are subject to the supplier approval procedure and Top Management are responsible for ensuring that contracts define the competency, responsibility and authority of any external experts used by the organization.

Ref: QMR 002 Training Record/Training Matrix

#### Awareness

Basic elements of employee training include the food safety policy, relevant FSMS objectives, hygiene requirements and awareness of the relevance and importance of their activities in maintaining food safety, contributing to the effectiveness of the FSMS and the implications of not conforming with the FSMS requirements.

Document Reference FSMS 7 Support Revision 1 22<sup>rd</sup> June 2018 Owned by: Technical Manager Authorised By: General Manager





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FSMS 7.4 Communication [Compatibility Mode]

### Food Safety & Quality Management System

### 7.4 Communication

The company has established and documented clear levels of communication for suppliers, contractors, customers, food authorities and staff within the Food Safety & Quality Management System, Detailed communication arrangements and communication responsibilities for all levels of management are contained in the Food Safety & Quality Manual. The scope of the communication procedures applies to all members of staff, both full time and temporary.

The Management Representative is the Technical Manager, who retains responsibility and authority for external communication and liaison regarding the Food Safety & Quality Management System, This responsibility for communication extends to ensuring there is sufficient information relating to product food safety and quality throughout the food chain. This communication includes documented agreements, contracts, specifications, product information, food safety leaflets, allergen advice and

The Technical Manger is responsible for managing all customer, statutory and regulatory documents applicable to the business including:

- Food Safety Legislation
- Food Regulations - FFC Directives
- National/International Standards
- Customer Codes of Practice

The company has a system in place through the Industry Federation to ensure that it is kept informed of all relevant legislation, food safety issues, legislative scientific and technical developments and Industry Codes of Practice applicable in the country of production and, where known, the country where the product will be sold.

### **Suppliers and Contractor Communication**

Several streams of communication occur with suppliers and contractors, including marketing, sales, development and technical. All new arrangements, products and suppliers are subject to the supplier approval procedure and must be officially approved by the Technical Manager who will ensure that this is effectively communicated and documented.

All supplies and purchases are to agreed specifications. Authority to purchase outside of these conditions can be only obtained from the Technical Manager following a risk assessment.

Document Reference FSMS 7.4 Communication Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





### Food Safety & Quality Management System

#### **Customer Communication**

Several streams of communication occur with customers, including marketing, sales, development and technical. The Sales Director agrees new contracts in principle with current and potential customers. All new arrangements and products are subject to the approval procedure and must be officially approved by the Technical Manager who will ensure that this is effectively communicated and documented.

All products are supplied to mutually agreed customer specifications which include product information related to food safety and quality, to enable the handling, display, storage, preparation, distribution and use of the product within the food chain or by the consumer.

This information includes relevant food safety information:

- allergen contents and warnings
- intended use
- nutritional contents
- storage requirements

- chemical, physical and microbiological parameters
- any food safety hazards that need to be controlled in the food chain or by consumers

The company measures customer satisfaction by monitoring agreed performance criteria for customer service and customer complaint levels, reviewing sales trends and pro-actively communicating with the customer to seek feedback on performance levels.

The customer service department handles day to day enquiries and orders from customers. Customers requiring more technical information are passed on to the Technical Manager.

The New Product Development team are required to demonstrate pro-activity with each customer, A measure of this pro-activity is the ability to achieve a targeted level of new product launches per annum depending on the customer requirements and targets.

Customer and/or consumer feedback, including complaints are initially directed to the Customer Services Manager. The handling of customer complaints is categorized into non-critical and critical. Non-Critical Quality complaints from customers are directed to the Customer Services Manager who coordinates the customer response with the Quality Manager.

Critical or Serious complaints such as a claim of alleged injury or poisoning are notified to the Technical Manager who will instigate an immediate investigation which may involve crisis and product recall. Product Recall and Crisis Management (including Emergencies/Incidents) Procedures are managed by the Crisis Management Team which includes the Technical Manager, Operations Manager and the

Document Reference FSMS 7.4 Communication Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



### Food Safety & Quality Management System

In the event of a product recall or emergency/accident the team consider contingency plans for supply of product.

#### Food Authority Communication

The Technical Manager retains responsibility and authority for external communication and liaison with statutory and regulatory authorities and any other external organisation that may have an impact on the Food Safety & Quality Management System. Any food safety related requirements are documented by the Technical Manager.

Where relevant, information obtained through external communication is included as input for management review and for updating the Food Safety & Quality Management System.

### Internal Communication

The Top Management Team is responsible for ensuring that appropriate communication processes are established, implemented and maintained regarding the effectiveness of the Food Safety & Quality Management System.

### Communication processes include:

- Team briefings
- Staff reviews
- Daily Management meetings
- Shift Handover meetings
- Newsletters
- Notice boards

Regular communication is important to keep all employees aware of company performance in meeting policies and objectives. The following key information is communicated regularly:

- Key Performance Indicators - Results of External Audits
- Results of Customer visits
- Results of Inspections by Regulatory Authorities
- Preventive actions
- Serious complaints
- Product withdrawal - New product launches
- Changes in raw materials, ingredients and services
- Changes in processes, production systems, packaging, equipment and/or products

Document Reference FSMS 7.4 Communication Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager











# **Section 7 Support includes:**

- 7.5 Documented information
- 7.5.1 General
- 7.5.2 Creating and updating
- 7.5.3 Control of documented information



Food Safety & Quality Management System

#### 7.5 Documented information

It is company policy to control documented information within the scope of the Food Safety & Quality Management System and to meet the requirements of international standards including ISO 22000:2018.

The Food Safety & Quality Management System documentation includes the food safety & quality policy and food safety & quality objectives, the procedures and records required by igg 22000, food safety & quality requirements required by statutory, regulatory authorities and customers and those documents required to ensure the effective development, implementation and updating of the Food Safety & Quality Management System.

All documents and records determined by the company to be necessary to ensure the effective planning, operation and control of the processes are controlled within the Food Safety Management System.

#### Document Control Procedure

The documentation which defines the Food Safety & Quality Management System is controlled. The company operates a system of document control for procedures and standards which will enable the following activities:

- All documentation is reviewed for adequacy before approval be authorised personnel
- Document amendments shall show evidence of change or modification. Deleted words will be are denoted with strikethrough. Changes are highlighted.
- Identification of reasons for changes and revision codes
- Issuing new or amended documents to point of use
   Maintaining legibility of issued documents
- Ensuring controlled status of externally sourced documents
- Identification and record disposition of obsolete documentation
- Periodic document review
- Documents are re-issued after a practical number of changes have been made
   Only approved documentation is used in the Food Safety & Quality Management System
- Only approved documentation is used in the Food Safety & Quality Management Sy
   A Master List of documents shall be kept to identify status of all documentation.

#### Checking and approval of adequacy

Authorised by: General Manager

All documents are reviewed for adequacy before approval be authorised personnel. Department Managers are responsible for documents used in their department.

Document Reference FSMS 7.5 Documented Information Revision 0 7th November 2023 Owned by: Technical Manager





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FSMS 7.5 Documented Information [Compatibility Mode]



## Food Safety & Quality Management System

#### 7.5 Documented information

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All documents and records determined by the company to be necessary to ensure the effective planning, operation and control of the processes are controlled within the Food Safety Management System.

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- Maintaining legibility of issued documents
- Ensuring controlled status of externally sourced documents
- Identification and record disposition of obsolete documentation
- Periodic document review
- Documents are re-issued after a practical number of changes have been made
- Only approved documentation is used in the Food Safety & Quality Management System
- A Master List of documents shall be kept to identify status of all documentation.

#### Checking and approval of adequacy

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Document Reference FSMS 7.5 Documented information Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





## Food Safety & Quality Management System

#### Identification of changes, reasons and revision codes

Changes to documents are recorded in the amendment register. Amendments result in the issue of a new revision. The new revision number, date of revision and reason for change is clearly identified in a table at the bottom of the document.

#### See example below

Revision Number	Summary of Changes made from previous revision	Requested By:	Authorised By:
5	Revised Critical Control Parameters	Production	Technical
		Manager	Manager

### Issuing new or amended documents to point of use

The Technical Manager issues new or revised documents to the point of use. The Master Copy of the previous revision is withdrawn and filed. The Department Manager signs acceptance of the new revision and is responsible for the disposal of all copies of the previous revision.

#### Maintaining legibility and accuracy of issued documents

The Technical Manager is responsible for reviewing and authorising all documents for legibility and

### Identification, retrieval and disposal of obsolete documents

The Department Manager identifies obsolete documents during routine review or formal review with the Technical Manager annually. The Quality Manager issues a document retrieval request to the point of use and ensures the document is withdrawn. The Master

Document list is updated and the document declared as obsolete and withdrawn. Withdrawn and obsolete documents are held in the Withdrawn/Obsolete Document file and retained for a specific period with a minimum period of 3 years. Computer documents are backed up on the company file server and stored for a minimum period of 5 years

#### Periodic document review

The relevant Department Manager and Technical Manager conduct a formal review all documents at least annually. The results of these reviews are documented. Documents are also reviewed during Internal and External Audit

Document Reference FSMS 7.5 Documented information Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





## Food Safety & Quality Management System

#### Documents are re-issued after a practical number of changes have been made

The Technical Manager is responsible for the re-issue of documents. All documents are reissued after 9 changes have been made.

#### Only approved documents are used in the Food Safety & Quality Management System

The Technical Manager is responsible for approval of adequacy of new documents, for updating amendment registers, circulation of amended documents and control of obsolete documents. Regular audits are carried out to ensure only approved document are being used.

#### A Master List of documents is kept to identify status of all documentation

Each document is given a unique reference code. The prefix letters of the code refer to a particular kind of document, as shown below:

Food Safety & Quality Management System - FSMS Production Procedure Quality Record - QRC Cleaning Schedule - CLS Work Instruction - WI - LAB Laboratory Document - SPC Specification Testing Schedule - TST Food Safety - FS

Documents for the specific areas are sequentially numbered and a Master List for each area is maintained by the Technical Manager.

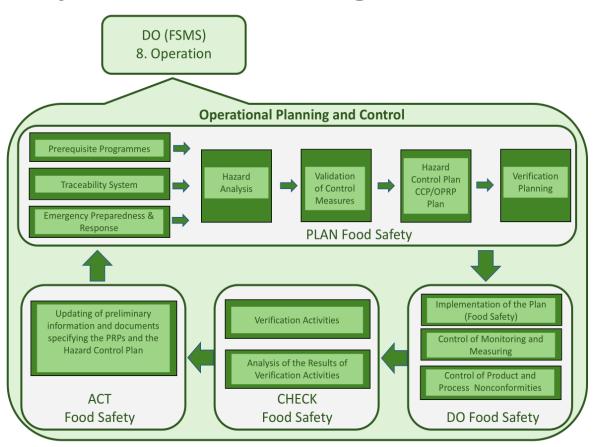
These procedures which relate to document control ensure that pertinent issues of appropriate documents are available at all locations where operations that are essential to the effective functioning of the Food Safety & Quality Management System are carried out and to ensure that all obsolete documents are removed from the point of issue or use.

Any document changes or modifications that are proposed and subsequently implemented are controlled by the Technical Manager who is responsible for authorisation of any change that relates to manufacturing or the Food Safety & Quality Management System and the issue of new documents. The Technical Manager is responsible for the amendment and approval of all specifications including review to ensure adequacy and status.

Document Reference FSMS 7.5 Documented information Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



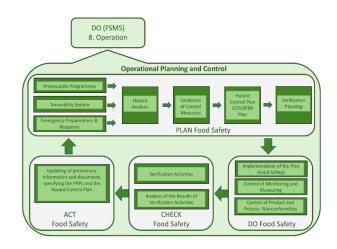






# This PDCA Cycle for Section 8 Operation includes:

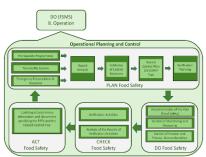
- 8.1 Operational planning and control
- 8.2 Prerequisite programmes (PRPs)
- 8.3 Traceability system
- 8.4 Emergency preparedness and response
- 8.4.1 General
- 8.4.2 Handling of emergencies and incidents
- 8.5 Hazard control
- 8.5.1 Preliminary steps to enable hazard analysis
- 8.5.1.1 General
- 8.5.1.2 Characteristics of raw materials, ingredients and product contact materials
- **8.5.1.3 Characteristics of end products**
- 8.5.1.4 Intended use
- 8.5.1.5 Flow diagrams and description of processes
- **8.5.1.5.1** Preparation of the flow diagrams
- **8.5.1.5.2** On-site confirmation of flow diagrams
- 8.5.1.5.3 Description of processes and process environment





# This PDCA Cycle for Section 8 Operation includes:

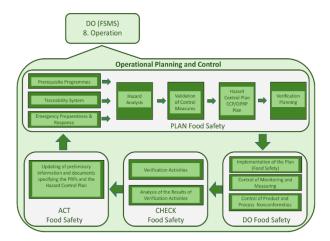
- 8.5.2 Hazard analysis
- 8.5.2.1 General
- 8.5.2.2 Hazard identification and determination of acceptable levels
- 8.5.2.3 Hazard assessment
- 8.5.2.4 Selection and categorization of control measure(s)
- 8.5.3 Validation of control measure(s) and combinations of control measures
- 8.5.4 Hazard control plan (HACCP/OPRP plan)
- 8.5.4.1 General
- 8.5.4.2 Determination of critical limits and action criteria
- 8.5.4.3 Monitoring systems at CCPs and for OPRPs
- 8.5.4.4 Actions when critical limits or action criteria are not met
- 8.5.4.5 Implementation of the hazard control plan
- 8.6 Updating the information specifying the PRPs and the hazard control plan
- 8.7 Control of monitoring and measuring





# This PDCA Cycle for Section 8 Operation includes:

- 8.8 Verification related to PRPs and the hazard control plan
- 8.8.1 Verification
- 8.8.2 Analysis of results of verification activities
- 8.9 Control of product and process nonconformities
- 8.9.1 General
- 8.9.2 Corrections
- 8.9.3 Corrective actions
- 8.9.4 Handling of potentially unsafe products
- 8.9.4.1 General
- 8.9.4.2 Evaluation for release
- 8.9.4.3 Disposition of nonconforming products
- 8.9.5 Withdrawal/recall





# **ISO 22000 Section 8 Operation**

# **Section 8 Operation includes requirements for:**

- 8.1 Operational planning and control
- 8.2 Prerequisite programmes (PRPs)
- 8.3 Traceability system
- 8.4 Emergency preparedness and response
- 8.4.1 General
- 8.4.2 Handling of emergencies and incidents



# **Food Safety Management System**

### 8.1 Operational planning and control

The company plans and develops the processes needed for the realization of safe products by establishing, documenting and implementing a procedure for design and development which is maintained in order to meet the requirements of the Food Safety Management system. In this way planned changes are controlled. Top Management are responsible for reviewing the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.

The scope of the procedure for design and development includes all product categories, processes, activities conducted, production sites and any outsourced activities. Should the site be required to outsource any process that may affect product conformity to the defined standards then the site will assume control over the design and development process.

The design and development procedure ensures the implementation and operation of planned activities and any changes to those activities. This includes ensuring the effectiveness of activities, prerequisite programmes, operational prerequisite programmes and/or the HACCP plan.

All design and development activities are co-ordinated by the development team and the New Product Development Manager has overall responsibility for all design and development on site. The development team are responsible for planning, identifying inputs, generating outputs, reviewing and verifying the design and development process. Each stage of the process is documented by the New Product Development Manager.

The development team plan the design and development:

- Plan the design and development of the product
- Control the design and development of the product
- Update the planning outputs whenever product design and development progress makes this necessary

The development team identify the design and development inputs:

- Define product design and development inputs
- Maintain a record of design and development inputs
- Review the product design and development inputs

At this stage, the development team will carry out a risk assessment to ensure that the intended product does not jeopardise factory operations. The team will take into consideration possible allergens and cross-contamination, cross-contamination of vegetarian products with meat products and preservation of product in the case of organic or id preserved products and how these materials will be handled to ensure food quality, safety and legality are maintained.

Document Reference FSMS 8.1 Operational planning and control Revision 1 22<sup>nd</sup> June 2018 Owned by: Technical Manager

Authorised By: General Manager





# 8.1 Operational planning and control

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FSMS 8.1 Operational planning and control [Compatibility Mode]

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## Food Safety & Quality Management System

#### 8.1 Operational planning and control

The company plans and develops the processes needed for the realization of safe products by establishing, documenting and implementing a procedure for design and development which is maintained in order to meet the requirements of the Food Safety & Quality Management system. In this way planned changes are controlled. Top Management are responsible for reviewing the consequences of unintended changes taking action to mitigate are valverse effects, as necessary.

The scope of the procedure for design and development includes all product categories, processes, activities conducted, production sites and any outsourced activities. Should the site be required to outsource any process that may affect product conformity to the defined standards then the site will assume control over the design and development process.

#### Design and Development

The design and development procedure ensures the implementation and operation of planned activities and any changes to those activities. This includes ensuring the effectiveness of activities, prerequisite programmes, operational prerequisite programmes and/or the HACCP plan.

All design and development activities are co-ordinated by the development team and the New Product Development Manager has overall responsibility for all design and development on site.

The development team are responsible for planning, identifying inputs, generating outputs, reviewing and werifying the design and development process. Each stage of the process is documented by the New Product Development Manager who is given clear guidelines on the scope of new product developments by the General Manager. The stages of product development are as follows:

STAGE 1: Product Brief

STAGE 2: Kitchen work stage

STAGE 3: Approval of Kitchen Product

STAGE 4: Factory trials

STAGE 5: Approval of Factory Product & Product Analysis

STAGE 6: Artwork Process

STAGE 7: Pre-production trials

STAGE 8: Product Launch

STAGE 9: Post Launch

There are reviews at the end of each stage to ensure that the project is feasible and that the new products or processes and any changes to product, packaging or manufacturing processes be safe and legal and not affect current product for example the introduction of allergens, glass packaging or microbiological risks.

Document Reference FSMS 8.1 Operational planning and control

Revision 0 7th November 2023

Owned by: Technical Manager

Authorised by: General Manager





# Food Safety & Quality Management System

At the product brief stage the development team will carry out a risk assessment to ensure that the intended product does not jeopardise factory operations. Clear guidelines on any restrictions to the scope of new product developments to control the introduction of hazards which would be unacceptable to the company or customers are issued by the Senior Management team.

The Development team take into consideration possible allergens and cross-contamination, crosscontamination of vegetarian products with meat products and preservation of products and how these materials will be handled to ensure food quality, safety and legality are maintained. For Id preserved products including organic, GMO, and certified origin, the product development team carry out a risk assessment of the raw material to identify routes of contamination and confirm compliance with specification throughout the purchasing and supply chain. Consideration is given to the impact on the process flow for the new product. The appropriate procedures are then applied to handling raw material, intermediate product and end product to prevent cross-contamination and preserve the identity status of the product.

Where packaging materials pose a product safety risk, special handling procedures are introduced to prevent product contamination or spoilage. When special procedures are introduced, new production records are developed, established and maintained to log failures and corrective actions taken. The result of this review is recorded and actions included in the design and development plan.

### New Products, Plant and Equipment

New Plant and Equipment requirements are authorised by the General Manager. The Engineering Manager is responsible for sourcing new Plant and Equipment and the Senior Management Team including the New Product Development Manager and Technical Manager approved the equipment meets quality, food safety and hygiene requirements. It is company policy that all new plant and equipment meets relevant legislation and also in the European Union bears a CE marking.

The Engineering Manager ensures that all plant and equipment is supplied with a Certificate of Conformity confirming it is fit for purpose (Suitable for use in a Food Environment). The Engineering Manager is responsible for the installation and commissioning of new plant and equipment in a hygienic and controlled manner such that it does not represent a risk to product. The Technical Manager is responsible for approving the release of new Plant and Equipment for shelf life trials and then production.

The Development team co-ordinate production proving trials and confirms acceptable quality, shelf life and transit stability of the product. Correct operation of processing and packing equipment is confirmed. Shelf life is established, taking into account product formulation, packaging, factory environment and subsequent storage conditions.

Document Reference FSMS 8.1 Operational planning and control Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# Food Safety & Quality Management System

Initial production and product shelf life trials use documented protocols as per customer codes of practice (or where not specified as per standard company) that reflect conditions expected during manufacture, storage, transport distribution, use and handling to determine product shelf life. Trial results documented and retained and confirm compliance with the agreed microbiological, chemical and organoleptic criteria/sensory analysis.

For long-life products where shelf-life trials prior to production are impractical accelerated shelf life tests are conducted and the NPD Manager produces a documented justification for the assigned shelf life.

When cooking instructions are provided to ensure product safety, the instructions are fully validated by the NPD Team to ensure that, when the product is cooked according to the instructions, a safe, readyto-eat product is consistently produced.

The Development team carry out design and development verifications and maintain a record of design and development verifications. At this stage, the Technical Manager also verifies that design requirements can be met.

Following completion of a new design of product or process the Technical team perform design and development validations to affirm continual compliance with the input requirements and maintain a record of these validations.

The development team perform systematic design and development reviews throughout to agreement of development process and maintain a record of the reviews. The reviews she held prior to agreement for full production to confirm that the site can meet design inputs agreed with the customer. The need for FSOMs and HACP system updating is also addressed with the Food safety team at this time. The appropriate FSOMS review is conducted by the Food Safety team taking into account verification and validation data from the development trials.

The HACCP system is reviewed when there are significant changes such as new raw materials or raw material supplier, new ingredients or recipe, process conditions or equipment and new products. Changes to the HACCP plan are fully validated and documented.

After each design or redesign of the HACCP Plan the Food Safety Team update and amend as necessary all the information that was used prior to the Hazard Analysis including:

- Product Description
- Intended Use
   Flowchart(s)
- Flowchart(s)
   Process Steps
- Control Measures

Document Reference FSMS 8.1 Operational planning and control Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager







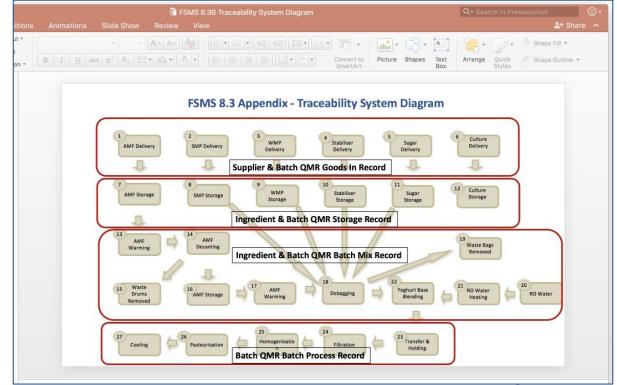
# 8.3 Traceability system



Stage	Details	Relevant Record
Raw Material Intake	Time, Date, Temperature, Batch Code, Supplier, Amount, COC or COA	QMR Raw Material Intake Record
Packaging Intake	Batch Code, Date, Supplier, Amount, COC or COA	QMR Packaging Intake Record
In-Process batches	Records all Ingredients mixed including Reworked material. Batch Code	QMR In-Process Record
Process Records	Hot/Cold Temperature and Time. Batch Code	QMR Process Record
Bulk Storage Records	Temperature and Time. Batch Code	QMR Bulk Storage Records
Production Records	Time, Date, Label, Expiry Code, Code of Packaging, Temperature, Quantity, Product & Packaging Reconciliation. Batch Code	QMR Production Records
Storage Record	Time, Date, Label, Expiry Code	QMR Storage Record
Dispatch Records	Time, Date, Label, Expiry Code, Amount, Customer	QMR Dispatch Record
Critical Control Records	For all Control Points	QMR Critical Control Records
Cleaning Records	For all stages	QMR Cleaning Records
Delivery Records Customer & Location Time, Date, Label, Expiry Code, Amount		QMR Delivery Record

The effectiveness of the product trace system is reviewed at least annually as part of the product recall and withdrawall review. These exercises and any corrective actions are documented. Where there is a requirement to ensure identity preservation within the supply chain, e.g. to use a logo or make claim to a product characteristic or attribute appropriate control and testing procedures are put in place.

Document Reference FSMS 8.3 Traceability system Revision 0 27th November 2020 Owned by: Technical Manager Authorised By: General Manager





# 8.4 Emergency preparedness and response

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FSMS 8.4 Emergency preparedness and response [Compatibility Mode]

### Food Safety & Quality Management System

#### 8.4 Emergency preparedness and response

The company has established, documented and implemented a Business Continuity Planning and Crisis Management Procedure for the site, which is maintained in order to deal with emergencies which do not normally occur and are not covered by other Food Safety & Quality Management System

#### Crisis Situations and First Point of Contact

The following Crisis Team members have been trained in Crisis Management and are the nominated first point of contact for the crisis situations described:

Fire or Site evacuation Safety Manager Flooding Maintenance Manager

Utility Supply failure Maintenance Manager Storm Damage Maintenance Manager IT systems failure Operations Manager Water Supply Contamination Technical Manager

Breaches of security General Manager Romb Threat or Similar General Manager Extortion or Sabotage General Manager Hazardous Chemicals Technical Manager

In all cases if the first point of contact cannot be contacted another member of the Crisis Management Team must be contacted.

In real crisis situation, a member of the Crisis Management Team must be contacted. The person contacted will urgently contact and assemble the other members of the Crisis Management Team. The Crisis Team will act quickly to assess the situation and formulate an action plan which is communicated to the site management. All relevant aspects of product safety, health and safety, financial effects and company image must be considered prior to recommencing production. All crisis and action resulting from crisis situations must be recorded.

If a call alleging or threatening extortion is received the person dealing with it should attempt to transfer the call to a member of the Crisis Management Team if at all possible. See appendix 1 Instructions to

The Crisis Team member contacted above will urgently contact the other members of the Crisis Management Team and the police through the local police station.

Product Quality and Safety - Issues relating to product quality and safety are covered by the Product Recall Procedure (including recalls in the case of food fraud).

Document Reference FSMS 8.4 Emergency preparedness and response

Revision 0 7th November 2023

Owned by: General Manager

Authorised by: Managing Director



## Food Safety & Quality Management System

#### Crisis Management Team

The Crisis Management Team are responsible for managing crisis incidents to ensure the health and safety of staff and public and to limit negative financial effects and negative public image. They are in place to deal with real emergencies and all day to day issues are dealt with by the site management

Members of the Crisis Management Team are trained in the use of communication systems including telecommunications, fax and e-mail.

A directory of contact details for key personnel is held in reception and the Crisis Management Team for use in crisis situations. Customers will be contacted if appropriate according to specific customer

The Crisis Management Team will include the following:

Sales and Marketing Manager General Manager

Technical Manager

Operations Manager

Manufacturing Manager

Health and Safety Manager

Maintenance Manager

All members must delegate a deputy to cover sickness, holidays and other absences.

Crisis Management Team			
Crisis	Name	Crisis Coordinator	Contact Details
Fire or Site evacuation		Safety Manager	
Flooding		Maintenance Manager	
Utility Supply Failure		Maintenance Manager	
Storm Damage		Maintenance Manager	
IT Systems Failure		Operations Manager	

Document Reference FSMS 8.4 Emergency preparedness and response

Revision 0 7th November 2023 Owned by: General Manager

Authorised by: Managing Director



### and Safety & Quality Management System

Water Supply Contamination	Technical Manager
Breaches of security	General Manager
Distribution Failure	Distribution Manager
Bomb Threat or similar	General Manager
Bioterrorism	Managing Director
Extortion or Sabotage	General Manager
Hazardous Chemicals	Technical Manager

### Communication

An initial brief on the situation should be prepared which will contain all the relevant information. This should be made available to members of the team.

The information should be updated continually and issued with sequential numbers, date and time. From this data a brief for the media, customer, company management and work-force should be prepared and agreed by the team.

Any out of hours contact with customers should only be made by authorised personnel.

a. General Manager and Technical Manager will contact external organisations by telephone and follow up with confirmation e-mails:

Customers General Manager Local Authority Technical Manager Media General Manager Insurers Health and Safety Manager

b. An Incident Room will be set up and all calls will be routed to it. All calls in and out will be logged. The reception personnel are briefed to transfer all calls to the Incident Room.

c. Communications with the Media This will be carried out only by the General Manager or his deputy.

Document Reference FSMS 8.4 Emergency preparedness and response Revision 0 7th November 2023 Owned by: General Manager Authorised by: Managing Director





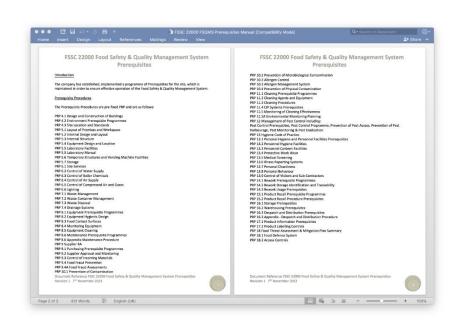






# **ISO 22000 Section 8 Operation**

# **BACK TO: 8.2 Prerequisite programmes (PRPs)**





# **Prerequisite Programmes**

Prerequisites programmes are established, implemented, maintained, reviewed, improved and updated to assist in:

- ✓ Controlling or preventing the introduction of food safety hazards through the work environment.
- ✓ To eliminate, prevent or reduce to an acceptable level the biological, chemical and physical contamination of the product(s) including cross contamination between products.
- ✓ To control, minimize and/or prevent food safety hazard levels in the finished product, ingredients and product processing environment.











ISO 22000 requires that effective control measures should be in place to reduce the risk of contamination of the food, when establishing PRP(s) the organization shall consider:

- a) construction, lay-out of buildings and associated utilities;
- b) lay-out of premises, including zoning, workspace and employee facilities;
- c) supplies of air, water, energy and other utilities;
- d) pest control, waste and sewage disposal and supporting services;
- e) the suitability of equipment and its accessibility for cleaning and maintenance;









ISO 22000 requires that effective control measures should be in place to reduce the risk of contamination of the food, when establishing PRP(s) the organization shall consider:

- supplier approval and assurance processes (e.g. raw materials, ingredients, chemicals and packaging);
- g) reception of incoming materials, storage, dispatch, transportation and handling of products;
- h) measures for the prevention of cross contamination;
- i) cleaning and disinfecting;
- j) personal hygiene;
- k) product information/consumer awareness;
- l) others, as appropriate.



- 8.2.1 The organization shall establish, implement, maintain and update PRP(s) to facilitate the prevention and/or reduction of contaminants (including food safety hazards) in the products, product processing and work environment.
  8.2.2 The PRP(s) shall be:
- a) appropriate to the organization and its context with regard to food safety;
- b) appropriate to the size and type of the operation and the nature of the products being manufactured and/or handled;
- c) implemented across the entire production system, either as programmes applicable in general or as programmes applicable to a particular product or process;
- d) approved by the food safety team.



8.2.3 When selecting and/or establishing PRP(s), the organization shall ensure that applicable statutory, regulatory and mutually agreed customer requirements are identified.

# The organization should consider:

a) the applicable part of the ISO/TS 22002 series;b) applicable standards, codes of practice and guidelines.

	C+C/DCD+ 1000 D 1200*	
	CAC/RCP 1-1969, Rev. 4-2003 <sup>1</sup>	
	TABLE OF CONTENTS	
INTRO	ODUCTION	
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CAC/RCP 1-1969, Rev.4- 2003

The current version of the Recommended International Code of Practice-General Principles of Food Hygiene including Annex on Hazard Analysis and Critical Control Point (HACCP) System and Guidelines for its Application was adopted by the Coder Alimentarias Commission in 1997. Amendments regarding rinsing adopted in 1999. HACCP Guidelines were revised in 2003. The Code has been sent to all Member Nations and Associate Members of FAO and WHO as an advisory text, and it is for individual povernments to decide that use they wish to make of the Guidelines.

# **Training - Prerequisite programmes**

# **Training**

All food handlers should be trained in personal hygiene, as well as in the specific operation with which they are working, to a level commensurate with their duties.

An ongoing training programme for key personnel is paramount to the success of a Food Safety Management System.





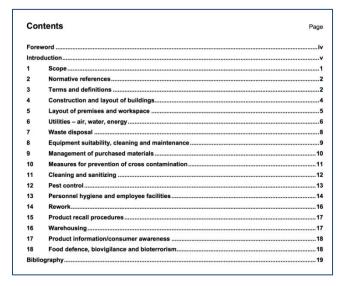
8.2.3 a) The organization should consider the applicable part of the ISO/TS 22002 series.

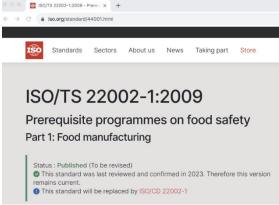
TECHNICAL SPECIFICATION 22002-1

First edition 2009-12-15

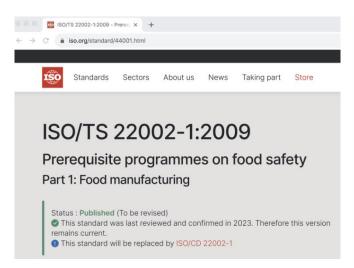
Prerequisite programmes on food safety —

Part 1:
Food manufacturing

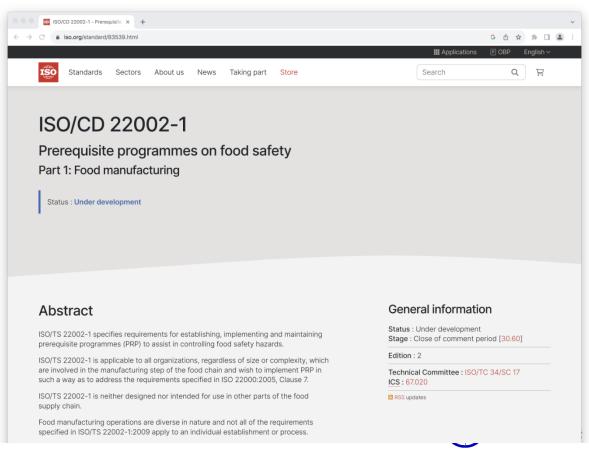


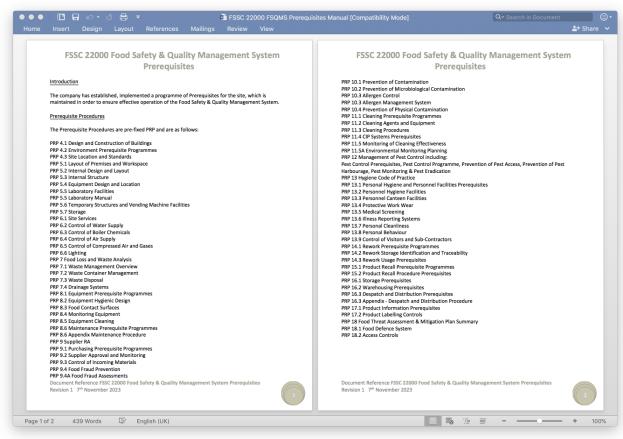






This standard will be replaced by ISO/CD 22002-1 which is under development







# ISO/TS 22002-1 requirements

ISO/TS 22002-1 specifies detailed requirements to be specifically considered in relation to ISO 22000 clause 8.2.4:

ISO 22000:2018 Clause 8.2.4	ISO/TS 22002-1:2009 Sections
a) construction, lay-out of buildings and associated utilities;	4 Construction and layout of buildings
b) lay-out of premises, including zoning, workspace and	5 Layout of premises and workspace
employee facilities;	
c) supplies of air, water, energy and other utilities;	6 Utilities – air, water, energy
d) pest control, waste and sewage disposal and supporting	7 Waste disposal
services;	12 Pest control
e) the suitability of equipment and its accessibility for cleaning	8 Equipment suitability, cleaning and maintenance
and maintenance;	
f) supplier approval and assurance processes (e.g. raw materials,	9 Management of purchased materials
ingredients, chemicals and packaging);	
g) reception of incoming materials, storage, dispatch,	16 Warehousing
transportation and handling of products;	
h) measures for the prevention of cross contamination;	10 Measures for prevention of cross contamination
i) cleaning and disinfecting;	11 Cleaning and sanitizing
j) personal hygiene;	13 Personnel hygiene and employee facilities
k) product information/consumer awareness;	17 Product information/consumer awareness
I) others, as appropriate.	14 Rework
	15 Product recall procedures
	18 Food defence, biovigilance and bioterrorism

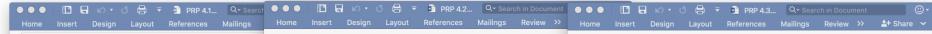
# TS ISO 22002-1 Prerequisite Programme Requirements

# 4. Construction and layout of buildings:

- ✓ 4.1 General requirements
- **✓** 4.2 Environment
- 4.3 Locations of establishments









# Design and Construction of Buil

### Introduction

The scope of the Prerequisite Programmes includes standards for the design ar buildings within the facility.

### Design and Construction of Buildings

The following standards are applied as part of the design and construction of b programmes:

- All buildings are constructed to protect against the entrance and harboi
- Entrances are heavily protected to prevent accidental damage
- Pedestrian and Fork Truck access is separate
- Foundations are at least 600mm deep and sufficient to prevent rodents
- Access points for pests is prevented by ensuring windows that open are
- Access points for pests is prevented by screening air intake and exit duc - External walls are smooth to prevent rodents from climbing up them
- All corrugated panels are sealed to prevent rodent from accessing the c
- All holes are filled to prevent rodent access
- All points where services pass through the foundations are permanently
- Air bricks have a maximum hole size of 5 mm to restrict rodent access
- Design and construction minimises the accumulation of dirt/debris
- External walls are of adequate thickness to resist traffic impact
- External walls are adequately sealed
- Wall cladding is not taken to ground level because of risk of damage and
- Materials are selected to keep maintenance at a minimum
- Drainpipes are external and protected from pest access
- Temperature control requirements are considered at the design stage in insulation performance of a wall particularly for cold storage.

## Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and

Document Reference PRP 4.1 Design and Construction of Buildings Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



# **Environment Prerequisite Programmes**

### Introduction

The scope of Prerequisite Programmes includes control of the local environment to prevent risk product contamination.

### Environment

The following standards are applied as part of the environment prerequisite programmes:

- Food facilities are located away from areas which present a potential risk of contamination
- Food facilities are located away from anywhere where, after considering protective meas is clear that there will remain a threat to food safety.
- Food facilities are located away from environmentally polluted areas and industrial activity which pose a serious threat of contaminating food
- Food facilities are located away from areas subject to flooding unless sufficient safeguard provided
- Food facilities are located away from areas prone to infestations of pests
- Food facilities are located away from areas where wastes, either solid or liquid, cannot be removed effectively.
- Periodic assessment of potential food safety impact from and to local environment is per

### Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and facility inspection

The prerequisite programmes are reviewed and modified as necessary when there are changes in local environment. The results of the review and subsequent modifications are recorded.

Document Reference PRP 4.2 Environment Prerequisite Programmes Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



### Site Location and Standards

### Introduction

The scope of Prerequisite Programmes includes standards for the site exterior and location.

### Site Location and Standards

The following standards are applied as part of the environment prerequisite programmes:

- Site boundaries are defined and controlled.
- Security arrangements are in place to control access to the site.
- The site is covered by a maintenance programme
- Vegetation is managed.
- Roads, yards and parking areas are maintained and have adequate drainage.

### Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and facility inspections.

Document Reference PRP 4.3 Site Location and Standards Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager







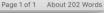




































# TS ISO 22002-1 Prerequisite Programme Requirements

# 5. Layout of premises workspace:

- √ 5.1 General requirements
- ✓ 5.2 Internal design, layout and traffic patterns
- √ 5.3 Internal structures
- √ 5.4 Location of equipment
- √ 5.5 Laboratory facilities
- ✓ 5.6 Temporary/mobile premises and vending machines
- 5.7 Storage of food, packaging materials, ingredients and non food chemicals





# TS ISO 22002-1 Prerequisite Programme Requirements

# 5. Layout of premises workspace

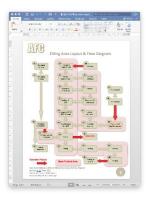
Internal layouts need to be designed, constructed and maintained to facilitate good hygiene and manufacturing practices.

Requirements for appropriate internal structures and fittings including ceilings, doors, drains, floors and walls.

Requirements for equipment design, maintenance and location such that its operation is hygienic.

Requirements for laboratory facilities, storage facilities and temporary

structures.









## Layout of Premises and Works

#### Introduction

The scope of prerequisite programmes includes standards for the layout of pr within the facility.

### Layout of Premises and Workspace

The following standards are applied as part of the layout of premises and wor programmes:

- The internal design and layout of food buildings permits good food hyp protection against cross-contamination between and during operation
- Buildings are maintained in a condition that permits good food hygien protection against contamination.
- There is always segregation of high and low risk areas.
- There is restricted access to high risk areas and dedicated clothing, for equipment.
- Product Process flow is logical and follows a one-way flow system
- Process flow should be designed to prevent contamination
- There are dedicated chill and freeze facilities where appropriate
- There are segregated equipment washing facilities
- The onsite laboratory is sited away from production areas or contracte
- Facility is appropriate for the purpose
- Adequate security arrangements are in place with restricted access on
- Operator/people movement is controlled to minimise risk of cross con

### Verification of Prerequisite Programmes

Verification activities are carried out for Layout of Premises and Workspace pr audits and facility inspections based on risk.

Document Reference PRP 5.1 Layout of Premises and Workspace Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



### Internal Structure PRPs

#### Introduction

The scope of Prerequisite Programmes includes requirements for the standard of internal structure for all food handling areas on site.

### Internal Structure

The following standards are applied as part of the internal structure prerequisite programmes:

### Ceilings

- All ceilings are solid and not hollow
- All ceilings are fire resistant
- All ceilings and their finishes are impervious and non-absorbent, washable and easily cleaned, non-contaminating and non-tainting
- Ceilings and overhead fixtures are constructed to minimize the build-up of dirt and condensation. and the shedding of particles
- False ceilings have adequate access to the void for cleaning and pest management

### Floors

- Floors are made of durable, impervious and non-absorbent, washable and easily cleaned, noncontaminating and non-tainting material
- Floors are constructed from materials that are able to withstand the cleaning methods applied
- Floors are constructed to allow adequate drainage and cleaning
- Wall/floor junctions are design to prevent the accumulation of dirt and to be easy cleaned

### Internal Walls

- All internal walls are solid and not hollow
- Internal walls are damp proofed and fire resistant
- All internal walls and their finishes are durable, impervious and non-absorbent, washable and easily cleaned, non-contaminating and non-tainting
- Walls are constructed from materials that are able to withstand the cleaning methods applied within the facility
- All coving is designed to prevent damage and to be easy to clean
- Window sills are sloped at a minimum of 45° to prevent accumulation and for ease of cleaning.
- Any windows that can be opened are protected by removable washable insect screens

Document Reference PRP 5.3 Internal Structure PRPs Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



## Storage PRPs

### Introduction

The company has established and implemented a programme of prerequisites including standards for the control of storage of materials and products on site. These are included in

### Storage Prerequisite Programme

All materials including chemicals, raw materials, ingredients, packaging, in process products, rework. quarantined product and finished product are stored in a clean storage area in a manner that protects them from contamination sources. The following standards are applied as part of the storage prerequisite programmes:

- Storage areas are designed to segregate materials when there is a risk of cross-contamination.
- Storage areas are designed to be easily cleaned and maintained.
- Storage areas are designed prevent contamination and deterioration.
- Storage areas are kept clean, well ventilated, and dry.
- All materials and packaging materials are protected from pests, condensate, drains, sewage, dust, dirt, chemicals or other contaminants.
- Separate areas for storing chemicals, packaging, raw materials and finished products to avoid cross-contamination risks.
- Separate areas are maintained for rework and guarantined products.
- Partially used materials are adequately sealed and protected before being returned to storage. - All chemicals, including cleaning and maintenance chemicals and non-product materials are
- stored in separate locked areas.
- Materials and products are stored off the floor on pallets (pallets are checked before use to ensure that they are food-grade, clean and in good repair) or in racking and at least 45 cm away from walls and ceilings.
- Rows of stored materials are spaced to allow cleaning and inspection.
- Pallets and other wooden surfaces are properly dried after being washed.
- Layer pads are placed between pallets and materials or products.
- Material stock levels are maintained at volumes to avoid excessive age and insect infestation.
- Chemicals, raw materials, work in progress, packaging and finished goods are clearly labelled with relevant information as appropriate including name, product code, delivery date, use by, best before date and/or date of manufacture to facilitate stock rotation. Monitoring of humidity and temperature of storage areas is carried out as required.
- Ingredients, packaging supplies and other materials are rotated by date code.
- Products are dispatched on a first in first out/first expired first out principle to ensure effective
- stock rotation. Raw materials, work in progress, packaging and finished goods are checked for microbiological
- contamination prior to use/release.
- When materials are stored outside they are protected against deterioration and contamination.

Document Reference PRP 5.7 Storage PRPs Revision 0 7th November 2023 Owned by: Technical Manager Authorised By: General Manager











































# TS ISO 22002-1 Prerequisite Programme Requirements

# 6. Utilities – air, water, energy

- **✓ 6.1 General requirements**
- √ 6.2 Water supply
- ✓ 6.3 Boiler chemicals
- ✓ 6.4 Air quality ventilation
- ✓ 6.5 Compressed air and other gases
- √ 6.6 Lighting













## Site Services PRPs

### Introduction

The company has established and implemented a programme of prerequithe control of service supplies to the site.

### Site Services Prerequisite Programme

The following standards are applied as part of the site services prerequisit

- The supply and routes for services to and around manufacturing ar the risk of product contamination
- All ducts, pipes and cables are predominantly located above the ce access to allow cleaning, maintenance and pest control.
- All services pass through walls, floors or ceilings local to their point
- Access points for pests is prevented by traps in drains
- Entrance holes to product areas are adequately sealed.
- Services passing through external walls and floors have a pipe seal
- Overhead pipes do not pass over open vessels or production lines
- The quality of services is monitored to ensure compliance with req
- Non-potable water supplies such as fire sprinkler systems are not r
- Sprinkler systems in production areas are supplied with potable wa way to the non-potable water system.
- Cables in production areas are placed in structural conduits which cleaning, pest control and maintenance or routed in open channels withstand cleaning operations.
- Rainwater pipes are protected by 5mm wire mesh balloons at the 1
- Exhaust fans are fitted with self-closing shutters that close when the
- Ventilation systems are protected with wire mesh

### Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audit:

# Control of Water Supply PRPs

### Introduction

The company has established and implemented a programme of prerequisites including standards the water supply to the site.

## Control of Water Supply Prerequisite Programme

The following standards are applied as part of the control of water supply prerequisite programme

- An adequate supply of potable water is provided from the company water supplier as per t procedure for supplier approval.
- Each facility has appropriate storage and distribution systems to provide potable water who
- Only potable water is used in cleaning applications, food handling and processing.
- Water recycled for reuse is treated and maintained so that it does not represent a risk to fo
- Non-potable water is not used in production areas.
- Where Non-potable water systems are used externally they are identified by colour coding do not connect with potable water systems.
- Steam and ice used in food contact are generated from potable water and systems are in p
- The water supply is routinely tested to ensure it meets the required chemical, physical and microbiological parameters.
- Residual chlorine, when applied as a control measure, is regularly tested at point of use.
- All potable water supply lines and tanks are disinfected at least annually.

### Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and laboratory routine testing as per the internal audit schedule and Laboratory Testing Schedule.

# Control of Air Supply PRPs

### Introduction

The company has established and implemented a programme of prerequisites including standards for the control of air supplies on site.

### Control of Air Supply Prerequisite Programme

The following standards are applied as part of the control of air supply prerequisite programme:

- Ventilation systems are designed so that air flows from high risk areas to low risk areas and designed so that they can be maintained and cleaned.
- When air is used as an ingredient or for food contact surfaces the requirements for relative humidity, microbiological quality and filtration are specified and controlled.
- Air is filtered when necessary to prevent contamination of the product.
- Ventilation is provided to control humidity and temperature when required.
- Ventilation is provided to minimise air-borne contamination of food by over pressuring high risk areas with HEPA filtered air.
- Filter system performance is regularly tested to confirm it is working correctly.
- Adequate ventilation is in place to prevent condensation and assist in drying after wet cleaning. - Air supply systems are accessible for cleaning, maintenance and filter changes.
- Air intake and extraction vents are protected with mesh screens, regularly inspected for integrity
- and cleaned as required. Adequate dust control and extraction is in place.
- There is a system to monitor air quality where the quality of air can affect the product.

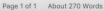
## Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and laboratory routine testing as per the internal audit schedule and Laboratory Testing Schedule.

Document Reference PRP 6.2 Control of Water Supply PRPs Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

Document Reference PRP 6.4 Control of Air Supply PRPs Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager







Document Reference PRP 6.1 Site Services PRPs

Revision 0 7th November 2023

Authorised by: General Manager

Owned by: Technical Manager



































# TS ISO 22002-1 Prerequisite Programme Requirements

# 7. Waste disposal

- √ 7.1 General requirements
- √ 7.2 Containers for waste and inedible or hazardous substances
- 7.3 Waste management and removal
- √ 7.4 Drains and drainage









# **Waste Container Management**

### Introduction

The company has established and implemented a programme of prerequisites incluthe management of waste containers used on site.

### Waste Container Management

The following standards are applied as part of the waste container management pr programme:

- Company waste is categorized and stored separately in dedicated colour co are clearly identified for their intended purpose and located in segregated c
- The following colour coded system applies:
- → General Grey
- → Glass Red
- → Oil Black
- -> Metal Blue
- → Plastic Green
- → Cardboard Brown
- → Product Yellow
- All waste containers are constructed of impervious material and are regular disinfected to prevent contamination of the work environment.
- Waste is not stored in empty ingredient or product packaging. All waste cor when not in immediate use and locked where the waste may pose a risk to
- Containers used to hold dangerous substances are identified and locked to accidental contamination of food.
- All members of staff are briefed on Induction to ensure that waste is put in coded bins.
- Clear notices are displayed in all areas as to the waste colour coding policy a containers are clearly labelled.

### Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and faci

Document Reference PRP 7.2 Waste Container Management Revision 0 7th November 2023 Owned by: Technical Manager

## Waste Disposal

### Introduction

The company has established, implemented a programme of prerequisites for the site includ standards for controlling the disposal of waste.

## Waste Disposal

The following standards are applied as part of the waste disposal prerequisite programme:

- Waste is regularly removed by licensed contractors to prevent accumulation.
- Preference is given to contractors who recycle rather than dispose of waste.
- Facilities are provided for the removal, segregation and storage of waste.
- Waste removal is managed to prevent the accumulation of waste in all areas.
- The frequency of waste removal is managed to avoid accumulation and at a minimum
- Records of disposal of waste and licensed contractors are maintained.
- The amounts of each type of waste sent for disposal is monitored on a weekly basis to
- If substandard products, labelled materials or printed packaging are transferred to a in disposal contractor for destruction or disposal, the contractor shall be in the business product or waste disposal.
- The licensed waste disposal contractor provides records of material destruction or dis which will be retained on site as evidence that the trademarked materials could not be

#### Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and facility inspec

Document Reference PRP 7.3 Waste Disposal PRPs Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



## **Drainage Systems**

### Introduction

The company has established and implemented a programme of prerequisites on site which include standards for the drainage systems.

### Drainage systems

The following standards are applied as part of the drainage systems prerequisite programmes:

- Appropriate drainage systems and facilities are provided with sufficient flow capacity to remove expected load and prevent the accumulation of waste.
- Drainage systems are designed, constructed and located so that the risk of contamination of
- materials or products is prevented and so that waste flows away from high care and clean areas. - Systems are constructed so that the risk of contaminating the potable water supply is avoided.
- Systems are constructed so that drains do not pass over manufacturing lines.
- All drains are protected by traps to prevent rodent access.
- Drains and sewers are proofed and regularly maintained to prevent rodents from gaining access or using them as harbourage.
- Drains are regularly checked and rodded.
- Disused drains are filled with concrete.
- Separate drainage systems are provided for sewage from staff facilities.
- Uncontrolled sewage water flow into irrigation facilities and other water basins is prevented.

### Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits, facility inspections and laboratory routine testing including environmental swabbing.

Document Reference PRP 7.4 Drainage Systems PRPs Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





Authorised by: General Manager



































# TS ISO 22002-1 Prerequisite Programme Requirements

- 8. Equipment suitability, cleaning and maintenance
- 8.1 General requirements
- 8.2 Hygienic design
- ✓ 8.3 Product contact surfaces
- ✓ 8.4 Temperature control and monitoring equipment
- √ 8.5 Cleaning plant, utensils and equipment
- **▼** 8.6 Preventive and corrective maintenance









# Equipment Prerequisite Programs

# Introduction

The company has established and implemented a programme of prerequisites incli the equipment used on site.

# Equipment

The following standards are applied as part of the equipment prerequisite program

- All food contact equipment is designed and constructed to facilitate cleanin
- Contact surfaces do not affect the products or cleaning system.
- All food contact equipment is constructed of durable materials such as high that are able to withstand cleaning operations.
- Equipment has good access for hygiene inspection and swabbing.
- All lubricants used on food grade equipment are food grade.
- Changeovers on equipment do not represent a food safety risk.
- The throughput and capacity is adequate at standard efficiency so that ther excessive running hours.
- Equipment is easy to use.
- Equipment is easily cleaned
- Equipment has a cleaning procedure
- Equipment has a cleaning checklist
- There enough space for access to all areas
- Change parts must have hygienic storage
- All operators are trained to use and competent - Equipment has an appropriate breakdown procedure
- Engineers are trained in the planned maintenance and breakdown procedu
- Condition of equipment is frequently assessed

# Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and faci

Document Reference PRP 8.1 Equipment Prerequisite Programmes PRPs Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



# **Equipment Hygienic Design**

# Introduction

The company has established and implemented a programme of prerequisites including standards the hygienic design of equipment used on site.

# Equipment Hygienic Design

The following standards are applied as part of the equipment hygienic design prerequisite program

- All food equipment must be of hygienic design, with smooth cleanable surfaces.
- Equipment must be self-draining in wet process areas.
- Equipment is constructed with materials that can withstand the vigour of exposure to prod
- Equipment framework is maintained in a hygienic condition and not penetrated by holes or
- All equipment piping and ductwork must drain, be cleanable and have no dead ends.
- The design of the equipment restricts the contact between the operator's hands and the products to a minimum Equipment does not contain any loose moving parts over exposed
- Equipment has good access for hygiene inspection and swabbing.
- Equipment does not have glass, plastic, or wooden parts.
- Equipment is design so that it does not represent a pest risk.
- Is designed so that the equipment is easy to use.
- Equipment has no detrimental effect to other plant or the work environment.
- Equipment must not represent a foreign body risk
- Equipment must be easy to maintain

# Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and facility inspections

Document Reference PRP 8.2 Equipment Hygienic Design Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



# **Maintenance Prerequisite Programmes**

# Introduction

The company has established and implemented a programme of prerequisites including standards for maintenance activities conducted on site.

# Maintenance System

The Plant Maintenance System is managed by the Engineering Manager. A Corrective and Preventative Maintenance Prerequisite Programme operates on site which operates in the following areas:

- Critical Equipment that monitors hazards include in Hazard Control Plans This equipment has a specific documented schedule of regular maintenance, inspection and/or calibration and includes material/process/product:
  - o Screens
  - o Filters (including air filters)
  - o Magnets
  - Metal detectors
  - X-ray detectors o Thermometers
- Boilers
- Buildings
- Cooling Towers
- Air Compressors
- Processing/Filling/Production/Packing Equipment
- Services

# Prerequisite Standard of Maintenance Operations

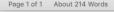
Corrective and Preventative Maintenance is carried out on site such that:

- Maintenance is carried out in such a way that production on adjoining lines or equipment is not at risk of contamination so the equipment or area is taken out of production, segregated and released to the Engineer to complete the work required. The Engineering Manager schedules Preventative Maintenance by issuing a Maintenance Task Card
- for each piece of equipment on a weekly basis, maintenance requests which impact on product safety are given priority. - Maintenance personnel all adhere to the company hygiene policy and area specific hygiene and
- dress codes.
- The Engineering Manager authorises temporary repairs so that product safety is not put at risk and schedules a permanent repair within a reasonable timescale.
- Engineering chemicals including boiler chemicals, water treatment chemicals, lubricants and heat transfer fluids are food grade where there is a risk of direct or indirect contact with the product.

Document Reference PRP 8.6 Maintenance Prerequisite Programmes Revision 0 7th November 2023

Owned by: Technical Manager Authorised by: General Manager



























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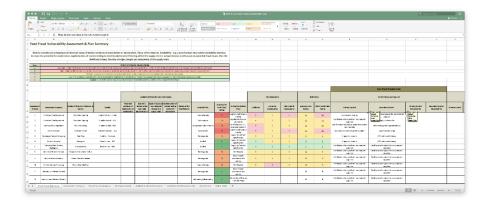




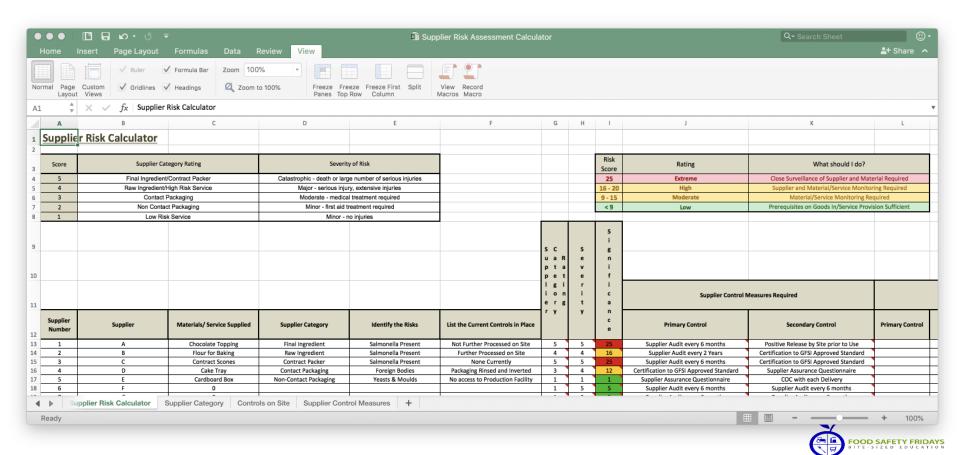


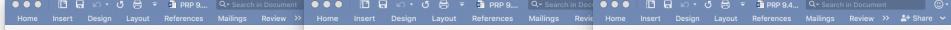
# 9. Management of purchased materials

- 9.1 General requirements
- 9.2 Selection and management of suppliers
- 9.3 Incoming material requirements (raw/ingredients/packaging)











# **Supplier Approval and Monitoring**

# Introduction

The company has established, implemented this procedure for the approval and monitoring of s in order to ensure materials, services and products are safe and compliant with customer and re requirements.

## Supplier Approval and Monitoring

Supplier approval and monitoring prerequisite programmes are applied for all materials and services which can impact food safety and food authenticity.

The Purchasing Department or nominated individuals purchase materials and services in accorda with the company purchasing procedures. This ensures that all purchases that can have an impa food safety are to defined specifications and from an approved supplier. Only in exceptional circumstances under concession from the Technical Manager can a non-approved supplier be us this situation, the Technical Manager distributes an extraordinary test and inspection schedule fr material or service. Authority to purchase outside of these procedures can only be authorized by Technical Manager in writing.

Initially suppliers are used because of their historic service record including Performance, Custor nomination or Price. This the starting point for an approved supplier list. With the implementati controlled approved supplier list, suppliers who do not reliably achieve specification are either d or if critical to the business, are given technical support to become reliable. New suppliers are o added to the list following successful sampling and technical approval. Customers can add a nor supplier to the list. This nomination may be overruled where product safety could be jeopardized

Materials and Services can only be purchased using the Approved Supplier List. Orders for mater chemicals, packaging and ingredients are raised and consignments of approved materials are cal from approved suppliers against planned product order requirements. All chemicals purchased f within the food handling facility are confirmed as "food grade" by the Technical Manager. The Pl Manager is responsible for ensuring that adequate materials are available to meet production requirements.

The Approved Supplier List is maintained by the Technical Manager and includes details of the m or service the supplier is approved to supply. Suppliers can only be added to this list after passing through the Supplier Approval procedure. Suppliers can be delisted following supplier audits or service levels. Rejected suppliers are kept on the supplier data as delisted in order to help identi delisted suppliers reapplying for inclusion.

New materials, services and suppliers are initially selected by the Purchasing Manager, who is responsible for selection of vendors and subcontractors, and for negotiating supply contracts.

Document Reference PRP 9.2 Supplier Approval and Monitoring Revision 0 21st November 2023 Owned by: Technical Manager Authorised by: General Manager



# **Control of Incoming Materials**

# Introduction

The company has established and implemented a programme of prerequisites includin the control of incoming materials.

# Control of Incoming Materials

Material acceptance is based on a combination of product sampling and testing, visual receipt certificates of analysis or conformance. Each delivery of material is inspected or damage or soiling and where appropriate to confirm if the seals are intact. The site's fo contains details of the measures considered necessary to secure incoming materials an protect them from deliberate act of sabotage or terrorist-like incidents. The food fraud contains details of the methods by which the identified food safety vulnerabilities from materials are controlled

Incoming raw materials is, where appropriate, thoroughly checked on arrival for the ab infestation. Records of these checks are maintained. Delivery notes are verified against purchase order and supplied with a Certificate of Conformity or Certificate of Analysis t material meets the current specification. Critical Raw materials as defined in the HACCI must be accompanied by a Certificate of Analysis. The parameters of the C.O.A. are def Material Specification. Goods Receipt notes are signed by the Warehouse Manager to § preliminary acceptance.

A register of raw materials with the parameters for acceptance and for the frequency of by the Technical Manager and followed by the Laboratory to clear each delivery of raw company policy to ensure that all incoming materials meet the required standards prior order to achieve this objective all raw materials delivered to site are subject to positive authorised QA staff prior to use.

When a material is received, it is given a unique pallet number. This pallet is used by all identify product. Good In operators are responsible for applying a Material QA Clearan unique pallet identification number) on each pallet of material received and recording material on the pallet label.

The QA staff check all incoming materials as per the testing schedule issued by the Labo Supervisor and authorised by the Technical Manager, Materials are released to product authorised QA staff only when it has been confirmed that the material meets specificat

This process requires the Laboratory Supervisor to complete and sign the Material Rele Once complete authorised QA staff complete the relevant section on the Pallet QA Rele and detach the Hold section of the label indicating the material has been released.

Document Reference PRP 9.3 Control of Incoming Materials Revision 0 21st November 2023 Owned by: Technical Manager Authorised by: General Manager



# **Food Fraud Prevention**

# Introduction

The company has established, documented and implemented this procedure to identifying the site's vulnerability to food fraud.

## Scope

The scope of the food fraud risk assessment and prevention procedure covers the site's susceptibility to material or product substitution, mislabelling/misbranding, dilution, concealment, unapproved enhancements, grey markets, diversion counterfeiting or stolen goods which may adversely impact food

## Food Fraud Team

The food fraud risk assessment and prevention procedures are developed and maintained by the Food Fraud Team, The Food Fraud Team includes members from purchasing, logistics management, technical, operations, quality and the sales departments. All team members are trained in product fraud vulnerability assessment and mitigation techniques.

Food Fraud Team	Name	Job Title	Details of Training	Date
Team Leader		Purchasing		
realif Leader		Manager		
Team Member		Logistics Manager		
Team Member		Warehouse		
ream wember		Manager		
Team Member		Technical Manager		
Team Member		Operations		
ream Wember		Manager		
Team Member		Quality Manager		
Team Member		Sales Manager		

Note: Food Fraud Initiative at Michigan State University (MSU) http://foodfraud.msu.edu, provides free on line training for sites and auditors on food fraud called Massive Open On-line Courses or MOOCs. Other resources that could be considered include Vulnerability Assessment Assistance Information:

# SSAFE Food Fraud tool

A food fraud vulnerability assessment tool that companies can use free-of-charge. The tool is a first-of-itskind solution to help companies fight food fraud and give consumers greater confidence in the safety and integrity of their food. The tool will support the food industry in preparing for new GFSI\*\* requirements that require for GFSI certified food companies to undertake food fraud vulnerability assessments and develop control plans to reduce risks.

https://www.pwc.nl/en/industries/agrifood/ssafe-food-fraud-tool.html

Document Reference PRP 9.4 Food Fraud Prevention

Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager







































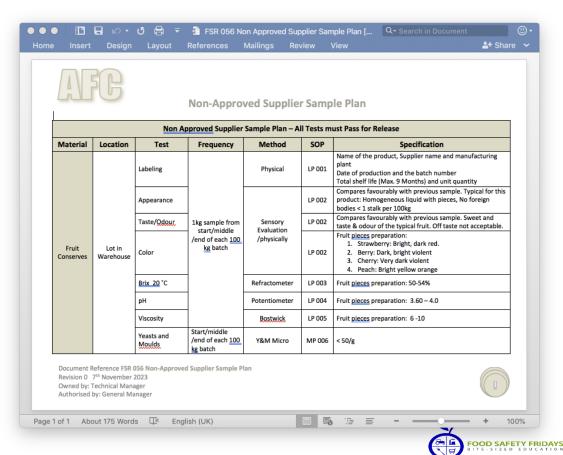
# 9. Management of purchased materials

Systems should be in place for the purchase and verification of

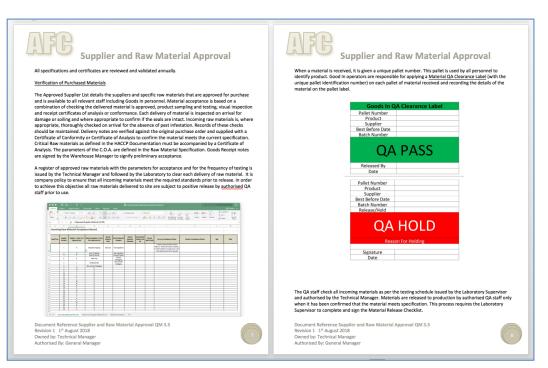


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Supplier Assessment Form	Supplier Assessment Form	Supplier Assessment Form
	Certification	unauthorised knives from the production area?
	Are your facilities and products certified to any recognised	Cleaning
Company Details  Company Name:  Address:	food safety or quality schemes?  If yes which?	Do you have documented cleaning schedules that include frequency of clean, chemicals used step by step instructions and the standard required?
Address.	Please provide a copy of your certificates	Do you monitor cleaning standards?
	Do you have a system in place to ensure compliance with	By visual inspections?
	Legislation?  Does your organisation have membership of any	By microbiological methods?
Please provide Head Office address if different from	professional bodies?	At what frequency?
above:	Hygiene	Pest Control
	If you are supplying food ingredients or food packaging,	Is a proactive system for the prevention of contamination
	then are your Operatives given any formal hygiene training?	of products by pests in place?
	If yes which scheme? And by whom?	Are raw materials, packaging and finished products stored
Technical or Quality Manager Contact Details	Do you have documented procedures/policies relating to:	so as to minimise the risk of infestation?
Name of Contact:	Hand Washing?	Are all buildings adequately proofed?  Is a Pest Control Association registered pest control
Position Held:		contractor employed to implement a pest control
Telephone No:	Smoking?	programme and maintain the site free from pest
Fax No:	No eating/drinking in production areas?	contamination?
Name of Deputy:	Wearing protective clothing (Inc. hats/hairnets)?	Is there a description of contracted services and a site
What is the total number of employees in your company?	Use of approved sticking plasters?	Is there a complete inventory of pesticides detailing the
How many people do you employ in direct labour?	Sickness/Illness reporting and exclusion?	location and safe use and application of balts and other
How many people are employed in your Quality	Wearing of watches/jewellery?	materials such as insecticide sprays or fumigants?
Assurance Department?	Wearing of make up/nail varnish?	Are flying insect controls in place?
What levels of qualifications are held within your	Foreign Body Control	Is there a system to quarantine any infested materials to prevent contamination of other materials, products or the
technical department?	Is there a policy for the control of glass and exclusion of	establishment
Products to be Supplied	glass from production areas?	Food Safety & Quality Systems
Product Name Specification Number	Is there a glass/brittle material breakage procedure?	Do you have and operate a food safety & quality
	Is there a policy for the control of wood and exclusion of	assurance programme?
	wood from production areas?  Is there a policy for the control of cardboard and	Do you have a documented Quality and Food Safety Policy & Objectives?
	exclusion of cardboard from production areas?	Do you have a documented food safety & quality
	Is there a policy for the control of metal and exclusion of	assurance manual that includes procedures for:
Please provide a full product specification with each product supplied	potential metal contaminants from production areas?  Is there a policy for the control of knives and exclusion of	Document/Record Control?
Document Reference FSR Supplier Assessment Form Revision 0 1tt August 2023 Owned by: Guality Manager Authorized by: General Manager	Document Reference FSM Supplier Assessment Form Revision 0 1st August 2023 Owned by: Quality Manager Authorized by: General Manager	Document Reference FSR Supplier Assessment Form Revision 0 1st August 2023 Owned by: Quality Manager Authorized by: General Manager





# TS ISO 22002-1 Prerequisite Programme Requirements Incoming Materials

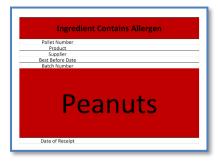






# 10. Measures for prevention of cross contamination

- **√** 10.1 General requirements
- **√** 10.2 Microbiological cross contamination
- **√** 10.3 Allergen management
- **✓** 10.4 Physical contamination





10. Measures for prevention of cross contamination

Systems should be in place to prevent, control and detect product contamination including allergen, microbiological and physical contamination.





# **Prevention of Contamination**

## Introduction

The scope of the Prerequisite programmes includes measures to prevent contamination of materials and products on site.

# Prevention of contamination

Good manufacturing practices described in the FSSC 22000 FSQMS Prerequisites Manual assist in preventing material/product contamination:



Document Reference PRP 10.1 Prevention of Contamination

Revision 0 18th November 2023 Owned by: Technical Manager Authorised by: General Manager





# Prevention of Contamination

Additional systems are applied as prerequisites as part of HACCP Application, these are documented in PRP 2 HACCP Prerequisite Programmes (located in the FSMS 8.5 Hazard Controls folder):



Document Reference PRP 10.1 Prevention of Contamination Revision 0 18th November 2023 Owned by: Technical Manager Authorised by: General Manager



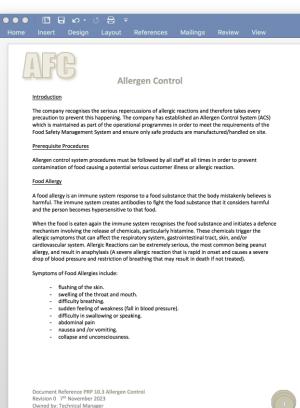
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PRP 10.3 Allergen Control [Compatibility Mode]





## Allergen Control

## Foods That Can Cause Reactions

The following types of foods can cause reactions in susceptible persons:

Nuts - Almond (Amygdalus communis L.), Hazelnut (Corylus avellana), Walnut (Juglans regia), Cashew (Anacardium occidentale), Pecan nut (Carya illinoiesis (Wangenh.) K. Koch), Brazil nut (Bertholletia excelsa), Pistachio nut (Pistacia vera), Macadamia nut and Queensland nut (Macadamia

Cereals containing Gluten - Wheat, Rye, Barley, Oats, Spelt, Kamut;

Eggs Fish

Shellfish

Soya

Sesame seeds

Celery/celeriac

Mustard

Sulphur dioxide and sulphites

## **Legislation USA**

# Legislation Europe ANNEX II

Substances or Products Causing Allergies or Intolerances

More details are contained in the Comprehensive Allergen Management System

# Controlling Allergens

All staff receives training on the types of foods that can cause allergies. The induction package includes a briefing on the types of allergens and specifically those handled on site. When allergen control is considered a significant hazard, the specific training is given to every member of staff who can affect the handling of that allergen risk.

The company recognises the serious repercussions of allergic reactions and therefore takes every precaution to prevent this happening. The company has established a Comprehensive Allergen Management System in order to meet the requirements of the Food Safety Management System and ensure the safe production of products, Refer to PRP 10.3 Allergen Management System Folder

Document Reference PRP 10.3 Allergen Control Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

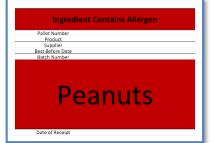




## Allergen Control

## References

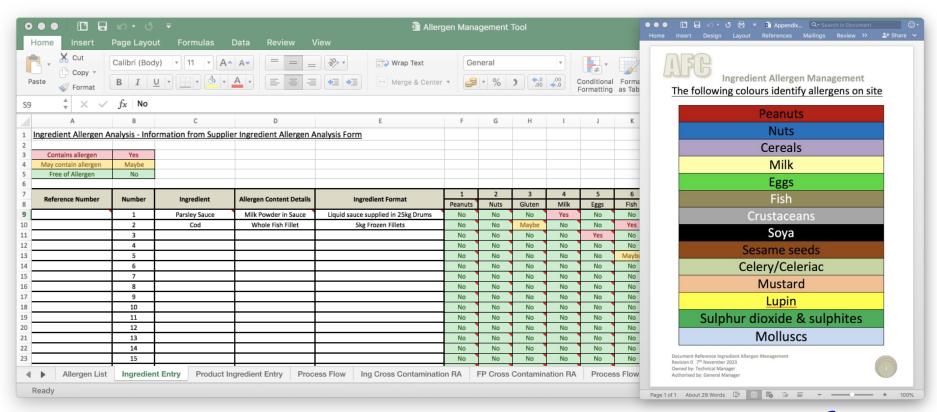
PRP 10.3 Allergen Management System Folder PRP 10.3 Allergen Control System (ACS) OPRP 5 Nut Handling Procedure



Document Reference PRP 10.3 Allergen Control Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager









# Allergen Control System (ACS)



## Allergen Prerequisite Programmes - Checking and Managing Ingredients

The Technical Manager maintains an information/specification folder containing all the ingredient information for every item purchased. Purchases are only made as per the purchasing procedure from approved suppliers to approved documented specifications. The Technical Manager checks all new ingredients and ingredients periodically to ensure the label and specification match and that all the allergens present in the ingredient have been identified and documented. This information is transferred via the recipe to in-process and end product specifications, descriptions and for product labelling purposes. The Technical Manager is responsible for approving all new product labels prior to product launch. Product and Ingredient labels are reviewed periodically by the Food Safety Team.

Allergen cross-contamination risks from suppliers and specific controls are described in the Allergen Control System. Allergen cross-contamination risks from suppliers are reviewed annually provided no changes occur. In addition, suppliers are required to formally agree in writing to notify site if they make any changes to their factory, processes or raw materials.

The Technical Manager provides an approved supplier and material list for the purchasing and goods in departments which includes a 'Register of Allergens' which describes any allergens present in the material. This information is used by the goods in department to identify the materials on acceptance. Identification of allergenic products is managed by applying an 'Allergen Identification tabef' at this stage.

Document Reference PRP 10.3 Allergen Control System (ACS) Revision 0 7th November 2023

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# Allergen Control System (ACS)

Checks are put in place to ensure that all packaging is intact and there is no evidence of any spillage and to verify that all ingredients are fully labelled.



Document Reference PRP 10.3 Allergen Control System (ACS) Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# Allergen Control System (ACS)

Allergen Prerequisite Programmes - Identification and Segregation of Allergens During Storage and Handling

Specific allergen storage areas are allocated to each type of allergen material identified. It is a company requirement that all such ingredients are clearly labelled with the allergen that they contain using an 'Allergen Identification Label'. The Technical Manager produces a 'Register of Allergens' which is applicable in the country of manufacture and the country where products are sold and circulates the register to all relevant staff on site.

Clear identification and segregation of foods and materials on the 'Register of Allergens' is implemented. Allergens are kept separate from each other as well as from mon-allergenic ingredients in storage. If an ingredient contains more than one allergen, it has its own segregated storage location. Raw materials containing allergens and edesignated storage areas for allergens must be clearly identified at all times. Procedures are in place to ensure that materials are supplied to the preparation and production areas in well-sealed, undamaged packaging. Allergenic material containers must be kept covered or adequately sealed to prevent spillage. OA sampling of allergenic ingredients should follow the sampling procedures to ensure that there is no risk of cross contamination risks using disposable sample pots which are clearly leadled. Any spillages must be reported and cleaned up immediately.

Containers used to store or handle allergenic ingredients are designated to the allergenic ingredient. Part used bags are resealed and returned to their designated storage area immediately after use. All equipment used in contact with allergens must be washed as per instructions prior to reuse.

Document Reference PRP 10.3 Allergen Control System (ACS) Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



FOOD SAFETY FRIDAYS

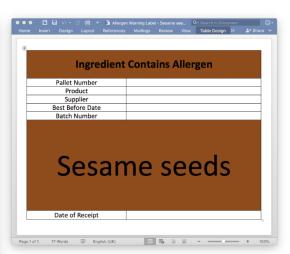


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# **Allergen Management Tools**







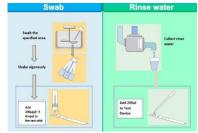


# Allergen Management – Validation & Verification of Cleaning Performance



Validation/Verification Monitoring method





**Food Contact Surface – Filler Nozzle** 

Verification Monitoring method: ATP Swab after cleaning before Start Up



# **Action Limits:**

< 10 rlu - Okay to Start Up 10 - 20 rlu - Sanitise and Re-Swab > 20 rlu - Full Clean and Re-Swab



# 11. Cleaning and sanitizing

- ✓ 11.1 General requirements
- **✓ 11.2 Cleaning and sanitizing agents and tools**
- √ 11.3 Cleaning and sanitizing programmes
- √ 11.4 Cleaning in place (CIP) systems
- **✓ 11.5 Monitoring sanitation effectiveness**







# **Cleaning Procedures**

## Introduction

The company has established and implemented a programme of prerequisites including standards for cleaning procedures operated on site.

## Cleaning Procedures

The company supports and maintains comprehensive cleaning procedures for all areas on site with specific attention to high risk areas.

Cleaning programmes are established and validated by the Food Safety Team to ensure that all parts of the facility, equipment and cleaning equipment are cleaned.

For all areas, detailed cleaning instructions are available and cleaning checklists completed. All personnel are trained in the specific cleaning requirements and instruction for their areas. When an item is cleaned a record of this cleaning is completed and the cleaning is checked and signed off by the department manager.

Each Cleaning Work Instruction will have specific details including:

- Protective Equipment to be worn
- Cleaning Equipment to be used
- Responsibility for cleaning
- Chemicals to be Used
- Correct dilution and temperature of Chemicals
- Contact time for Chemicals
- Method of Cleaning
- Any precautionary measures
- Frequency of cleaning
- Responsibility for monitoring of cleaning
- Responsibility for post cleaning inspection
- Start-up checks after cleaning

## Verification of Cleaning Procedures

Verification activities are carried out for prerequisites in the form of audits, inspections and laboratory routine testing as per the internal audit schedule and Laboratory Testing Schedule.

Document Reference PRP 11.3 Cleaning Procedures Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# **Cleaning Procedures**

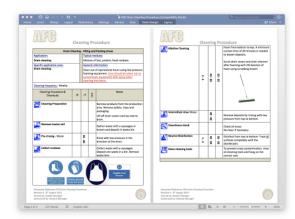
## Responsibility

All personnel are required to carry out cleaning procedures as instructed and maintain a clean and tidy

Department Managers are responsible for supervising cleaning procedures across the site and ensuring that cleaning records are completed and signed off.

The Technical department is responsible for monitoring the effectiveness of cleaning and specifying the use of cleaning chemicals.

The Technical Manager is responsible for approving all cleaning procedures, work instruction and



Document Reference PRP 11.3 Cleaning Procedures Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager















# Floor and Drains Cleaning Procedure

Processing, Filling, Packing & Storage Areas

Application:			Typical residues:			
Floor and Drains cleaning		Mixture of fats, protein, food residues.				
Specific application area: Floor and Drains cleaning in Filling, Processing, Packing & Storage Areas.			General information: Clean out of production hours using low pressur foaming equipment. Care should be taken not to contaminate equipment with spray when cleaning the drains.			
Cleaning frequency: Hose Daily	and Foa	m We	ekly.			
Cleaner: Area Operator				Responsible: Supervisor		
Cleaning Procedure & Chemicals	%	°C	min.	Notes		
Cleaning Preparation				Remove products, pallets, trays and packaging. Lift off drain covers and lanext to drain.		
Remove coarse soil				Gather waste with a squeegee, Broon (Angle cut) & Shovel and deposit in a waste bin. Use red Squeegee, Broom (Angle cut) & Shovel for Process rooms, green squeegee, Broom (Angle cut) & Shovel for Filling rooms and blue squeegee, Broom (Angle cut) & Shovel for Packaging and Storage rooms.		
Pre-rinsing - Water		25 - 40		Rinse with low pressure water in the direction of the floor/ drain.		
Collect residues				Collect waste with a squeegee, Broom (Angle cut) & Shovel. Remove waste bins.		







Document Reference Floor and Drains Cleaning Procedure Sample 12th April 2023 Owned by: Production Supervisor Authorised By: Production Manager



Floor and	Di	rain	s Cl	eaning Procedure
Alkaline Cleaning FoamGel	2-4	25-40	20 - 30	(Use FoamGel to remove Food Residues) Foam in the direction of floor/ drain. A minimum contact time of 20 minutes is needed to loosen deposits.  Scrub drain covers and drain channels after foaming with 2-4% Solution of FoamGel using scrubbing brush of correct colour code.  Use white top Red Broom for Process rooms, white top Green Broom for Filling rooms and white top Blue Broom for Packaging and Storage rooms to scrub floor or drains when deposits are loosened. Use round long handle broom of correct colour code to clean drain holes.
Acidic Cleaning Acid FoamGel	2-4	25-40	20 - 30	(Use Acid FoamGel to remove mineral stains if necessary.) Foam in the direction of drains/ floor. A minimum contact time of 20 minutes is needed to loosen deposits.
Intermediate Rinse - Water		25-40		Remove deposits by rinsing with low pressure water in the direction of drain/ floor.

drain/ floor.

**Document Reference Floor and Drains Cleaning Procedure Sample** 12th April 2023 Owned by: Production Supervisor

Authorised By: Production Manager



# Floor and Drains Cleaning Procedure

		_	_	
Cleanliness check				Check all areas. Re-clean if necessary.
Neutral Disinfection	1-3	25 - 40	20 - 30	(Use XYZ to disinfect floor/ drain) Disinfect all areas of the floor/drain using low pressure spray.
Final rinse - Water		25 - 40		Remove disinfectant residues by rinsing with low pressure water. Rinse with potable water.
Store cleaning tools	-		10	To prevent cross-contamination, rinse all cleaning tools and soak into a 1% Sanitiser solution for 10 min and hang on correct rack. Ensure fresh solution is used for soaking every day.







Processing Area Colour

Filling Area Colour

Packaging & Storage Area Colour

**Document Reference Floor and Drains Cleaning Procedure Sample** 12<sup>th</sup> April 2023 Owned by: Production Supervisor Authorised By: Production Manager





# 11.5 Monitoring sanitation effectiveness Acceptable and Unacceptable Cleaning Performance



Food Contact Surface – Filler Nozzle

Monitoring method:

ATP Swab after cleaning before Start

Up



# **Action Limits:**

< 10 rlu – Okay to Start Up 10 – 30 rlu – Sanitise and Reswab > 30 rlu – Full Clean and Reswab



# 11.5 Monitoring sanitation effectiveness



# 12. Pest control

- **✓ 12.1 General requirements**
- 12.2 Pest control programmes
- **✓ 12.3 Preventing access**
- 12.4 Harbourage and infestations
- **✓ 12.5 Monitoring and detection**
- **✓** 12.6 Eradication









PRP 12 Management of Pest Control [Compatibility Mode]

PRP 12 Management of Pest Control [Compatibility Mode]



# **Management of Pest Control**

### Interior monitoring devices include:

Mechanical traps

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- Glue boards
- Gassing traps
- Live cage traps
- See-saw tubes
- Electrocution traps
- Extended trigger traps that send alert e-mails or text messages

# Electronic Flying Insect Killing Units (EFKs)

EFKs assist in the identification and monitoring of flying insects. For food safety reasons, all EFKs have shatter-resistant tubes and are positioned at least 3 m from food contact surfaces, exposed products, packaging, and raw materials in food handling areas. EFKs are installed away from entrance areas in a way that does not attract insects to the facility. EFKs are used to monitor flying insect activity at locations that are likely to allow access to the facility. All units are checked weekly to ensure they are working. Each unit is serviced quarterly by the pest control contractor, the service includes:

- Emptying collection trays and analysis of contents
- Cleaning the units
- Reporting volume and type of insects caught including trends
- Annually tube change at the beginning of the active season.

All EFK services records are kept in the pest control file, the Technical Manager uses the EFK service information to identify and eliminate the source of insect activity.

### Pheromone Traps

Pheromone traps are used to assist in the identification of stored product insect pests in areas prone to this type of infestation. Pheromone traps are inspected quarterly by the pest controller who reports the types and quantities of insects found. The Technical Manager uses the information to identify and eliminate the source of activity.

## Bird Control

Bird control is applied as part of the pest control measures to prevent contamination of food products. Buildings are design so as not to offer attractive roosting areas and bird deterrent measures including spiking and nets are used where appropriate.

Document Reference Management of Pest Control PRP 12

Revision 1 7th November 2023 Owned by: Technical Manager

Authorised by: General Manager





# **Management of Pest Control**

### Elimination of Pest Habitat

The Field Biologist identifies any possible pest habitat around the site in the quarterly inspections. The Technical Manager takes actions to remove or eliminate favourable conditions for pests including eliminating any rodent burrows, rodent runs and areas that provide harbourage or may attract rodents or other pests to the site or outside grounds.

## Pesticide Management

Pesticides are controlled as described in Storage procedures and Chemical Contamination Controls. Pesticides are stored in a locked storage area and are properly ventilated. Pesticide containers and application equipment are labelled and only used for each specific pesticide as per the label. Pesticides are applied and stored according to label directions. Empty pesticide containers are disposed of according to label directions and regulatory requirements, unused obsolete pesticides are secured until collected by the pest control contractor and disposed of as per regulatory requirements.

Pesticides are approved by the Technical Manager before use, Pesticides are only handled and used by authorised personnel as defined in the pest control contract and service agreement.

Records of all Monitoring devices are maintained, including services performed, to ensure that devices are properly placed and inspected to allow trend analysis of activity.

Pest Control Contractor reports include:

- Signs of pest activity
- Proofing requirements
- Actions required by site
- Type of Pest
- Pesticide or material applied
- Pesticide registration number
- Rate of application or percent of concentration
- Specific location of application
- Method of application
- Amount of pesticide used at the application site
- Date and time
- Next action/follow up date

- Signature of pest controller

Document Reference Management of Pest Control PRP 12 Revision 1 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# **Management of Pest Control**

Temporary placement of any pest monitoring devices for short-term monitoring is documented in pest control action reports.

The Field Biologist conducts a quarterly assessment of the facility including catch trap analysis. The assessment evaluates all areas inside and outside the facility. Assessment results and recommendations are documented and reviewed with the Technical Manger with a view to improving and updating the pest control procedures. During the assessment, the Field Biologist measures the effectiveness of the program to verify the elimination of applicable pests.

All personnel are trained to avoid contact with pest control devices and materials and that only authorised personnel are permitted to handle pesticides at induction. Personnel are required to inform management immediately if such contact is made and then take the appropriate hand washing and change of protective work wear measures. All personnel are trained to identify potential issues caused by pests at induction. A pest control reporting procedure is in place such that any incident or sign of pest activity is immediately reported to the Technical Manager and any potential product affected is quarantined. The Technical Manager maintains a log of pest sightings and the action taken by the pest

The log is maintained in the pest control file and includes:

- Date
- Time
- Type of pests observed
- Actions taken
- Person taking the action and signature

The log is used to identify and eliminate areas where pest activity is observed and to document corrective Actions taken. In the event of an infestation the Technical Manager identifies, evaluates and authorises the release of any potential product affected by the pests. The Field Biologist reviews the log each quarter to identify trends in pest activity. A report of findings is submitted to the Technical Manager for review.

The pest control contractor provides reports for all visits and advises on any trends and corrective actions. Department Managers are allocated corrective or preventative actions which must be completed within the agreed timescale.

## Verification of Pest Control Activities

The Technical department and line management are required to conduct documented audits including pest control throughout the site at monthly intervals.

Document Reference Management of Pest Control PRP 12 Revision 1 7th November 2023 Owned by: Technical Manager Authorised by: General Manager









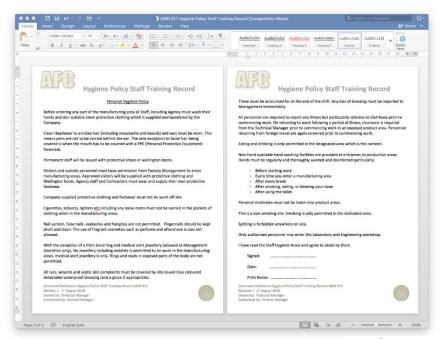
# 13 Personnel hygiene and employee facilities

- **✓ 13.1 General requirements**
- √ 13.2 Personnel hygiene facilities and toilets
- **✓ 13.3 Staff canteens and designated eating areas**
- **√** 13.4 Work wear and protective clothing
- √ 13.5 Health status
- √ 13.6 Illness and injuries
- √ 13.7 Personal cleanliness
- √ 13.8 Personal behaviour



# TS ISO 22002-1 Prerequisite Programme Requirements Personal Hygiene







# TS ISO 22002-1 Prerequisite Programme Requirements Personal Hygiene





# TS ISO 22002-1 Prerequisite Programme Requirements Personal Hygiene



# Personal Hygiene

## Personal Hygiene Policy

Before entering any part of the manufacturing area all Staff, including Agency must wash their hands and don suitable clean protective clothing which is supplied and laundered by the Company.

Clean Headwear to enclose hair (including moustache and beards) and ears must be worn. This means pens are not to be carried behind the ear. The only exception to facial hair being covered is when the mouth has to be covered with a PPE (Personal Protective Equipment) facemask

Permanent staff will be issued with protective shoes or wellington boots.

Visitors and outside personnel must have permission from Factory Management to enter manufacturing areas. Approved visitors will be supplied with protective clothing and Wellington boots. Agency staff and Contractors must wear and supply their own protective footwear.

Company supplied protective clothing and footwear must not be worn off site

Cigarettes, tobacco, lighters  $\underline{etc}$  including any loose items must not be carried in the pockets of clothing when in the manufacturing areas.

Nail varnish, false nails, eyelashes and hairgrips are not permitted. Fingernails should be kept short and clean. The use of fragrant cosmetics such as perfume and aftershave is also not allowed.

With the exception of a Plain band ring and medical alert jewellery (allowed at Management discretion only), No Jewellery including watches is permitted to be worn in the manufacturing areas. medical alert jewellery is only. Rings and studs in exposed parts of the body are not permitted.

All cuts, wounds and septic skin complaints must be covered by site issued blue coloured detectable waterproof dressing (and a glove if appropriate). These must be accounted for at the end of the shift. Any loss of dressing must be reported to Management immediately.

Document Reference Personal Hygiene QM 7.2 Revision 1 1th August 2018 Owned by: Technical Manager Authorised By: General Manager





# Personal Hygiene

All personnel are required to report any illness but particularly sickness or diarrhoea prior to commencing work. On returning to work following a period of illness, clearance is required from the Technical Manager prior to commencing work in an exposed product area. Personnel returning from foreign travel are again screened prior to commencing work.

Eating and drinking is only permitted in the designated area which is the canteen.

Non-hand operable hand washing facilities are provided at entrances to production areas. Hands must be regularly and thoroughly washed and disinfected particularly:

- Before starting work
- Every time you enter a manufacturing area
- After every break
- After smoking, eating, or blowing your nose
- After using the toilet

Personal medicines must not be taken into product areas.

This is a non-smoking site. Smoking is only permitted in the dedicated area.

Spitting is forbidden anywhere on site.

Only authorised personnel may enter the Laboratory and Engineering workshop.

Authorised by Technical Manager .....

Date

Document Reference Personal Hygiene QM 7.2 Revision 1 1st August 2018 Owned by: Technical Manager Authorised By: General Manager

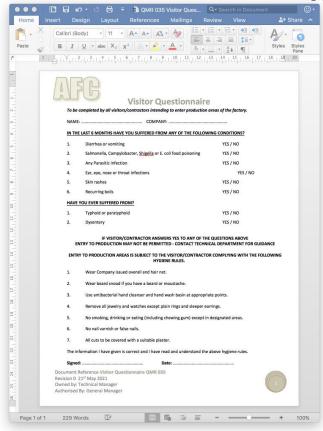


# ENTRY TO PRODUCTION AREAS IS SUBJECT TO THE VISITOR/CONTRACTOR COMPLYING WITH THE FOLLOWING HYGIENE RULES.

- Wear Company issued overall and hair net.
- Wear beard snood if you have a beard or moustache.
- 3. Use antibacterial hand cleanser and hand wash basin at appropriate points.
- Remove all jewelry and watches except plain rings and sleeper earrings.
- No smoking, drinking or eating (including chewing gum) except in designated areas.
- No nail varnish or false nails.
- All cuts to be covered with a suitable plaster.



# TS ISO 22002-1 Prerequisite Programme Requirements Medical Screening



# There should be:

- Illness notification procedures for employees
- Illness notification procedures for visitors
- Documented infectious disease procedure



# TS ISO 22002-1 Prerequisite Programme Requirements Medical Screening

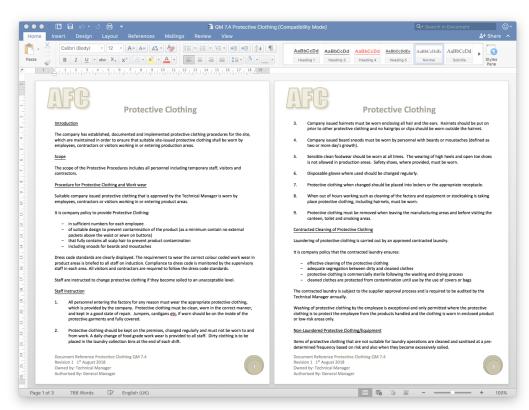
Conditions which should be reported to management so that any need for medical examination and/or possible exclusion from food handling can be considered, include:

- jaundice
- diarrhoea
- vomiting
- fever
- sore throat with fever
- visibly infected skin lesions (boils, cuts, etc.)
- discharges from the ear, eye or nose





# Protective Clothing: Employees and Visitors to Production Areas

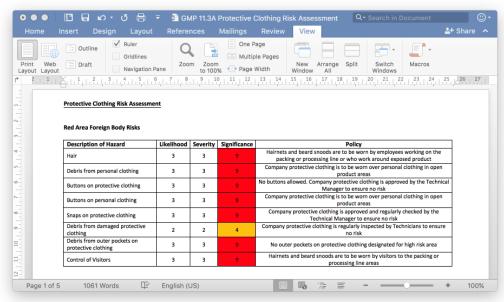






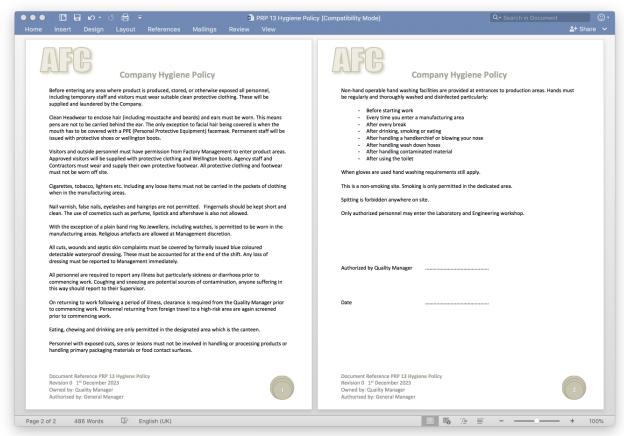
# Protective Clothing: Employees and Visitors to Production Areas







# **Hygiene Policy**







# Hygiene Code of Practice

## First Aid

- Any employees who cuts or injures themselves at work must report to a first aider immediately.
- Clean wounds should be covered with a 'blue metal detectable plaster' by a first aider. If necessary a fingerstall or glove should cover any dressing.
- Personnel arriving at work with an unprescribed wound dressing shall have it checked and, if necessary, replaced by a first aider.
- Any loss of plaster dressing must be reported to Management immediately.
- All accidents must be recorded in the accident book as soon as possible.

## Foodstuffs and Drinks

- The consuming of sweets (including medicinal lozenges), foodstuffs, or chewing gum in product areas is not allowed.
- Food and drinks are only to be consumed in the canteen.
- Drinks are not allowed to be taken into the product areas, water may only be taken at the designated water dispensers in product areas.

### Sensory Testing of Products

- Eating or tasting of products in food handling areas is not permitted.
- Sensory testing is only permitted to be carried out by authorized personnel in QC/Inspection areas which are equipped for the purpose.
- Personnel conducting sensory tests must be trained and operate a high standard of personal
- Equipment used for sensory testing is sanitized, maintained and stored separate from processing equipment.

## Smoking

Page 4 of 8

Smoking, chewing tobacco and the taking of snuff is strictly forbidden in the interests of hygiene and safety. Smoking is confined to the 'designated smoking area' which is outside the building.

Document Reference PRP 13 Hygiene Code of Practice Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



# Hygiene Code of Practice

- Cigarette ends must always be placed in the receptacles provided and not stubbed onto the floor where they can be taken into the factory on the soles of shoes, etc.
- The area must be kept clean and tidy

### **Brittle Materials**

- Glass, china, bottles, ceramics or brittle plastic of any description must not be taken into product areas due to the seriousness of product contamination if a breakage should occur.
- If for any reason there is a breakage the matter must be immediately reported to Management.

### Knives

- Personnel must take care of any knife issued to them. Knives must never be lent to other nersonnel
- Personnel must not take their knife off the premises, under any circumstances
- Any loss or damage to the knife or knife blade must be reported immediately to Management.

# Animals and Birds

- The bringing of animals or birds onto the factory premises or the encouragement of birds or animals by putting out of food is forbidden.
- Any spillages of foodstuffs or waste should be cleaned up as soon as possible to prevent attraction of animals and birds.
- All waste food material should be suitably wrapped and placed into a waste bin as soon as possible.

## Stationery

- Drawing pins, staples, rubber bands, paper clips, pins, etc., are not allowed in product area.
- Cello tape or red tape must not be used on machines or to attach notices. Any notices should be laminated and attached with double-sided sticky tape or a bulldog clip.

Document Reference PRP 13 Hygiene Code of Practice Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# Hygiene Code of Practice

## Preventing Contamination

- Waste materials should be placed in the proper waste receptacles provided and not left lying around the factory. A 'clean as you go' policy should be adopted.
- The use of any materials likely to cause product contamination in the product areas of the factory, e.g. staples in boxes, should be brought to the attention of the Management.
- Packaging, Products and Ingredients should be kept in the appropriate containers and off the floor.
- Wash down hoses must be stored in the racks provided and not on the floor when not in use.
- It is the responsibility of every employee to immediately report to Management the discovery of contamination in any area of the manufacturing facility that constitutes a risk to product and / or personnel.
- If for any reason an employee feels that contaminated product may have been dispatched to customer(s) they must report the incident to a member of Management immediately.
- All personnel engaged in any food handling, preparation or processing operations shall ensure that products and materials are handled and stored in such a way as to prevent damage or product contamination.
- Personnel entry to processing areas shall be through the personnel access doors only.
- All doors are to be kept closed. Doors shall not be left open for extended periods when access for waste removal or receiving of product/ingredient/packaging is required.
- Waste shall be contained in the bins identified for this purpose and removed from the processing area on a regular basis and not left to accumulate.

## Plant Maintenance

- No welding, riveting, drilling or soldering is to be carried out on plant, which is being used for production.
- Any part of the factory where construction work is being carried out should be screened off to prevent risk of product contamination.

Document Reference PRP 13 Hygiene Code of Practice Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager









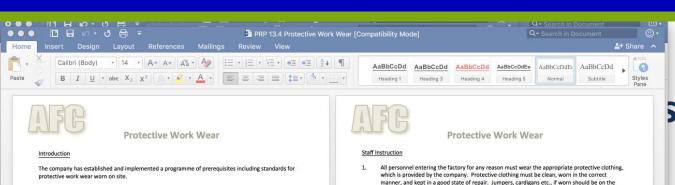












## Protective Work Wear

Based on risk assessment protective work wear requirements proportional to the hazard posed to the process area or product are established and documented. The Food Safety Team has established. documented and implemented protective clothing procedures for the site, which are maintained as part of the prerequisite programmes in order to meet the requirements of the Food Safety Quality Management System and ensure the safe production of products.

There is a minimum requirement that all personnel who work in or enter areas where materials are handled must wear work clothing that is fit for purpose, clean and in good condition.

The standard of work wear is defined in purchasing specifications and authorised by the Technical Manager such that work wear does not have buttons or outside pockets above waist level. Zips or press stud fastenings are acceptable.

The scope of the Protective Clothing Procedures includes all employees including temporary staff, visitors and contractors are required to be familiar with and follow these procedures.

## Procedure for Protective Clothing and Work wear

Dress code standards are clearly displayed. The requirement to wear the correct colour coded work wear in production areas is briefed to all staff on induction. Compliance to dress code is monitored by the supervisory staff in each area. All visitors and contractors are required to follow the dress code standards.

All protective clothing is designed to prevent product contamination and have no external pockets. Work wear is designed to provide adequate coverage to prevent contamination of the product.

The captive footwear and distinctive protective clothing provided must worn in high risk production areas and removed when leaving these areas.

A daily change of food grade work wear is provided to all staff. All work wear is professionally laundered at a Food Grade Laundry at regular intervals to ensure there is an adequate supply of clean work wear. Dirty clothing is to be placed in the laundry collection bins at the end of each shift.

Document Reference PRP 13.4 Protective Work Wear Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



- manner, and kept in a good state of repair. Jumpers, cardigans etc., if worn should be on the inside of the protective garments and fully covered.
- Protective clothing should be kept on the premises, changed at least weekly and must not be worn to and from work.
- Company issued hairnets must be worn enclosing all hair and the ears. Hairnets should be put on prior to other protective clothing and no hairgrips or clips should be worn outside the hairnet.
- Company issued beard snoods must be worn (not required for moustaches). A beard is defined as two or more day's growth.
- Sensible clean footwear should be worn at all times. The wearing of high heels and open toe shoes is not allowed in production areas. Safety shoes are that are fully enclosed and made from non-absorbent materials are provided in processing areas.
- Protective clothing when changed should be placed into lockers or the appropriate receptacle.
- When out of hours working such as cleaning of the factory and equipment or stocktaking is taking place protective clothing, including hairnets, must be worn.
- Protective clothing must be removed when leaving the manufacturing areas and before visiting the canteen, toilet and smoking areas. Work wear must not be used for any other purpose other than its designated use.
- Where gloves are used for product contact, they are coloured, disposable and regularly changed to ensure that they are clean and in good condition. The use of latex gloves is avoided where possible.

The food grade laundry supplier is subject to the supplier approval procedure and periodic checks of the quality of laundering are carried out by the Laboratory staff.

Document Reference PRP 13.4 Protective Work Wear Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

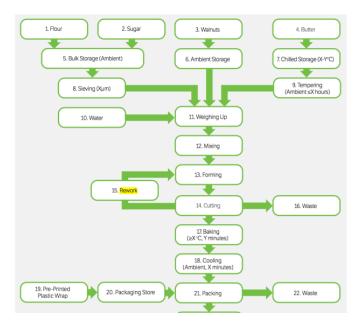




# 14. Rework

- ✓ 14.1 General requirements
- √ 14.2 Storage, Identification and traceability
- √ 14.3 Rework usage











# **Rework Prerequisite Programmes**

# Introduction

The company has established and implemented a programme of prerequisites including standards for the control of rework on site

## Rework

Based on risk assessment rework management controls proportional to the hazard posed to the process area or product are established and documented:

- Controls are applied to the way rework is stored, handled and used as part of the rework prerequisite programmes to ensure the following are maintained:
- → product safety
- → product quality
- → traceability
- → regulatory compliance
- Rework is protected as per standard storage prerequisites although controlled and segregated from other products.
- Rework is considered as part of the HACCP study and the appropriate control measures applied including the requirement for reprocessing.
- Special attention is given to allergen controls in the use of rework such that if adequate controls cannot be applied then the product is subject to alternate use or disposal rather than reworking.

# Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and laboratory routine testing as per the internal audit schedule and Laboratory Testing Schedule.



# Rework Storage Identification &

# Introduction

The company has established and implemented a programme of prerequisi control of rework on site.

# Rework

Based on risk assessment rework management controls proportional to the area or product are established and documented:

- Stored rework is protected from exposure to microbiological, chemi contamination.
- Reworked material is controlled so that it remains identifiable and t
- Where rework or any reworking operation is performed, traceability traceability records to the finished product to ensure that product s compromised e.g. allergy status, identity preservation and ingredier
- The traceability will provide details on all parts of the product from to filling time.
- The food safety team assess the risk of allergens from rework and d of products containing allergens.
- Rework is only permitted on a like for like basis unless specifically at
- Manager who will ensure there is no risk of cross-contamination. - Segregation requirements for rework are documented as applicable
- Rework is identified by product name and date of production to allo for rework is recorded.

# Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits testing as per the internal audit schedule and Laboratory Testing Schedule.



# **Rework Usage Prerequisites**

# Introduction

The company has established and implemented a programme of prerequisites including standards for the control of rework on site.

# Rework Usage

Based on risk assessment rework usage controls proportional to the hazard posed to the process area or product are established and documented. Specifications and controls for reworking are authorised by the Technical Manager and include:

- acceptable quantity
- type of product or intermediate product
- process conditions
- inspection requirements prior to reworking
- process step
- method of addition
- any necessary preparation
- controls for the removal and segregation of packaging materials
- any measures needed to avoid product contamination

# Verification of Prerequisite Programmes

Verification activities are carried out for prerequisites in the form of audits and laboratory routine testing as per the internal audit schedule and Laboratory Testing Schedule.

Document Reference PRP 14.1 Rework Prerequisite Programmes Revision 0 7th November 2023 Owned by: Technical Manager



Document Reference PRP 14.2 Rework Storage Identification & Traceabilit Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

Document Reference PRP 14.3 Rework Usage Prerequisites Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



Authorised by: General Manager



































# 15. Product recall procedures

- ✓ 15.1 General requirements
- √ 15.2 Product recall requirements

Product recall procedures should ensure that products can be identified, located and removed from all necessary points of the supply chain.



FSMS 8.9.5 Withdrawal:recall [Compatibility Mode]

• • • □ □ □ □ □ □ ▼ Food Safety & Quality Management System Any out of hours contact with customers should only be made by authorised personnel A communication plan for the timely provision of information to customers, consumers and regulatory authorities is followed: a. General Manager and Technical Manager will contact external organisations by telephone and follow up with confirmation e-mails: Local Authority Technical Manager Trading Standards -Technical Manager General Manager The communication will include the following: Notifying consignees of how to return or dispose of recalled product Instructions for the appropriate disposal of recalled product (i.e., destroy, divert. An Incident Room will be set up and all calls will be routed to it. All calls in and out will be logged. The reception personnel are briefed to transfer all calls to the Incident Room. Communications with the Media This will be carried out only by the General Manager or his deputy. d. Communications to Management A brief bulletin should be issued to key management to include all the latest information available. e. Communication to Workforce A similar brief should be given to all workers by their own management, in particular to those workers directly involved in the preparation of the product if appropriate. Communication to Company Insurers. This will be carried out only by the General Manager or his deputy. A member of the team must brief the Managing Director on the situation. All written communications should be authorised by the General Manager It is the responsibility of the team to initiate an action programme which must be recorded in the Document Reference FSMS 8.9.5 Withdrawal/recall Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



# Food Safety & Quality Management System

The progress of the action must be monitored at least on a 4-hourly basis and the details listed in the Product Incident Log by the Product Recall Team Leader.

# Limiting the Damage and Restoring Customer Confidence

The Distribution Manager is responsible for conducting the product recall:

- To ensure all suspect products from the Product Risk Team Brief is removed from the market
- To issue instructions how this should be carried out. In the case of a High-Risk product recall, suspect product should not be shipped back to producing area. Where possible it should be destroyed at source of discovery. With a Low Risk recall product would be returned to the plant providing the Team is assured there is no risk of contamination of safe product and the recalled product is safely guarantined until a decision is reached by the Food Safety Team as to whether the product can be reprocessed or requires disposal.
- To ensure similar product, i.e. date of manufacture, is held separate from production stock in a guarantine area, checked and only sold when the Product Recall Team has given a decision.
- Conducting effectiveness checks to verify recall is carried out

Re-starting Production - No production of the product-at-risk should be made until authority is given by the Product Recall Team.

# Deliberate or Malicious Contamination

The product at risk may have been caused by deliberate contamination. This information may come from the initial communication, e.g. Outside telephone call, letter. A special course of action may be necessary as the problem will become a police matter and the Crisis Management Team should be also

In the event of a member of staff receiving communication of the above this information must be passed to the General Manager immediately. Do not discuss the matter with colleagues. Should the General Manager be absent then the Technical Manager should be contacted.

# Product Recall Report

On Completion of the Product Recall, a full report should be issued detailing cost of the recall recommendations and responsibility for action to ensure there is no chance of a repetition of the problem. This report is reviewed at the next Senior Management Review meeting.

Document Reference FSMS 8.9.5 Withdrawal/recall Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# Food Safety & Quality Management System

In order to verify its effectiveness, the Product Recall procedure is subjected to a timed test at least annually and the results of the exercise recorded and reviewed by the senior management team to identify and implement areas for improvement.

# Types of Defects which may lead to a Product Recall

Guidelines for deciding whether a product needs to be recalled or withdrawn:

# a. Microbiological

# Presence of

- Salmonella
  - Listeria monocytogenes
  - Clostridia
- Staphylococci
- Strentococci
- Campylobacter
- Other bacteria, toxins, viruses,
- Or Customer Illness, not defined

# Chemical

# Presence of:

- Taint, e.g. phenol, cresol, ammonia, or metallic.
- Banned substances e.g. antibiotics
- More than one complaint of customer Illness not defined.

- Presence of foreign bodies, e.g. glass, wood, dirt, infestation, Presence of Nuts in non- nut product.
- Incorrect labelling which could lead to customer illness.

# Suspected food fraud

### Quality

- High temperature, e.g. loss / lack of refrigeration.
- Product deterioration on shelf.
- Presence of Meat in a Vegetarian product.

Document Reference FSMS 8.9.5 Withdrawal/recall Revision 0 7th November 2023 Owned by: Technical Manager

Authorised by: General Manager







# 16. Warehousing

- **√** 16.1 General requirements
- **√** 16.2 Warehousing requirements
- √ 16.3 Vehicles, conveyances and containers



Materials and products need to be stored in clean, dry, ventilated spaces and protected from dust, condensation, fumes, odors or other sources of contamination.



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PRP 16.2 Warehousing Procedures [Compatibility Mode]





# Warehousing Procedures

The company has established and implemented a programme of prerequisites including standards for the standard of warehousing on site.

### Warehousing

Based on risk assessment warehousing controls proportional to the hazard posed to the process area or product are established and documented. The company stores materials in an appropriate manner to ensure that storage does not represent a risk of contamination or an opportunity for bacteria to grow. All warehouses are controlled such that temperature, humidity and other environmental conditions are provided as required by product or storage specifications.

All materials including raw materials, ingredients, packaging, in process products, rework, quarantined product and finished product are stored in as per PRP 5.7 Storage Prerequisites and PRP 16.1 Warehousing Prerequisites. Waste materials, chemicals, lubricants and pesticides are stored separately.

Materials are stored off the floor on pallets or in racking and at least 45 cm away from walls and ceilings. Rows of stored materials are spaced to allow cleaning and inspection.

Pallets are clean and in good repair. Pallets and other wooden surfaces are properly dried after being washed. Layer pads are placed between pallets and bags of ingredients, When pallets are stacked pallet boards are used and stacking is controlled to prevent damage to lower layers.

Material stock levels are maintained at volumes to avoid excessive age and insect infestation. Chemicals. Raw materials, work in progress, packaging and finished goods are clearly labelled with relevant information as appropriate including name, product code, delivery date, use by, best before date and/or date of manufacture to facilitate stock rotation. Ingredients, packaging supplies and other materials are rotated by date code.

Products are dispatched on a first in first out principle to ensure effective stock rotation. Raw materials. work in progress, packaging and finished goods should be checked for microbiological contamination to be within agreed levels.

Gasoline or diesel powered fork lift trucks are not used in food ingredient or product storage areas.

When materials are stored outside they are adequately protected against deterioration and contamination.

Document Reference PRP 16.2 Warehousing Procedures Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# Warehousing Procedures

### Chilled Warehousing

The company recognises that by law chilled food must be kept at 8°C or below and as a policy for increased food safety cold storage areas and chilled equipment are set to run at 5°C or below.

Perishable foods are kept chilled between 1 and 5 °C to prevent food poisoning bacteria from growing.

Quality Control staff make daily checks are made of refrigerated products to ensure the product and air temperatures are between 1 and 5 ° C and that cold storage areas are not over stocked as this will restrict the flow of cold air and make cold storage less effective.

The digital display temperature of each cold storage area is checked 3 times a day to ensure each cold storage area is working correctly. Any temperatures outside of these parameters or problems identified with cold storage areas are reported to the Technical Manager.

Materials whenever possible are stored in clean enclosed containers to reduce the risk of crosscontamination and/or contamination from foreign objects.

# Cold Storage Area Equipment Breakdown

If a cold storage area refrigeration or chilling equipment breaks down, the Technical Manager must be informed immediately. The Technical Manager will arrange to check the temperature of the products and assess if it safe to use or should be thrown out. Depending on the temperature of the food material and the length of time it has been at that temperature the Technical Manager may choose to dispatch the product immediately or transfer it to another cold storage area whilst arranging for the cold storage area or chill display equipment to be repaired.

All cold storage areas are cleaned and defrosted on a regular basis according to the Cold Storage Area cleaning schedule.

Equipment that is unreliable and breaks down on a regular basis represents a risk to the business and will be replaced. It is company policy to use appropriate commercial chilling units of adequate capacity in the facility.

### Frozen Warehousing

The company uses frozen storage for a variety of foods including raw and end products. Therefore, care is taken to segregate these products by separate storage and where possible separate freezers. Frozen food will keep for longer periods as bacteria and/or yeasts will not grow at very cold temperatures. All Freezers are set to operate at a temperature between -18°C and - 21 °C.

Document Reference PRP 16.2 Warehousing Procedures Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



# Warehousing Procedures

Frozen material deliveries are always arranged during working hours and frozen food is placed in the freezer as soon as it is delivered.

All personnel are trained to always check the date codes on deliveries

and monitor the date codes on frozen stock to ensure that it is rotated correctly. Any problems or short coded frozen materials are reported to the Technical Manager.

It is not normally practise to freeze fresh food, however if fresh food is frozen the food is labelled so that it can be identified and the date of freezing and initial preparation recorded.

The Warehouse Manager conducts a stock check of frozen food every week to monitor stock levels and

All Freezers are cleaned and defrosted on a regular basis according to the Frozen Storage Area cleaning

# Freezer Breakdown

If a freezer breaks down, the Technical Manager must be informed immediately (If frozen food materials start to defrost, food poisoning bacteria could grow). The Technical Manager will arrange check to see if the food material is still frozen by checking the temperature.

Depending on the temperature of the food material, whether it has defrosted and the length of time it has been at that temperature the Technical Manager may:

- For food materials that are still frozen arrange to move them to another freezer
- For food materials that have begun to defrost arrange to continue defrosting then use
- For fully defrosted food materials arrange for it to be used immediately
- For food materials where there is any suspected risk whatsoever arrange for it to be thrown

It is policy that frozen food materials cannot be re-frozen once it has started to defrost. It must be used immediately or thrown away.

Equipment that is unreliable and breaks down on a regular basis represents a risk to the business and will be replaced. It is company policy to use appropriate commercial freezer units of adequate capacity in the facility.

Document Reference PRP 16.2 Warehousing Procedures Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager







PRP 16.3 Appendix - Dispatch and Distribution Procedure [Compatibility Mode]



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# Dispatch and Distribution

The company has established a programme of prerequisites to ensure the effective Dispatch and Distribution operations

Should the site be required to sub-contract any dispatch or distribution that may affect product conformity to the defined standards of the Food Safety Management System then the Distribution Manager will assume control over this process.

### Procedure

Instruction for delivery of finished product is sent in the form of a Purchase Order from the Customer to

The Sales Manager authorises the order and passes it on to the Planning Manager who arranges production and then liaises with the Dispatch Manager to arrange vehicle loading and the Distribution Manager to arrange delivery.

The Dispatch Manager checks the product stocks and arranges to load the vehicle using the Sales Order Copy as a checklist.

The Distribution Manager schedules a vehicle to be loaded and arranges a delivery time with the customer. The Distribution Manager arranges a delivery driver and provides the driver with the necessary documentation, including a delivery note and specific delivery instructions.

The driver inspects the vehicle for damage then ensures the vehicle is cleaned prior to collecting the product from the warehouse. The driver collects the ordered product from the Warehouse at the scheduled time. The Dispatch Manager ensures the vehicle is inspected for cleanliness and to ensure there is no risk of contamination prior to loading. The Dispatch Manager is responsible for ensuring that vehicle loading is carried out at the correct temperature and that products are evenly and securely spaced to optimise product conditions and reduce the risk of product damage.

Chilled distribution vehicle trailers are fitted with refrigeration to maintain temperature permanently between 1 and 5° C. For frozen distribution vehicle trailers are fitted with refrigeration to maintain temperature permanently below -18° C. Thermograph data loggers are installed on every vehicle and are fitted with alarms to sound if this temperature is exceeded. Ambient distribution vehicles are checked to ensure they are dry and that there is no likely contamination risk to the product.

Document Reference PRP 16.3 Appendix Dispatch and Distribution Procedure Revision 0 7th November 2023 Owned by: Technical Manager



# Dispatch and Distribution

After loading the Dispatch Manager checks the vehicle and load with the driver. A Delivery checklist is completed with confirmation of the following:

- Date and time vehicle was cleaned
- The vehicle was inspected prior to loading and found to be clean
- The vehicle was inspected prior to loading and found to be undamaged and free from
- The vehicle was inspected after loading and the vehicle and product were in a satisfactory condition and at the correct temperature.
- The load has been checked and the correct products and quantities have been loaded and

When the delivery checklist is completed and it has been confirmed that the product loaded matches both the Sales Order Copy and the Delivery Note then the Dispatch Manager seals the vehicle with a tamper-evident closure and records the closure tag number on the delivery checklist.

The driver delivers the product to the Customer as per delivery instructions from the Distribution Manager at the scheduled time. Any delays are reported to the Distribution Manager who communicates the delay to the customer.

In the case of vehicle or refrigeration equipment breakdown the distribution refrigeration breakdown procedure is followed. Product is checked to ensure it is still within the acceptable temperature limits and transferred to an alternative vehicle, if not it is returned to site for cooling and assessment by the Technical Manager. All incidence of vehicle or refrigeration equipment breakdown is recorded and the corrective action taken documented.

When a third party is used for the distribution of products the same process applies, however the third party is treated as a supplier and subject to the Supplier Approval Procedure.

Authorised by: General Manager

The Dispatch Manager is responsible for managing the Warehouse and Vehicle loading and ensuring that the Warehouse. The Dispatch Manager is responsible for ensuring the Warehouses and the Products, Raw Materials, and Packaging contained within them are secure, especially when they are not

The Distribution Manager is responsible for providing an on-time delivery service of product to customer and for customer liaison on deliveries and amendments and for scheduling distribution movements. This also includes responsibility for managing third party distribution.

Document Reference PRP 16.3 Appendix Dispatch and Distribution Procedure Revision 0 7th November 2023 Owned by: Technical Manager



**Dispatch and Distribution** 

Driver's Handbook Distribution Breakdown Procedures PRP Prerequisite Programmes

Document Reference PRP 16.3 Appendix Dispatch and Distribution Procedure Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





- 17. Product information /consumer awareness
- √ 17.1 Product information
- √ 17.2 Labelling of pre-packaged foods

Product information should be presented to consumers in such a way as to enable them to understand its importance and make informed choices.





PRP 17.2 Product Labelling Controls [Compatibility Mode]





# **Product Labelling Controls**

# Introduction

The company has established a programme of prerequisites for product labelling controls. All product labels are approved by the Technical Manager who ensures that the label meets product specifications and that the finished product label is in accordance with customer specific requirements, where specified, and the applicable food regulations in the country manufacture and of intended sale. The Operations Manager is responsible for ensuring that the correct approved product label is applied to finished products.

### Approval of Product Labels

The Technical Manager is responsible for ensuring that product labels comply with legal requirements and contains information to enable the safe handling, display, storage and preparation of the product within the food supply chain or by the customer. The Technical Manager verifies that the labeling information is correct labelling is correct based on the product recipe and ingredient specifications

- ingredient and allergen labeling based on the product recipe and ingredient specifications
- nutritional content
- storage conditions
- preparation and serving instructions
- customer information meets legislation for the destination country

### Labelling information is reviewed whenever there are changes to:

- the product recipe
- raw materials
- supplier of raw materials
- legislation
- country of origin of raw materials

For all products, the New Product Development Manager validates the product formulation and product process are capable of meeting any product claims prior to launch and verifies that ingredient and allergen labelling is correct based on the product recipe.

Where the label information is the responsibility of a customer or third party the New Product Development Manager provides information to ensure labelling is correct and also communicates changes which may affect label information.

For each delivery of printed packaging or labels the QA Staff are required to check the printed packaging or labels against 'Approved Samples' provided by the Technical Manager prior to release.

Document Reference PRP 17.2 Product Labelling Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# **Product Labelling Controls**

# Product Label Prerequisites

Based on risk assessment product labelling control requirements considering any hazards associated with the labelling systems are documented. Product labelling system prerequisites are as follows:

- Traceability records by Label and Expiry date are maintained and retained for all product
- Procedures are in place to check product labelling and coding at regularly intervals as well as every product change over.
- Copies of labels and coding are retained by the Laboratory for traceability purposes.
- Trained production personnel carry out label and date checks, every check is countersigned by a second check so that two members of staff verify that the label and code are correct.
- It is potentially as dangerous to mix allergen product packaging with non-nut packaging. If a nut free packaging is filled with a nut product there is no indication to the customer that the product contains nuts.
- All allergen packaging is kept in the designated locked areas which is additionally identified by red lines and hatched on the floor and walls.
- All allergen packaging is returned to that area once production has finished.
- Only the Shift Manager and Senior Shift Managers have keys to this area. - On no account is any allergen free packaging stored in the allergen packaging designated area
- All allergen packaging is clearly marked by a prominent label and sealed in a red coloured bag
- If there is packaging which could be confused with an allergen product then this will be treated
- in a similar way and will be packed in sealed blue bags.

### **Process Specifications**

The Technical Manager translates the product specification for every new product into a Process Specification. The process specification details manufacturing instructions to be followed and contains recipes as defined in customer specifications.

# The Process Specification describes:

Ingredient Details including unique identification code Packaging Details including unique identification code Specific Label requirements Explicit date coding instructions Bar Code requirements Specific process or production conditions

Mixing instructions Equipment process settings

Document Reference PRP 17.2 Product Labelling Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# **Product Labelling Controls**

Processing times and temperatures Cooling times and temperatures Criteria for product acceptance

Specific test or analysis procedures

Prerequisite programmes

Relevant operational procedures/Work Instructions

HACCP plans including Critical Control Point monitoring requirements and acceptable criteria

The process specification is authorised by the Technical Manager and issued to both the laboratory and production departments.

Product checks are carried out at regular intervals during the packaging run, following packaging changes and when changing batches of packaging materials to ensure correct packaging materials are used and the code is correct.

# Product Labelling Checks

Procedures are in place to ensure that product is being packed into the correct packaging with the

- ✓ At start of packing
- ✓ During the production run at a frequency based on volume and risk
- ✓ When batches of packaging materials are changed
- ✓ When label reels are changed
- ✓ At the end of the production run

QA checks include verification of the following printed information where appropriate:

- ✓ Date coding ✓ Batch coding
- ✓ Lahel
- ✓ Quantity declared ✓ Pricing
- ✓ Bar code
- ✓ Country of origin

Packaging materials are supplied to packing lines such that that only the packaging for immediate use is available at the packaging machines. Traceability records by Label and Expiry date are maintained and retained for all product batches. Procedures are in place to check product labelling and coding at regularly intervals as well as every product change over. Copies of labels and coding are retained by the Laboratory for traceability purposes on PRP 17.2A Label Retention and Check Record.

Document Reference PRP 17.2 Product Labelling Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

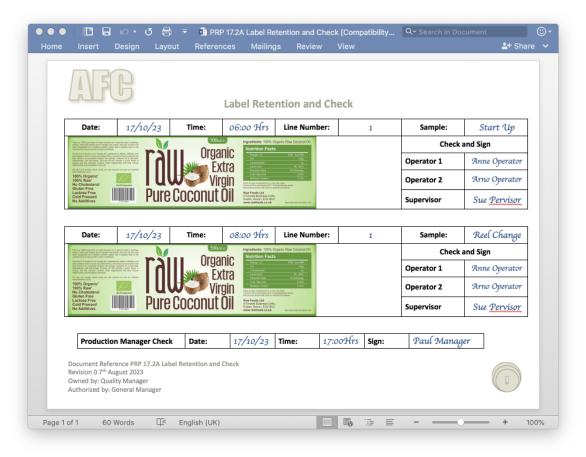








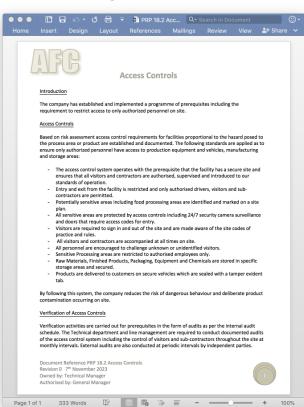




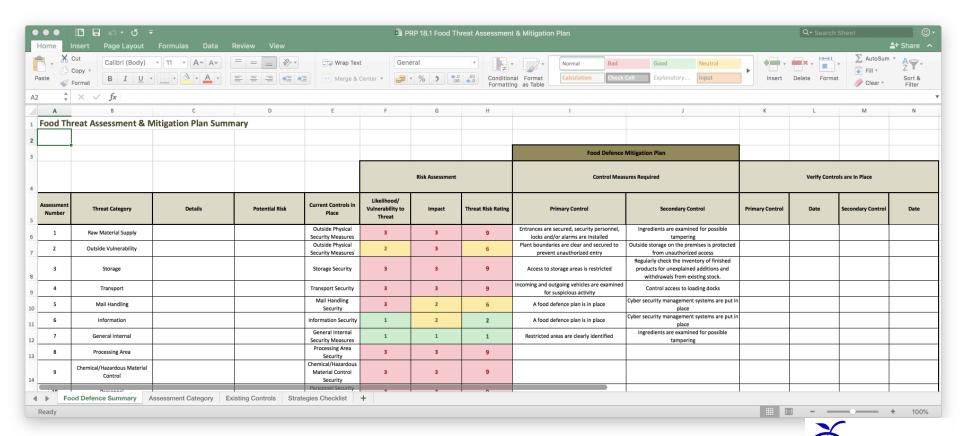


- 18. Food defence, biovigilance and bioterrorism
- **✓ 18.1 General requirements**
- √ 18.2 Access controls

Management should assess the hazard to products posed by potential acts of sabotage, vandalism or terrorism and put in place proportional protective measures including access controls.

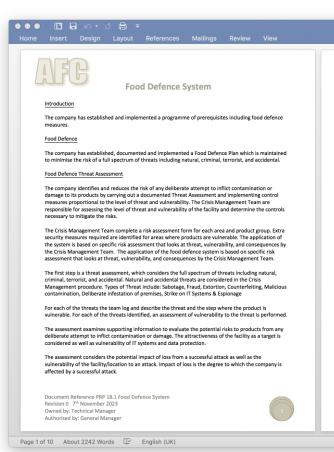






FOOD SAFETY FRIDAYS

PRP 18.1 Food Defence System [Compatibility Mode]





# Food Defence System

Vulnerability is defined to be a combination of the attractiveness of a facility as a target and the level of deterrence and/or defence provided by the existing measures. Target attractiveness is a measure of the asset or facility in the eyes of an aggressor.

### isk Analysis

Once the credible threats are identified, a vulnerability to threat assessment is performed. The vulnerability assessment considers the potential impact of loss from a successful attack as well as the vulnerability of the facility/location to an attack. Impact of loss is the degree to which the company is affected by a successful attack.

Vulnerability is defined to be a combination of the attractiveness of a facility as a target and the level of deterrence and/or defence provided by the existing measures. Target attractiveness is a measure of the asset or facility in the eves of an azeressor.

A combination of the impact of loss rating and the vulnerability rating can be used to evaluate the potential risk to the facility from a given threat. A risk matrix is used to conduct the risk analysis by combining the vulnerability to threat with the impact of loss for the facility.

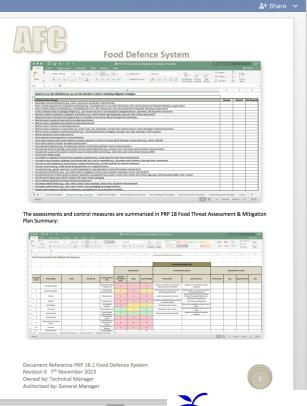
	Vulnerability to Threat				
Impact of Loss	High	Medium	Low		
Severe					
Noticeable					
Minor					
High risk - actions are implemented immediately.					
Medium risk	Medium risk - actions should be planned in the near future.				
Low risk - acti	Low risk - actions will enhance security but are lower priority.				

Based on the findings from the risk analysis, the Crisis Management Team identify and implement actions in a documented Food Defence Plan that will lower the various levels of risk.

See PRP 18 Food Defence Mitigation Strategies Checklists for options on strategies:

Document Reference PRP 18.1 Food Defence System Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





FOOD SAFETY FRIDAYS

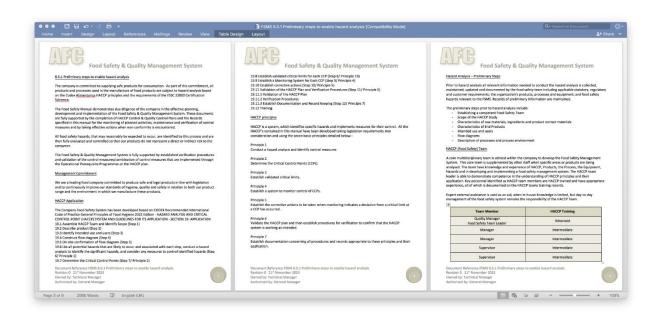
# ISO 22000 Requirement for Prerequisite programmes

When selecting and/or establishing PRP(s), the food safety team will need to consider and utilize appropriate information such as statutory and regulatory requirements, customer requirements, recognized guidelines, Codex Alimentarius Commission (Codex) principles and codes of practices, national, international or sector standards.

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# 8.5.1 Preliminary steps to enable hazard analysis





FSMS 8.5.1 Preliminary steps to enable hazard analysis [Compatibility Mode]

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Food Safety & Quality Management System

Home Insert Design Layout References Mailings Review View Table Design

8.5.1 Preliminary steps to enable hazard analysis

The company is committed to supplying safe products for consumption. As part of this commitment, all products and processes used in the manufacture of food products are subject to hazard analysis based on the Codex Alimentarius HACCP principles and the requirements of the FSSC 22000 Certification

The Food Safety Manual demonstrates due diligence of the company in the effective planning, development and implementation of the Food Safety & Quality Management System. These documents are fully supported by the completion of HACCP Control & Quality Control Plans and the Records specified in this manual for the monitoring of planned activities, maintenance and verification of control measures and by taking effective actions when non-conformity is encountered.

All food safety hazards, that may reasonably be expected to occur, are identified by this process and are then fully evaluated and controlled so that our products do not represent a direct or indirect risk to the

The Food Safety & Quality Management System is fully supported by established verification procedures and validation of the control measures/combination of control measures that are implemented through the Operational Prerequisite Programmes or the HACCP plan.

# Management Commitment

We are a leading food company committed to produce safe and legal products in line with legislation and to continuously improve our standards of hygiene, quality and safety in relation to both our product range and the environment in which we manufacture these products.

# **HACCP Application**

The Company Food Safety System has been developed based on CODEX Recommended International Code of Practice General Principles of Food Hygiene 2022 Edition - HAZARD ANALYSIS AND CRITICAL CONTROL POINT (HACCP) SYSTEM AND GUIDELINES FOR ITS APPLICATION - SECTION 19: APPLICATION

- 19.1 Assemble HACCP Team and Identify Scope (Step 1)
- 19.2 Describe product (Step 2)
- 19.3 Identify intended use and users (Step 3)
- 19.4 Construct flow diagram (Step 4)
- 19.5 On-site confirmation of flow diagram (Step 5)

19.6 List all potential hazards that are likely to occur and associated with each step, conduct a hazard analysis to identify the significant hazards, and consider any measures to control identified hazards (Step 6/ Principle 1)

19.7 Determine the Critical Control Points (Step 7/ Principle 2)

Document Reference FSMS 8.5.1 Preliminary steps to enable hazard analysis Revision 0 21st November 2023

Owned by: Technical Manager

Authorised by: General Manager



# Food Safety & Quality Management System

19.8 Establish validated critical limits for each CCP (Step 8/ Principle 19)

19.9 Establish a Monitoring System for Each CCP (Step 9/ Principle 4)

19.10 Establish corrective actions (Step 10/ Principle 5)

19.11 Validation of the HACCP Plan and Verification Procedures (Step 11/ Principle 6)

19.11.1 Validation of the HACCP Plan

19 11 2 Verification Procedures

19.11.3 Establish Documentation and Record Keeping (Step 12/ Principle 7)

19.12 Training

# **HACCP** principles

HACCP is a system, which identifies specific hazards and implements measures for their control. All the HACCP's contained in this manual have been developed taking legislation requirements into consideration and using the seven basic principles detailed below: -

Conduct a hazard analysis and identify control measures

Determine the Critical Control Points (CCPs).

### Principle 3 Establish validated critical limits.

Establish a system to monitor control of CCPs.

Establish the corrective actions to be taken when monitoring indicates a deviation from a critical limit at a CCP has occurred.

Validate the HACCP plan and then establish procedures for verification to confirm that the HACCP system is working as intended.

### Principle 7

Establish documentation concerning all procedures and records appropriate to these principles and their application.

Document Reference FSMS 8.5.1 Preliminary steps to enable hazard analysis Revision 0 21st November 2023

Owned by: Technical Manager

Authorised by: General Manager



# Food Safety & Quality Management System

### Hazard Analysis - Preliminary Steps

Prior to hazard analysis all relevant information needed to conduct the hazard analysis is collected, maintained, updated and documented by the food safety team including applicable statutory, regulatory and customer requirements; the organization's products, processes and equipment; and food safety hazards relevant to the FSMS. Records of preliminary information are maintained.

The preliminary steps prior to hazard analysis include:

- Establishing a competent Food Safety Team
- Scope of the HACCP Study
- Characteristics of raw materials, ingredients and product contact materials - Characteristics of End Products
- Intended use and users
- Flow diagrams
- Description of processes and process environment

# HACCP (Food Safety) Team

A core multidisciplinary team is utilised within the company to develop the Food Safety Management System. This core team is supplemented by other staff when specific areas or products are being analysed. The team have knowledge and experience of HACCP, Products, the Process, the Equipment, Hazards and in developing and implementing a food safety management system. The HACCP team leader is able to demonstrate competence in the understanding of HACCP principles and their application. Key personnel identified as HACCP team members are HACCP trained and have appropriate experience, all of which is documented on the HACCP teams training records.

Expert external assistance is used as an aid, when in-house knowledge is limited, but day-to-day management of the food safety system remains the responsibility of the HACCP Team.

Team Member	HACCP Training	
Quality Manager Food Safety Team Leader	Advanced	
Manager	Intermediate	
Manager	Intermediate	
Supervisor	Intermediate	
Supervisor	Intermediate	

Document Reference FSMS 8.5.1 Preliminary steps to enable hazard analysis Revision 0 21st November 2023

Owned by: Technical Manager

Authorised by: General Manager









8.5.1.2 Characteristics of raw materials, ingredients and product contact materials

The organization shall ensure that all applicable statutory and regulatory food safety requirements are identified for all raw materials, ingredients and product contact materials.

The organization shall maintain <u>documented</u> <u>information</u> concerning all raw materials, ingredients and product contact materials ...



# **Section 8 Operation 8.5.1.2**

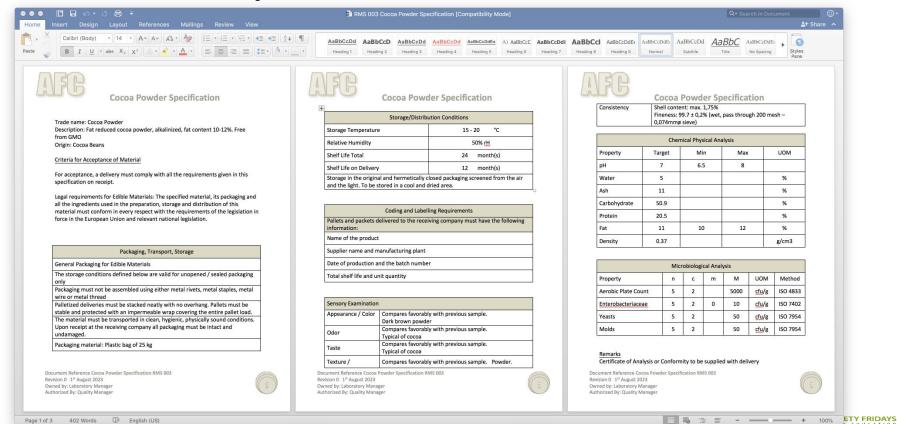
The organization shall maintain <u>documented information</u> concerning all raw materials, ingredients and product contact materials to the extent needed to conduct the hazard analysis (see 8.5.2), including the following, as appropriate:

- a) biological, chemical and physical characteristics;
- b) composition of formulated ingredients, including additives and processing aids;
- c) source (e.g. animal, mineral or vegetable);
- d) place of origin (provenance);
- e) method of production;
- f) method of packaging and delivery;
- g) storage conditions and shelf life;
- h) preparation and/or handling before use or processing;
- i) acceptance criteria related to food safety or specifications of purchased materials and ingredients appropriate to their intended use.





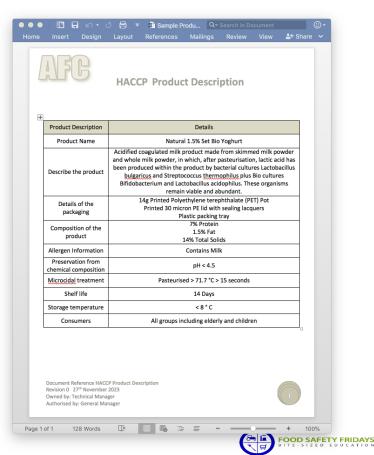
# 8.5.1.2 Characteristics of raw materials, ingredients and product contact materials



# 8.5.1.3 Characteristics of end products

The organization shall ensure that all applicable statutory and regulatory food safety requirements are identified for all the end products intended to be produced.

The organization shall maintain <u>documented</u> <u>information</u> concerning the characteristics of end products to the extent needed to conduct the hazard analysis (see 8.5.2)



# 8.5.1.3 Characteristics of end products

The organization shall maintain <u>documented information</u> concerning the characteristics of end products to the extent needed to conduct the hazard analysis (see 8.5.2), including information on the following, as appropriate:

- a) product name or similar identification;
- b) composition;
- c) biological, chemical and physical characteristics relevant for food safety;
- d) intended shelf life and storage conditions;
- e) packaging;
- f) labelling relating to food safety and/or instructions for handling, preparation and intended use;
- g) method(s) of distribution and delivery.





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FPSPEC 002 3.5% UHT Milk Specification [Compatibility Mode]





# 3.5% UHT Milk Specification

Product Description			
3.5% UHT Whole Milk Homogenised and Ultra Heat Treated and Aseptically packed			
Organoleptic			
Appearance Homogenous white creamy colour, smooth no separation			
Aroma Milk/cream no cooked or off aromas			
Flavour	Whole milk with a smooth creamy taste		

Ingredients		
Water, Full Cream Milk Powder, Skimmed Milk Powder, Anhydrous Milk Fat		
Allergens		
Milk		

Processing, Manufacturing + Packing Parameters				
1. Homogenise:	200 Bar			
2. UHT Tetra Flex	135 °C for 4 seconds			
Storage in Aseptic Tank     (Maximum Storage 48 hours)	15 - 30 ° C			
4. Filling TBA	Butterfat = 3.5 – 3.7%			
(Maximum 24 Hours Intermediate clean every 12 hours)	Total Solids = Minimum 12%			
5. Packing/Storage	Ambient			

Content Control					
Declared Volume (ml)	Target Average Volume (ml)	Lower volume limit (ml)	Upper volume limit (ml)	Weight of Packaging (g)	Frequency
200	200	198	202	8	Start and end
1000	1000	990	1010	29	of run plus half hourly

Document Reference UHT 3.5% Milk Specification FPSPEC 002 Revision 0 1st August 2023

Owned by: Development Manager Authorized By: Quality Manager





# 3.5% UHT Milk Specification

Coding					
Date of Production	DOP	Date of Expiry	DOP + 12 Months		
200ml Barcode					
1L Barcode					

Item	Supplier
Tetra Paper 3.5% 1000ml	Tetra Pak
Carton Trays 3.5% 1000ml	
Long Inside Strip LS	Tetra Pak
Caps Slim 1Ltr - White	Tetra Pak
Cap Glue	
Pull Tab IS Strip	Tetra Pak
Patch A-Tab-strip Alu	Tetra Pak
Pallet Label	Printed on Site

Item	Supplier	
Tetra Paper 3.5% 200mL	Tetra Pak	
Carton Trays 3.5% 200mL		
STRAW RED A877514504	Tetra Pak	
Long Inside Strip LS A-8856-951-01 - MPM Jumbo	Tetra Pak	
Straw Glue 250.3		
Pallet Label	Printed on Site	

Document Reference UHT 3.5% Milk Specification FPSPEC 002 Revision 0 1st August 2023 Owned by: Development Manager Authorized By: Quality Manager



# 3.5% UHT Milk Specification

Pallet Configuration				
200ml	Packed 27 Per Case			
1L	Packed 12 Per Case			
200ml Case packing format	5265 Packages/ pallet 195 Units / pallet 13 Layers / pallet 15 Units / layer			
1L Case packing format	720 Packages/ pallet 60 Units / pallet 5 Layers / pallet 12 Units / layer			
Finished pallet height (metres): (MAX)	1.4			

Product	pH	BF	TS	Frequency
Finished Product	6.6 - 6.8	3.5 – 3.7%	5 – 3.7% Minimum 12%	S/E Every 30
for Release				minutes

QA Positive Release Parameters DOP + 10					
Product	pН	TPC	Spores	Frequency	
Finished Product for Release to Market	6.5 – 6.8	< 10/g	< 10/g	As per Testing Schedule	

Finished Product Microbiological Standards					
	pH	TPC	Spores	Salmonella	Listeria
Target	6.5 - 6.8	< 10/g	< 10/g	Absent in 25g	Absent in 25g
Frequency	Each batch as per testing schedule			Product tested monthly on a rotating schedule	

Document Reference UHT 3.5% Milk Specification FPSPEC 002 Revision 0 1st August 2023 Owned by: Development Manager Authorized By: Quality Manager





# 8.5.1.4 Intended use

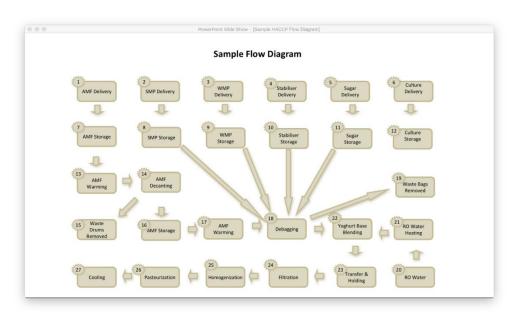
The intended use, including reasonably expected handling of the end product and any unintended use but reasonably expected mishandling and misuse of the end product, shall be considered and shall be maintained as <u>documented information</u> to the extent needed to conduct the hazard analysis (see 8.5.2).

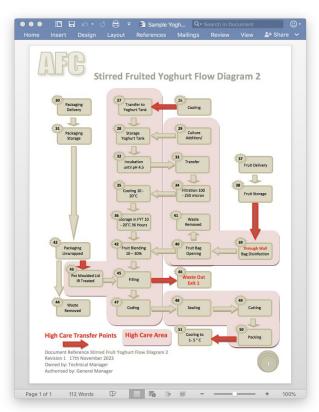
Where appropriate, groups of consumers/users shall be identified for each product.

Groups of consumers/users known to be especially vulnerable to specific food safety hazards shall be identified.



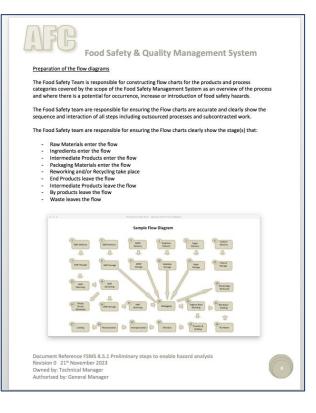
- 8.5.1.5 Flow diagrams and description of processes
- 8.5.1.5.1 Preparation of the flow diagrams
- **8.5.1.5.2** On-site confirmation of flow diagrams







- 8.5.1.5.3 Description of processes and process environment The food safety team shall describe, to the extent needed to conduct the hazard analysis:
- a) the layout of premises, including food and non-food handling areas;
- b) processing equipment and contact materials, processing aids and flow of materials;
- c) existing PRPs, process parameters, control measures (if any)
- d) external requirements
- The variations resulting from expected seasonal changes or shift patterns shall be included as appropriate.





**Section 8 Operation includes requirements for:** 

8.5.2 Hazard analysis

8.5.2.1 General

8.5.2.2 Hazard identification and determination of acceptable levels

8.5.2.3 Hazard assessment



Food Safety & Quality Management System

### 8.5.2 Hazard Analysis

### Hazard Identification

The Food Safety Team conducts a hazard analysis for food safety hazards that are reasonably likely to occur for each product and process category. A hazard analysis is conducted every time there are

The Food Safety Team record the food safety hazards that are reasonably likely to occur for each product and process category in each process facility as identified by the information gathered in the

- Scope of the HACCP Study
- Characteristics of raw materials, ingredients and product contact materials
- Characteristics of End Products
- Intended use and Users
- Description of processes and process environment
- Control Measures

### In addition, Food Safety Hazards are identified and recorded based on:

- Experience (Food Safety Team knowledge)
- External and internal Information such as epidemiological studies, scientific and other historical
- information relating to the product food safety
- Information from the Food Chain on Food Safety Hazards of relevance for intermediate products end products and the food at the time of consumption
- Customer, regulatory and statutory requirements
- Customer complaints
- Previous internal non-conformances are used to help assess the risk.

### The Food Safety Team:

- Identify hazards taking into account the steps preceding and following the specified operation, process equipment, process services and surroundings, persons, all steps in the flow diagram and preceding and following links in the food chain
- Consider hazards in sufficient detail to enable hazard assessment and the selection of
- appropriate control measures
- Identify step(s) (e.g. receiving raw materials, processing, distribution and delivery) at which each food safety hazard can be present, be introduced, increase or persist.

Document Reference FSMS 8.5.2 Hazard Analysis

Revision 0 7th November 2023 Owned by: Technical Manager

Authorised by: General Manager





FSMS 8.5.2 Hazard Analysis [Compatibility Mode]

Food Safety & Quality Management System

# 8.5.2 Hazard Analysis

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### Hazard Identification

The Food Safety Team conducts a hazard analysis for food safety hazards that are reasonably likely to occur for each product and process category. A hazard analysis is conducted every time there are relevant changes.

The Food Safety Team record the food safety hazards that are reasonably likely to occur for each product and process category in each process facility as identified by the information gathered in the steps so far:

- Scope of the HACCP Study
- Characteristics of raw materials, ingredients and product contact materials
- Characteristics of End Products
- Intended use and Users
- Flow diagrams
- Description of processes and process environment
- Control Measure

In addition, Food Safety Hazards are identified and recorded based on:

- Experience (Food Safety Team knowledge)
- External and internal Information such as epidemiological studies, scientific and other historical information relating to the product food safety
- Information from the Food Chain on Food Safety Hazards of relevance for intermediate products, end products and the food at the time of consumption
- Customer, regulatory and statutory requirements
- Customer complaints
- Previous internal non-conformances are used to help assess the risk.

### The Food Safety Team:

- Identify hazards taking into account the steps preceding and following the specified operation, process equipment, process services and surroundings, persons, all steps in the flow diagram and preceding and following links in the food chain
- Consider hazards in sufficient detail to enable hazard assessment and the selection of appropriate control measures
- Identify step(s) (e.g. receiving raw materials, processing, distribution and delivery) at which each food safety hazard can be present, be introduced, increase or persist.

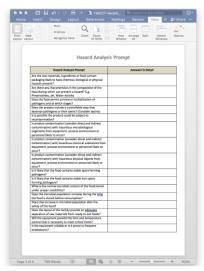
Document Reference FSMS 8.5.2 Hazard Analysis Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





Food Safety & Quality Management System

The food safety team can use the HACCP Hazard Analysis Prompt (In FSMS 8.5 Hazard Controls folder) to identify potential food safety hazards:



Document Reference FSMS 8.5.2 Hazard Analysis Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





Food Safety & Quality Management System

# Determination of Acceptable Levels

For each Food Safety Hazard Identified, the acceptable level of the hazard in the end product is determined, justified and recorded taking into account regulatory & statutory requirements, customer food safety requirements, historic information, scientific literature, professional experience and intended use by the customer. This hazard list is referred to as a preliminary hazard list and covers all hazards that could potentially occur in the product.

# Hazard Assessment

Each potential food safety hazard is risk assessed to determine whether its elimination or reduction to acceptable levels is required to produce a safe product and also any controls required to achieve the acceptable levels. For each step grades of impact (severity of adverse health effects in relation to the intended use) and probability (likelihood of a food safety hazard occurring in the end product prior to application of control measures) are allotted and the combined matrix used to judge the severity and priority for elimination or minimisation of the hazard. The team identify the hazards that need to be prevented, eliminated or reduced to acceptable levels. The HACCP team consider the probability of the hazard occurring, the severity of the hazard on the consumer, the vulnerability of the targeted consumer, the survival and multiplication of any biological hazards and any likely toxin production, the presence of chemicals or foreign bodies, contamination at any stage in the process and possible deliberate contamination or adulteration.

Taking this into account a rating is given for probability and severity and entered into the HACCP Calculator:

Step Number	Step Name	Hazards Identified			
1	Delivery of Ingredient A	Bone	1	3	3
1	Delivery of Ingredient A	Campylobacter spp.	2	3	6
1	Delivery of Ingredient A	Contamination with Bacteria from pests	3	3	9
1	Delivery of Ingredient A	Pesticides	3	1	3
1	Delivery of Ingredient A	Salmonella spp. (S. typhimurium, S. enteriditis)	3	3	9
1	Delivery of Ingredient A	Bacteria (spore-forming) General	2	2	4
1	Delivery of Ingredient A	Pest control chemicals	1	1	

Document Reference FSMS 8.5.2 Hazard Analysis Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





# **ISO 22000 HACCP Application – CODEX Reference**

# **CODEX General Principles of Food Hygiene** are listed in ISO 22000 Bibliography

ISO 22000:2018(E) **Bibliography** ISO 9000:2015, Quality management systems — Fundamentals and vocabulary ISO 9001:2015, Quality management systems - Requirements ISO 19011, Guidelines for auditing management systems ISO/TS 22002 (all parts), Prerequisite programmes on food safety ISO/TS 22003, Food safety management systems — Requirements for bodies providing audit and certification of food safety management systems ISO 22005, Traceability in the feed and food chain — General principles and basic requirements for system design and implementation ISO Guide 73:2009, Risk management - Vocabulary CAC/GL 60-2006, Principles for Traceability / Product Tracing as a Tool Within a Food Inspection and Certification System CAC/GL 81-2013, Guidance for governments on prioritizing hazards in feed CAC/RCP 1-1969, General Principles of Food Hygiene Joint FAO/WHO Food Standards Programme, Codex Alimentarius Commission: Procedural Manual. Twenty-fifth edition, 2016 Codex Alimentarius, Available from: http://www.fao.org/fao-who-codexalimentarius/en/

# Annex A (informative)

Cross references between the CODEX HACCP and this document

Table A.1 — Cross references between the CODEX HACCP principles and application steps and clauses of this document

CODEX HACCP Principles	CODEX HACCP application stepsa		This document		
	Assemble HACCP team	Step 1	5.3	Food safety team	
	Describe product	Step 2	8.5.1.2	Characteristics of raw materials ingredients and product-contact materials	
			8.5.1.3	Characteristics of end products	
	Identify intended use	Step 3	8.5.1.4	Intended use	
	Construct flow diagram	Step 4	8.5.1.5	Flow diagrams and descriptions	
	On-site confirmation of flow diagram	Step 5		of processes	
Principle 1	List all potential hazards	Step 6	8.5.2	Hazard analysis	
Conduct a hazard analysis	Conduct a hazard analysis Consider control measures		8.5.3	Validation of control measure(s) and combinations of control measure(s)	
Principle 2	Determine CCPs	Step 7	8.5.4	Hazard control plan	
Determine the critical control points (CCPs)					
Principle 3	Establish critical limits	Step 8	8.5.4	Hazard control plan	
Establish critical limit(s)	for each CCP				
Principle 4	Establish a monitoring	Step 9 8.5.4.3	8.5.4.3		
Establish a system to monitor control of the CCP	system for each CCP			for OPRPs	
Principle 5	Establish corrective	Step 10	8.5.4	Hazard control plan	
Establish the corrective	actions		8.9.2	Corrections	
action to be taken when monitoring indicates that a particular CCP is not under control			8.9.3	Corrective actions	
Principle 6	Establish verification procedures	Step 11	8.7	Control of monitoring and measuring	
Establish procedures for verification to confirm that			8.8	Verification related to PRPs and	
the HACCP system is				the hazard control plan	
working effectively			9.2	Internal audit	
Principle 7	Establish documentation	Step 12	7.5	Documented information	
Establish documentation concerning all procedures and records appropriate to these principles and their application	and record keeping				



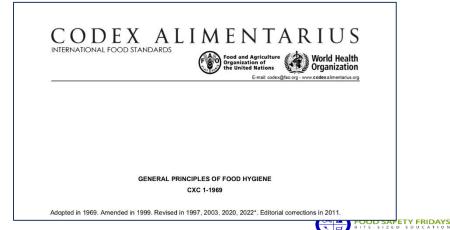
# **HACCP Principles**

HACCP stands for Hazard Analysis and Critical Control Point. It was developed by the Codex Alimentarius Commission. HACCP is a system used to identify, prevent, and control food safety hazards.

The HACCP system and guidelines for its application are defined by the Codex Alimentarius Commission in the CODEX Recommended International Code of Practice General Principles of Food Hygiene CXC 1-1969 last

amended in 2022.

CXC 1-1969 HAZARD ANALYSIS AND CRITICAL CONTROL POINT (HACCP) SYSTEM AND GUIDELINES FOR ITS APPLICATION 16. INTRODUCTION TO HACCP In the second part of this document, section 17 sets out the seven principles of the HACCP system, Section 18 provides general guidance for the application of the HACCP system and section 19 describes its application in 12 successive steps (Annex II, Figure 1), while recognizing that the details of application may vary and a more flexible approach to application may be appropriate depending on the circumstances and the capabilities of the food business operation. The HACCP system, which is science-based and systematic, identifies specific hazards and measures for their control to ensure the safety of food. HACCP is a tool to assess hazards and establish control systems that focus on control measures for significant hazards along the food chain, rather than relying mainly on end-product testing. Development of a HACCP system may identify the need for changes in processing parameters, in processing steps, in manufacturing technology, in end product characteristics, in method of distribution, in the intended use or in the GHPs applied. Any HACCP system should be capable of accommodating change, such as advances in equipment design, processing procedures or technological developments.



# **HACCP Application – CODEX Section 19**

Refer to CODEX
Recommended International
Code of Practice General
Principles of Food Hygiene
Section 19 for more
information

	CODEX GENERAL PRINCIPLES OF FOOD HYGIENE CXC 1-1969
	Adopted in 1969. Amended in 1999. Revised in 1997, 2003, 2020, 2022
HAZAR	D ANALYSIS AND CRITICAL CONTROL POINT (HACCP) SYSTEM AND GUIDELINES FOR ITS  APPLICATION
	16. INTRODUCTION
	17. PRINCIPLES OF THE HACCP SYSTEM
PRINCIPLE 1	Conduct a hazard analysis and identify control measures.
PRINCIPLE 2	Determine the Critical Control Points (CCPs).
PRINCIPLE 3	Establish validated critical limits.
PRINCIPLE 4	Establish a system to monitor control of CCPs.
PRINCIPLE 5	Establish the corrective actions to be taken when monitoring indicates a deviation from a
critical limit	at a CCP has occurred.
PRINCIPLE 6	Validate the HACCP plan and then establish procedures for verification to confirm that the
HACCP syst	em is working as intended.
PRINCIPLE 7	Establish documentation concerning all procedures and records appropriate to these
principles a	nd their application.
	18. GENERAL GUIDELINES FOR THE APPLICATION OF THE HACCP SYSTEM
18.1 Introdu	uction
18.2 Flexibi	ity for small and/or less developed food businesses
	19. APPLICATION
19.1 Assem	ble HACCP Team and Identify Scope (Step 1)
	pe product (Step 2)
	y intended use and users (Step 3)
	uct flow diagram (Step 4)
	confirmation of flow diagram (Step 5)
	potential hazards that are likely to occur and associated with each step, conduct a hazard
	dentify the significant hazards, and consider any measures to control identified hazards (Ste
6/ Principle	1) *
19.7 Deterr	nine the Critical Control Points (Step 7/ Principle 2)
19.8 Establi	sh validated critical limits for each CCP (Step 8/ Principle 3)
19.9 Establi	sh a Monitoring System for Each CCP (Step 9/ Principle 4)
19.10 Estab	lish corrective actions (Step 10/ Principle 5)
19.11 Valida	ation of the HACCP Plan and Verification Procedures (Step 11/ Principle 6)
19.11.1 Vali	dation of the HACCP Plan
19.11.2 Ver	ification Procedures
19.11.3 Esta	ablish Documentation and Record Keeping (Step 12/ Principle 7)
19.12 Train	ng
Annex I: HA	CCP measures, logic sequence and example
Table 1: Cor	nparison of control measures with examples.
Annex II, Fig	ture 1 – Logic sequence for application of HACCP
Annex III, Ta	able 1 – Example of hazard analysis worksheet
	Fools to determine the critical control points (CCPs)
Figure 1: Exidentified	ample of a CCP decision tree – apply to each step where a specified significant hazard is
Table 1: Exa	imple of a CCP determination worksheet (apply to each step where a specified significant entified)
	ample of a HACCP worksheet

\* FBOs may take advantage of risk assessments and risk management matrices established by a competent authority or by international expert groups such as JEMRA.

CXC 1-1969

### 19. APPLICATION

### 19.1 Assemble HACCP team and identify scope (Step 1)

The FBO should ensure that the appropriate knowledge and expertise are available for the development of an effective HACCP system. This may be achieved by assembling a multidisciplinary learn responsible for different activities within the operation, e.g. production, maintenance, quality control, cleaning, and disinfection. The HACCP beam is responsible for developing the HACCP plan.

Where relevant expertise is not available in house, expert advice should be obtained from other sources, such as trade and industry associations, independent experts, competent authorities, HACCP literature and HACCP guides (including sector-specific HACCP guides). It may be possible that a well-trained individual with access to such guidance is able to implement a HACCP system in house. A generic HACCP plan developed externally may be used by FBOs where appropriate but should be abloed to the food operation.

The HACCP team should identify the scope of the HACCP system and applicable prerequisite programmes. The scope should describe which food products and processes are covered.

### 19.2 Describe product (Step 2)

A full description of the product should be developed, including relevant safely information such as composition (e.e. ingredients), physicalchemical characteristics (e.e. a.e., pl. preservatives, allergens), processing methods/technologies (i.e. heat-teatment, freezing, drying, brining, smoking, etc.), packaging, durability/sheff life, storage conditions and method of distribution. Within businesses with multiple products, it may be efficient to group products with smillar characteristics and processing steps for the purpose of development of the HACCP plan. Any initials relevant to the food product already established for bazards should be considered and any analysis of the purpose of the purpose of development of the HACCP plan. Any initials relevant to the food product already established for pazards should be considered and all and the product of the purpose of the purpose of the purpose of development of the three plants are producted to the purpose of development of the purpose of the purp

### 19.3 Identify intended use and users (Step 3)

Describe the use intended by the FBO and the expected uses of the product by the next FBO in the food chain or the consumer. The description may be influenced by external information, e.g. from the competent authority or other sources on ways in which consumers are known to use the product other than those intended by the FBO. In specific cases (e.g. hopstates), whereastic proportions may have to be considered. Where the product of the consumers of the product of the product of the product of the considered of the control of the considered o

# 19.4 Construct flow diagram (Step 4)

A flow diagram that covers all steps in the production of a specific product, including any applicable revork, should be construited. The same flow diagram may be used for a number of products that are manufactured using similar processing steps. The flow diagram should indicate all inputs, including those of ingredients and food contact materials, water, and are, if relevant. Complex manufacturing operators can be between down into snaller, more manageable modules and multiple flow diagrams that link together can be developed. The flow diagrams should be used when conducting the hazard analysis as a basis for evaluating the possible diagrams should be used when conducting the possible as a basis for evaluating the possible conducting detailed to the obtaint needed to conduct the hazard analysis. Flow diagrams should, as appropriate, include but not be limited to the following:

- · the sequence and interaction of the steps in the operation;
- where raw materials, ingredients, processing aids, packaging materials, utilities and intermediate products enter the flow;
- · any outsourced processes:
- · where applicable reworking and recycling take place;
- · where end products, intermediate products, waste, and by-products are released or removed.

# 19.5 On-site confirmation of flow diagram (Step 5)

Steps should be taken to confirm the processing activities against the flow diagram during all stages and hours of operation and amend the flow diagram, where appropriate. The confirmation of the flow diagram should be performed by a person or persons with sufficient knowledge of the processing operation.



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# **HACCP Application vs. ISO 22000:2018 Relevant Clauses**

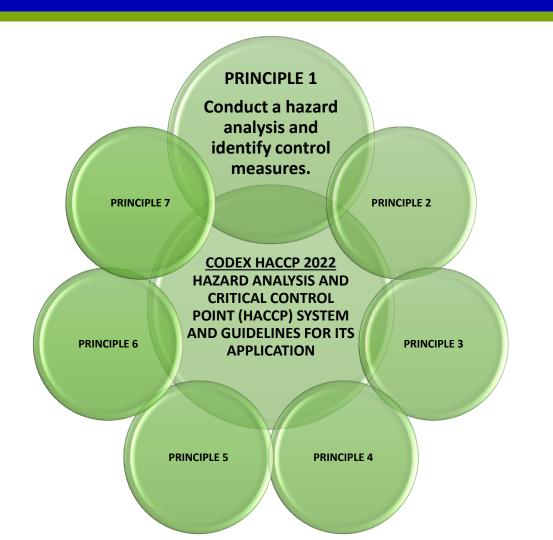
Step	CODEX HACCP Application 2022	CODEX Principles 2022	ISO 22000:2018 Relevant Clauses
Step 1	19.1 Assemble HACCP Team and Identify Scope (Step 1)		5.3 Food safety team
Step 2	19.2 Describe product (Step 2)		8.5.1.2 Characteristics of raw materials, ingredients and product-contact materials 8.5.1.3 Characteristics of end products
Step 3	19.3 Identify intended use and users (Step 3)		8.5.1.4 Intended use
Step 4	19.4 Construct flow diagram (Step 4)		8.5.1.5 Flow diagrams and descriptions of processes
Step 5	19.5 On-site confirmation of flow diagram (Step 5)		
Step 6	19.6 List all potential hazards that are likely to occur and associated with each step, conduct a hazard analysis to identify the significant hazards, and consider any measures to control identified hazards (Step 6/ Principle 1)	Principle 1 Conduct a hazard analysis and identify control measures	8.5.2 Hazard analysis 8.5.3 Validation of control measure(s) and combinations of control measure(s)
Step 7	19.7 Determine the Critical Control Points (Step 7/ Principle 2)	Principle 2 Determine the Critical Control Points (CCPs).	8.5.4 Hazard control plan
Step 8	19.8 Establish validated critical limits for each CCP (Step 8/ Principle 3)	Principle 3 Establish validated critical limits.	8.5.4 Hazard control plan 8.5.3 Validation of control measure(s) and combinations of control measure(s)
Step 9	19.9 Establish a Monitoring System for Each CCP (Step 9/ Principle 4)	Principle 4 Establish a system to monitor control of CCPs.	8.5.4.3 Monitoring systems at CCPs and for OPRPs
Step 10	19.10 Establish corrective actions (Step 10/ Principle 5)	Principle 5 Establish the corrective actions to be taken when monitoring indicates a deviation from a critical limit at a CCP has occurred.	8.5.4 Hazard control plan 8.9.2 Corrections 8.9.3 Corrective actions
Step 11	19.11 Validation of the HACCP Plan and Verification Procedures (Step 11/ Principle 6) 19.11.1 Validation of the HACCP Plan 19.11.2 Verification Procedures	Principle 6 Validate the HACCP plan and then establish procedures for verification to confirm that the HACCP system is working as intended.	8.5.3 Validation of control measure(s) and combinations of control measure(s) 8.7 Control of monitoring and measuring 8.8 Verification related to PRPs and the hazard control plan 9.2 Internal Audit
Step 12	19.12 Establish Documentation and Record Keeping (Step 12/ Principle 7)	Principle 7 Establish documentation concerning all procedures and records appropriate to these principles and their application.	7.5 Documented information

# 7 Principles of a HACCP System

The HACCP system, which is science-based and systematic, identifies specific hazards and measures for their control to ensure the safety of food. HACCP is a tool to assess hazards and establish control systems that focus on control measures for significant hazards along the food chain, rather than relying mainly on end-product testing.

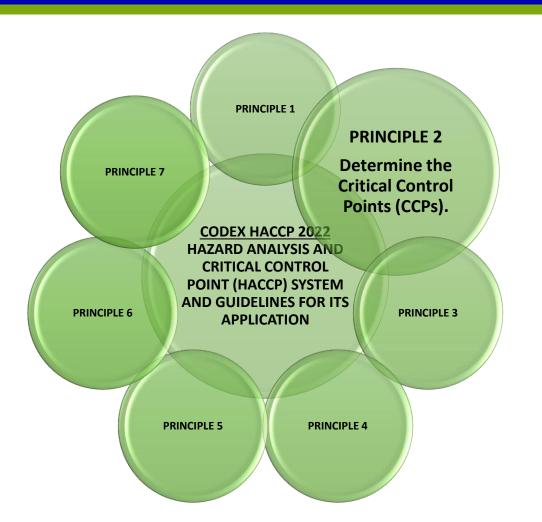
The HACCP system is designed, validated and implemented in accordance with the following seven principles which are shown in the next 7 slides.





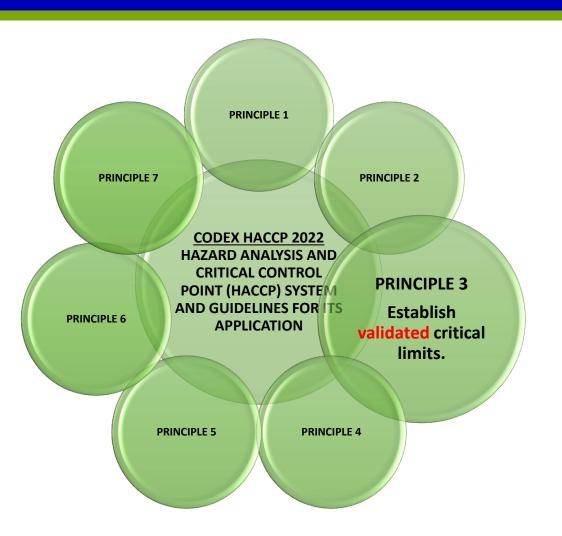
# PRINCIPLE 1 Conduct a hazard analysis and identify control measures.





# PRINCIPLE 2 Determine the Critical Control Points (CCPs).





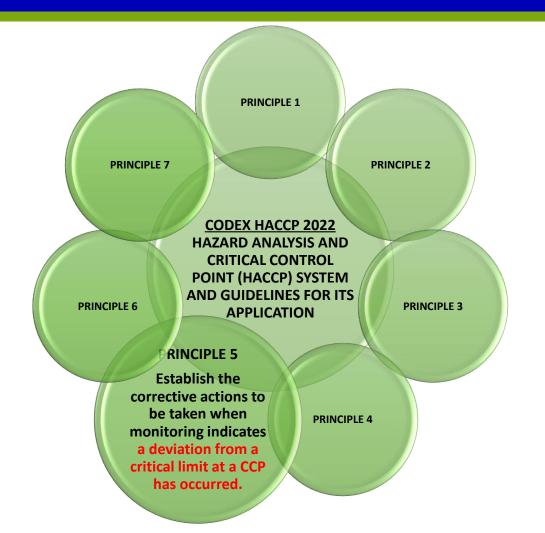
# PRINCIPLE 3 Establish validated critical limits.





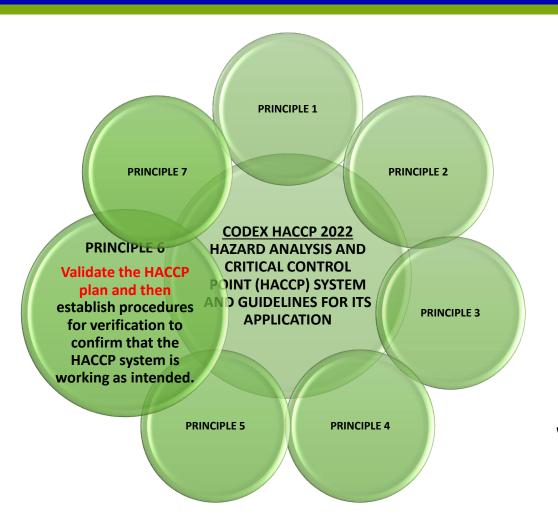
# PRINCIPLE 4 Establish a system to monitor control of CCPs.





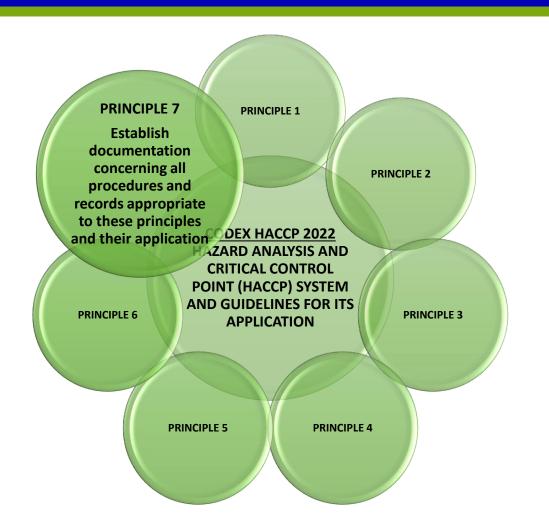
**PRINCIPLE 5 Establish** the corrective actions to be taken when monitoring indicates a deviation from a critical limit at a CCP has occurred.





**PRINCIPLE 6** Validate the HACCP plan and then establish procedures for verification to confirm that the **HACCP** system is working as intended.

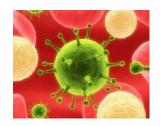




PRINCIPLE 7 **Establish** documentation concerning all procedures and records appropriate to these principles and their application



# ISO 22000 Implementation Hazard Analysis







#### Food Safety Hazards can be identified and recorded based on:

- ✓ Experience (Food Safety Team knowledge)
- ✓ External and Internal Information such as scientific information epidemiological studies and other historical information relating to the product food safety
- ✓ Information from the food chain on food safety hazards related to the safety of the end products, intermediate products and the food at the time of consumption
- ✓ Statutory, regulatory and customer requirements.
- ✓ Customer complaints
- Previous internal non conformances



# **HACCP – CODEX PRINCIPLE 1 Conduct a hazard analysis**

Biological hazards are living organisms that can make food unsafe to eat. Biological hazards may be bacterial, parasitical, or viral.

Chemical hazards may be the result of something naturally occurring in ingredients or food or accidentally added during the process. Harmful chemicals have been associated with both acute and chronic illness.

A Physical hazard is a physical component of a food that is unexpected and may cause illness or injury to the person consuming the food.

Food safety hazards also include Allergens and Radiological substances

RECOMMENDED INTERNATIONAL CODE OF PRACTICE GENERAL PRINCIPLES OF FOOD HYGIENE (CAC/RCP 1.1965)

#### 2. Describe product

A full description of the product should be drawn up, including relevant safety information such as: composition, physical/chemical structure (including A, pH, etc.), microcidal/static treatments (heat-treatment, freezing, brining, smoking, etc.), packaging, durability, storage conditions and method of distribution. Within businesses with multiple products, for example, catering operations, it may be effective to group products with similar characteristics or processing steps for the purpose of development

#### 3. Identify intended use

The intended use should be based on the expected uses of the product by the end user or consumer. In specific cases, vulnerable groups of the population, e.g. institutional feeding, may have to be considered.

#### 4. Construct flow diagram

The flow diagram should be constructed by the HACCP team (see also "Assemble HACCP team" above). The flow diagram should cover all steps in the operation for a specific product. The same flow diagram may be used for a number of products that are manufactured using similar processing steps. When applying HACCP to a given operation, consideration should be given to steps preceding and following the specified operation.

#### 5. On-site confirmation of flow diagram

Steps must be taken to confirm the processing operation against the flow diagram during all stages and hours of operation and amend the flow diagram where appropriate. The confirmation of the flow diagram should be performed by a person or persons with sufficient knowledge of the processing operation.

#### 6. List all potential hazards associated with each step, conduct a hazard analysis, and consider any measures to control identified hazards (see Principle 1)

The HACCP team (see "assemble HACCP team" above) should list all of the hazards that may be reasonably expected to occur at each step according to the scope from primary production, processing, manufacture and distribution until the point of consumption.

The HACCP team (see "assemble HACCP team") should next conduct a hazard analysis to identify for the HACCP plan which hazards are of such a nature that their elimination or reduction to acceptable levels is essential to the production of a safe food.

#### In conducting the hazard analysis, wherever possible, the following should be included:

- the likely occurrence of hazards and severity of their adverse health effects; the qualitative and/or quantitative evaluation of the presence of hazards:
- survival or multiplication of micro-organisms of concern;
- production or persistence in foods of toxins, chemicals or physical agents; and
- conditions leading to the above.



# HACCP PRINCIPLE 1 Conduct a Hazard Analysis

ISO 22000 Clause 8.5.2.2.2

The organization shall identify step(s) (e.g. receiving raw materials, processing, distribution and delivery) at which each food safety hazard can be present, be introduced, increase or persist.

When identifying hazards, the organization shall consider:

- a) the stages preceding and following in the food chain;
- b) all steps in the flow diagram;
- c) the process equipment, utilities/services, process environment and persons.



















# ISO 22000 Implementation Preliminary Hazard List

For each Food Safety Hazard Identified, the acceptable level of the hazard in the end product is determined, justified and recorded taking into account regulatory and statutory requirements, customer food safety requirements, historic information, scientific literature, professional experience, intended use of end products and other relevant information.

This hazard list is referred to as a <u>Preliminary Hazard List</u> and covers all hazards that could potentially occur in the product.



# ISO 22000 Implementation 8.5.2.3 Hazard assessment

Each potential food safety hazard is risk assessed to determine whether its elimination or reduction to acceptable levels is required to produce a safe product and also any controls required to achieve the acceptable levels.

For each step grades of impact (the severity of its adverse health effects in relation to the intended use) and probability (the likelihood of its occurrence in the end product <u>prior to application of control measures</u>) are allotted and the combined matrix used to judge the significance and priority for elimination or minimisation of the hazard.

		Likelihood			
		Not Likely	Possible	Highly Likely	
S e v e r i t y	Not Severe	1	2	3	
	Possible Illness	2	4	6	
	Severe Illness	3	6	9	



# ISO 22000 Implementation 8.5.2.3 Hazard assessment

3 x 3 Hazard Risk Assessment
Severity of adverse health effects x
Likelihood of a food safety hazard
occurring

		Likelihood			
		Not Likely	Possible	Highly Likely	
S e v e r i t y	Not Severe	1	2	3	
	Possible Illness	2	4	6	
	Severe Illness	3	6	9	



# **ISO 22000 Implementation Hazard Assessment**

The food safety team assess the food safety hazards

First, the Food Safety Team assess the likelihood of the hazard

occurring:

1 for Highly Unlikely

2 for Possible

3 for Likely

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Step Number	Step Name	Hazards Identified		erity	nificance
1	Delivery of Ingredient A	Bone	1	3	3
1	Delivery of Ingredient A	Campylobacter spp.	2	3	6
1	Delivery of Ingredient A	Contamination with Bacteria from pests	3	3	9
1	Delivery of Ingredient A	Pesticides	3	1	3
1	Delivery of Ingredient A	Salmonella spp. (S. typhimurium, S. enteriditis)	3	3	9
1	Delivery of Ingredient A	Bacteria (spore-forming) General	2	2	4
1	Delivery of Ingredient A	Pest control chemicals	1	1	1

Then, the Food Safety Team assesses the severity of the hazard:

- 1 for Not Severe
- 2 for Could possibly cause illness
- 3 for Severe (Could be fatal)



# **ISO 22000 Implementation Hazard Assessment**

The Food Safety team factor in the vulnerability of the targeted consumer, the survival and multiplication of any biological hazards and any likely toxin production, the presence of chemicals or foreign bodies, contamination at any stage in the process and possible deliberate contamination or adulteration to the severity score to determine all the Significant Food Safety Hazards.

In this example the food safety hazards that score a 9 are regarded as significant and form the <u>Significant Food Safety Hazard List</u>.

			Probability	Severity	Signifi	
Step Number	Step Name	Hazards Identified	ability	erity	Significance	
1	Delivery of Ingredient A	Bone	1	3	3	
1	Delivery of Ingredient A	Campylobacter spp.	2	3	6	
1	Delivery of Ingredient A	Contamination with Bacteria from pests	3	3	9	)
1	Delivery of Ingredient A	Pesticides	3	1	9	
1	Delivery of Ingredient A	Salmonella spp. (S. typhimurium, S. enteriditis)	3	3	9	
1	Delivery of Ingredient A	Bacteria (spore-forming) General	2	2	4	
1	Delivery of Ingredient A	Pest control chemicals	1	1	1	



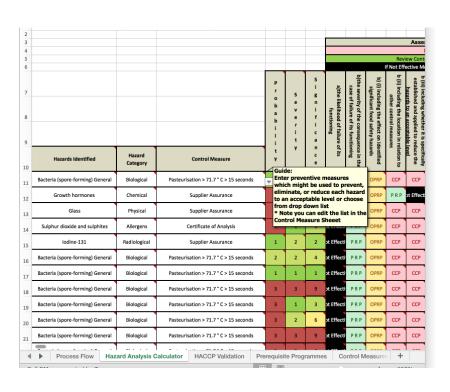
# 8.5.2.4 Selection and categorization of control measure(s)

The HACCP team must then consider what control measures, if any, exist which can be applied for each hazard. More than one control measure may be required to control a specific hazard(s) and more than one hazard may be controlled by a specified control measure.





For significant hazards decide what control measures are in place for the hazard.





# **8.5.2 Hazard Analysis**

When developing your hazard analysis it is important to keep supporting documentation such as regulations, scientific papers, study, or in-plant study, and historical information about the process for the decisions reached by the team.

When applying HACCP to a given operation, consideration should be given to steps preceding and following the specified operation.

When applying HACCP to a given operation, consideration should be given to steps preceding and following the specified operation.

This will help you with a due diligence defence in demonstrating how you have conducted your hazard analysis.

Remember to list the actual hazard or organism rather than just a general hazard whenever possible.





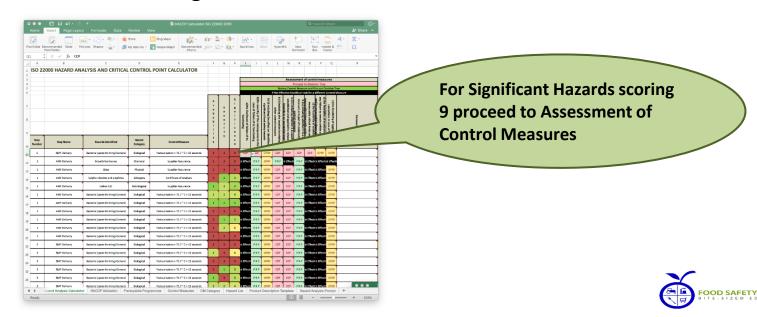




# **ISO 22000 Implementation Assessing Control Measures**

#### 8.5.2.4 Selection and categorization of control measure(s)

Using a systematic approach the Food Safety Team categorise the selected identified control measures to be managed as OPRPs or at CCPs.



- 8.5.2.4.1 For each of the control measures selected, there needs to be an assessment of:
- a) the likelihood of failure of its functioning
- b) the severity of the consequence in the case of failure of its functioning
- b) (1) including the effect on identified significant food safety hazards
- b) (2) including the location in relation to other control measures
- b) (3) including whether it is specifically established and applied to reduce the hazards to an acceptable level
- b) (4) including whether it is a single measure or is part of combination of control measures
- 8.5.2.4.2 For each of the control measures selected, there needs to be an assessment of:
- a) the <u>feasibility</u> of establishing measurable critical limits and/or measurable/observable action criteria
- b) the <u>feasibility</u> of <u>monitoring to detect any failure</u> to remain within critical limit and/or measurable/observable action criteria
- c) the feasibility of applying timely corrections in case of failure



Selection and categorization of control measures includes the following assessments in the Hazard Analysis Calculator worksheet:

The Control Measure Assessment section of the Hazard Analysis Calculator is <u>Colour Coded</u>.

Control Measures that are <u>Not</u> likely to be <u>Effective</u> are highlighted by a <u>Black Box</u>.

Control Measures that are likely to be <u>PRPs</u> are highlighted by a <u>Green Box</u>.

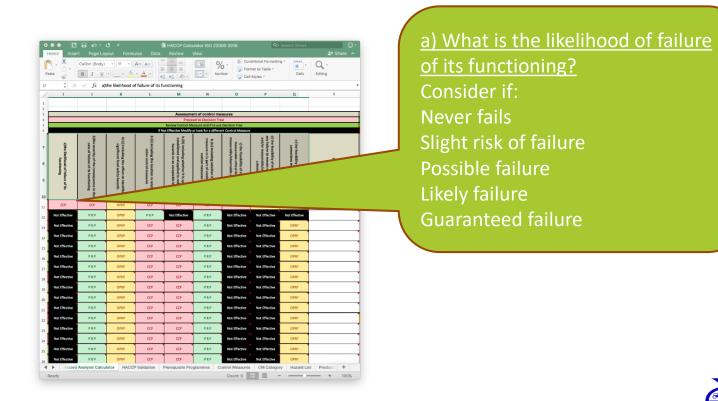
Control Measures that are likely to be <u>Operational PRPs</u> are highlighted by a <u>Orange Box</u>.

If all <u>Boxes are Red</u> after <u>Assessment</u> the team are to continue and use the <u>Decision Tree Section</u>.

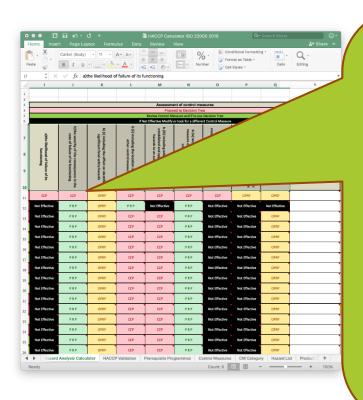
If a mixture of <u>Red and Orange Boxes</u> are highlighted then the <u>HACCP team consider if to proceed to the</u> Decision Tree Section or implement as an Operational PRP.

<u>Significant Hazards</u> which proceed to the <u>Decision Tree Section</u> are Categorised as <u>Critical Control Points</u> if they are highlighted in <u>Red</u> by the Hazard Analysis Calculator <u>otherwise</u> they are implemented as <u>Operational PRPs</u>.



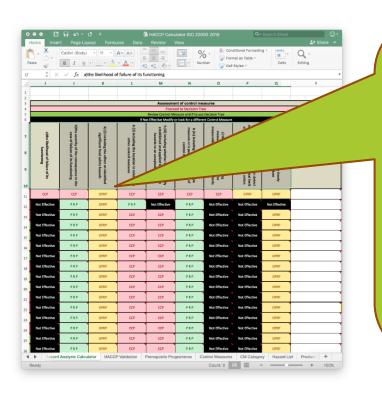






b) What is the severity of the consequences in the case of failure in its functioning? Consider would failure mean a: Very severe life-threatening event Severe injury or trauma requiring urgent hospital treatment Immobilising injury or trauma requiring hospital treatment Non-immobilising injury or trauma but requiring hospital treatment Minor non-immobilising injury or trauma not requiring hospital treatment

OOD SAFETY FRIDAYS



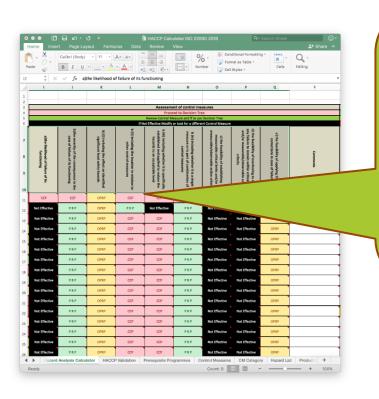
b) (1) What is the effect on identified significant food safety hazards?

Eliminates the hazard Significant reduction Some reduction Little effect

Based on the above select from the drop-down list if it is likely to be a CCP, OPRP, PRP or Not Effective.

If Not Effective Modify or look for a different Control Measure

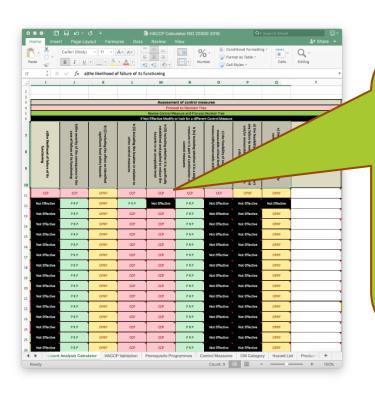




b) (2) What is the location in relation to other control measures?

At the end of the process
Near the end of the process
Mid process
Start of process

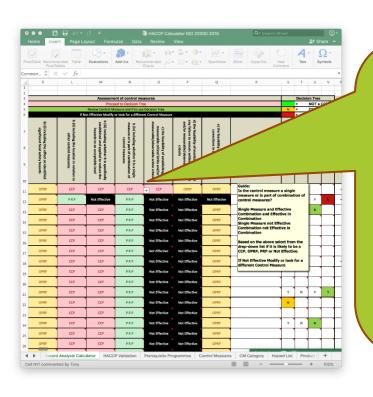




b) (3) Is the Control Measure specifically established to reduce the hazards to an acceptable level?

Specifically designed to Control the Hazard
Not specific but Effective
Not specific partly effective
Not specific not effective

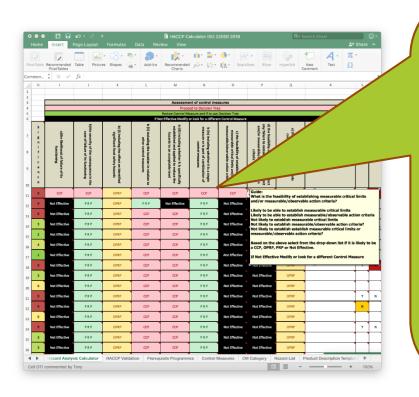




b) (4) Is the control measure a single measure or is part of combination of control measures?

Single Measure and Effective Combination and Effective in Combination
Single Measure not Effective Combination not Effective in Combination





Feasibility a) What is the feasibility of establishing measurable critical limits and/or measurable/observable action criteria?

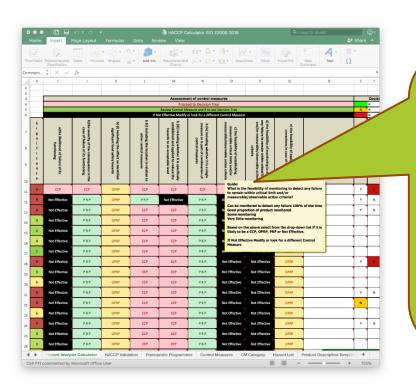
Likely to be able to establish measurable critical limits

Likely to be able to establish measurable/observable action criteria Not likely to establish measurable critical limits

Not likely to establish measurable/observable action criteria

Not likely to establish establish measurable critical limits or measurable/observable action criteria

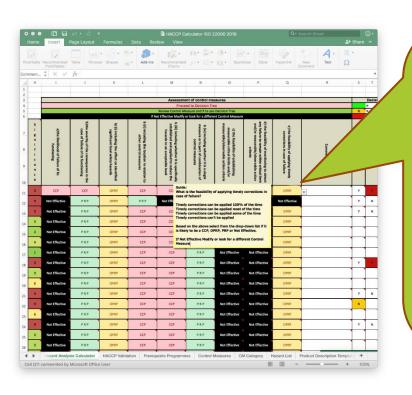




Feasibility b) What is the feasibility of monitoring to detect any failure to remain within critical limit and/or measurable/observable action criteria?

Can be monitored to detect any failure 100% of the time Good proportion of product monitored Some monitoring Very little monitoring

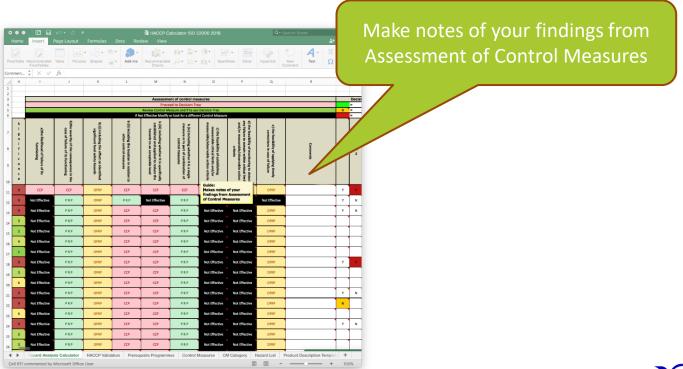




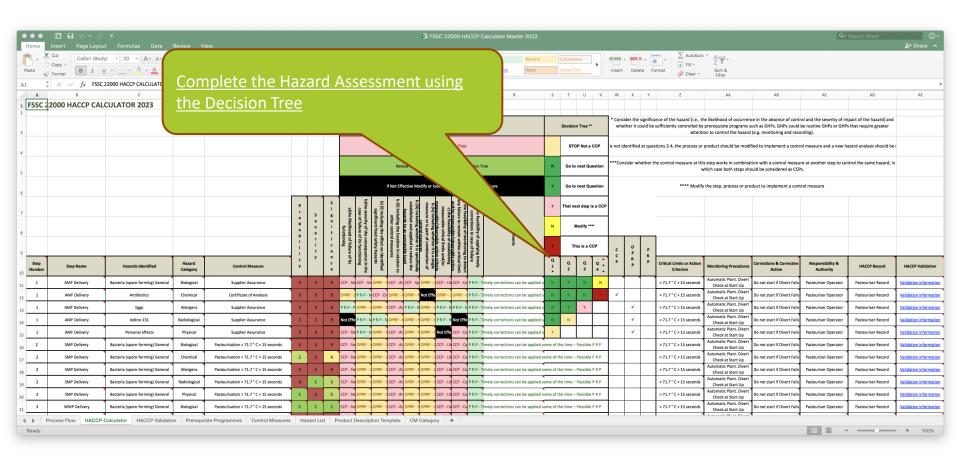
Feasibility c) What is the feasibility of applying timely corrections in case of failure?

Timely corrections can be applied 100% of the time
Timely corrections can be applied most of the time
Timely corrections can be applied some of the time
Timely corrections can't be applied



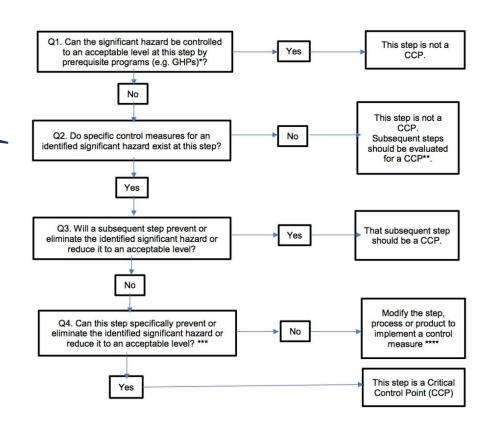






You are now ready to complete the Hazard Analysis Calculator Decision Tree Section

- \* Consider the significance of the hazard (i.e., the likelihood of occurrence in the absence of control and the severity of impact of the hazard) and whether it could be sufficiently controlled by prerequisite programs such as GHPs. GHPs could be routine GHPs or GHPs that require greater attention to control the hazard (e.g. monitoring and recording).
- \*\* If a CCP is not identified at questions 2-4, the process or product should be modified to implement a control measure and a new hazard analysis should be conducted.
- \*\*\*Consider whether the control measure at this step works in combination with a control measure at another step to control the same hazard, in which case both steps should be considered as CCPs.
- \*\*\*\*Return to the beginning of the decision tree after a new hazard analysis.





You are now ready to complete the Hazard Analysis Calculator Decision Tree Section

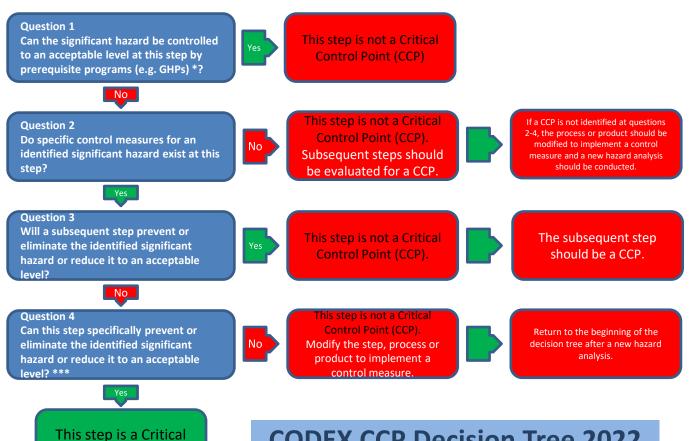
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- \*\*\*Consider whether the control measure at this step works in combination with a control measure at another step to control the same hazard, in which case both steps should be considered as CCPs.
- \*\*\*\*Return to the beginning of the decision tree after a new hazard analysis.

Q1. Can the significant hazard be This step is not a CCP controlled to an acceptable level at this step by prerequisite programmes (e.g. GHPs)?\* Q2. Do specific control measures for This step is not CCP. the identified significant hazard exist Subsequent steps should be at this step? evaluated for a CCP\*\* Q3. Will a subsequent step prevent That subsequent step or eliminate the identified significant should be a CCP hazard or reduce it to an acceptable level? Q4. Can this step specifically prevent Modify the step, process or product or eliminate the identified significant to implement a control measure\*\*\*\* hazard or reduce it to an acceptable level?\*\*\* This step is a CCP

- \* Consider the significance of the hazard (i.e. the likelihood of occurrence in the absence of control and the severity of impact of the hazard) and whether it could be sufficiently controlled by prerequisite programmes such as GHPs. GHPs could be routine GHPs or GHPs that require greater attention to control the hazard (e.g. monitoring and recording).
- If a CCP is not identified at questions 2-4, the process or product should be modified to implement a control measure and a new hazard analysis should be conducted.
- \*\*\* Consider whether the control measure at this step works in combination with a control measure at another step to control the same hazard, in which case both steps should be considered as CCPs.
- \*\*\*\* Return to the beginning of the decision tree after a new hazard analysis.

Document Reference FSSC 22000 HACCP Calculator Instructions Revision 2 2023 Written by: Tony-C

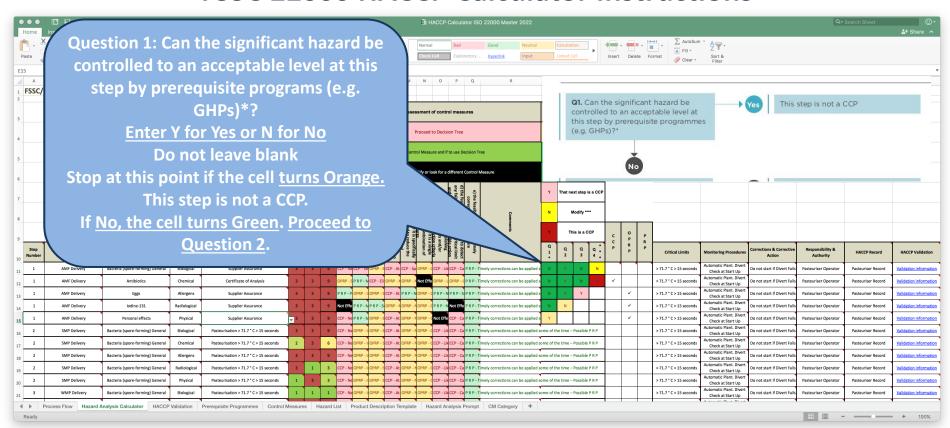




Control Point (CCP)

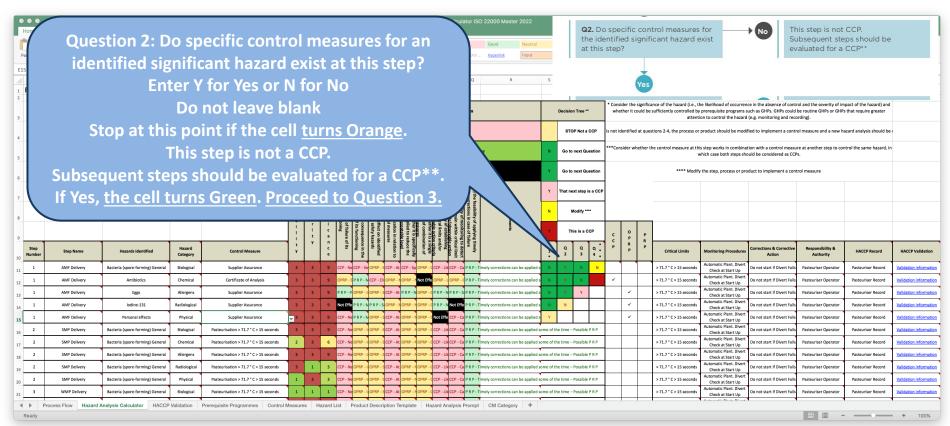
**CODEX CCP Decision Tree 2022** 





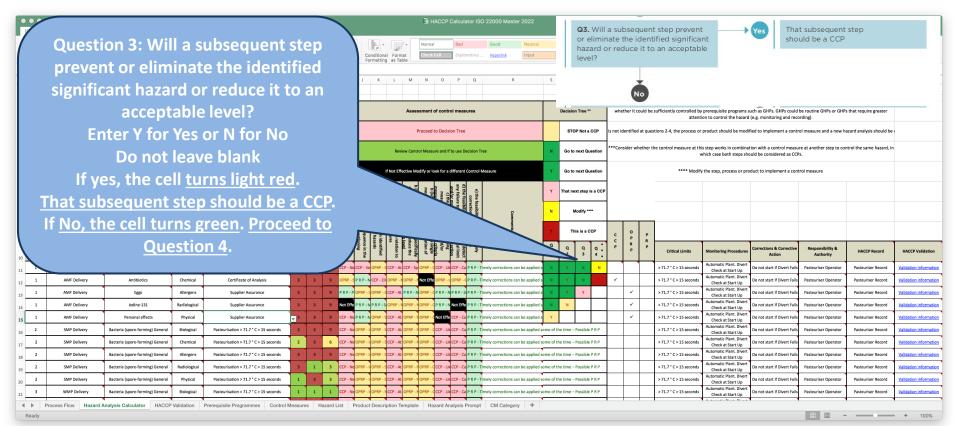
Document Reference FSSC 22000 HACCP Calculator Instructions Revision 2 2023 Written by: Tony-C





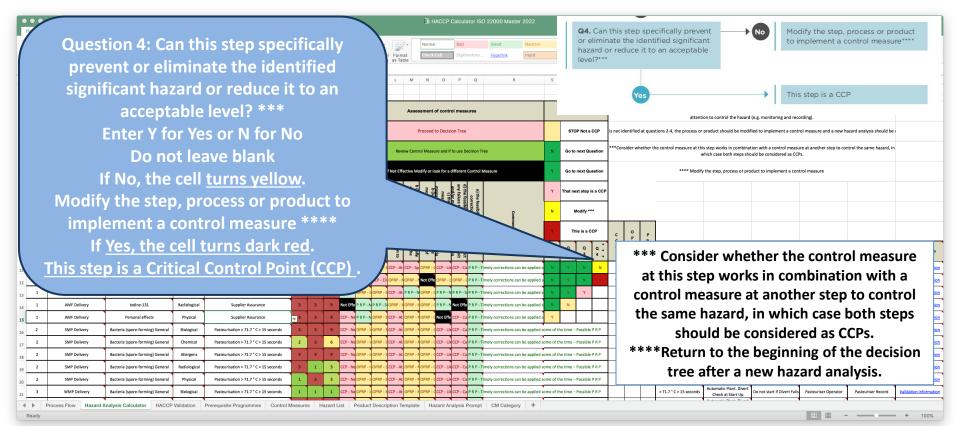
Document Reference FSSC 22000 HACCP Calculator Instructions Revision 2 2023 Written by: Tony-C









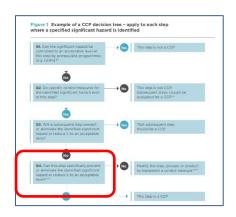


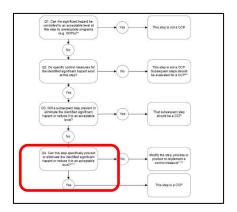
Document Reference FSSC 22000 HACCP Calculator Instructions Revision 2 2023 Written by: Tony-C



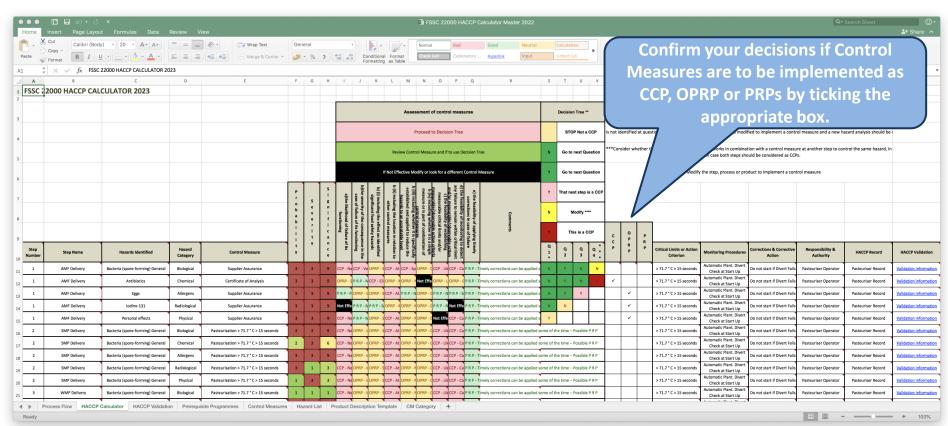
#### FSSC 22000 HACCP Calculator - HACCP Decision Tree

\*\*\* Consider whether the control measure at this step works in combination with a control measure at another step to control the same hazard, in which case both steps should be considered as CCPs.





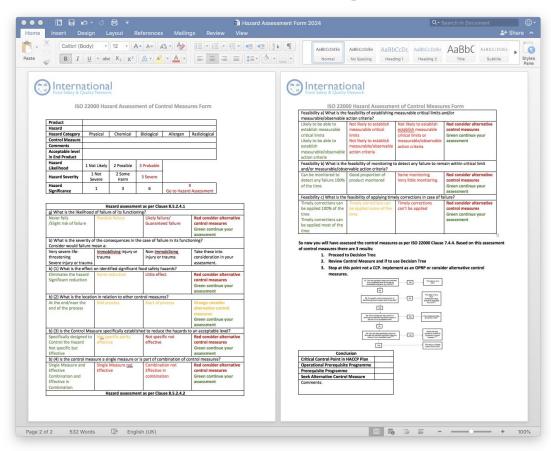




Document Reference FSSC 22000 HACCP Calculator Instructions Revision 2 2023 Written by: Tony-C



# Selection and Categorization of Control Measures



Confirm your decisions if Control Measures are to be implemented as CCP, OPRP or PRPs by ticking the appropriate box.



# **CODEX Table 1: Example of a CCP determination worksheet**

36

CXC 1-1969

Table 1: Example of a CCP determination worksheet (apply to each step where a specified significant hazard is identified)

Process step	Significant hazards	Q1. Can the significant hazard be controlled to an acceptable level at this step by prerequisite programs (e.g. GHPs)? <sup>a</sup>	Q2. Do specific control measures for the identified significant hazard exist at this step?	Q3. Will a subsequent step prevent or eliminate the identified significant hazard or reduce it to an acceptable level?	Q4. Can this step specifically prevent or eliminate the identified significant hazard or reduce it to an acceptable level?	CCP number
Identify process step	Describe hazard and cause	If yes, this step is not a CCP.  If no, proceed to Q2.	If yes, proceed to Q3.  If no, this step is not a CCP. Subsequent steps should be evaluated for a CCP.	If yes, that subsequent step should be a CCP.  If no, proceed to Q4.	If yes, this step is a CCP.  If no, modify the step, process or product to implement a control measure.d	Number the CCP and include in HACCP worksheet.

Confirm your decisions if Control Measures are to be implemented as CCP, OPRP or PRPs by ticking the appropriate box.



<sup>&</sup>lt;sup>a</sup> Consider the significance of the hazard (i.e. the likelihood of occurrence in the absence of control and the severity of impact of the hazard) and whether it could be sufficiently controlled by prerequisite programs such as GHPs. GHPs could be routine GHPs or GHPs that require greater attention to control the hazard (e.g. monitoring and recording).

<sup>&</sup>lt;sup>b</sup> If a CCP is not identified at questions 2–4, the process or product should be modified to implement a control measure and a new hazard analysis should be conducted.

<sup>&</sup>lt;sup>c</sup> Consider whether the control measure at this step works in combination with a control measure at another step to control the same hazard, in which case both steps should be considered as CCPs.

d Return to the beginning of the decision tree after a new hazard analysis.

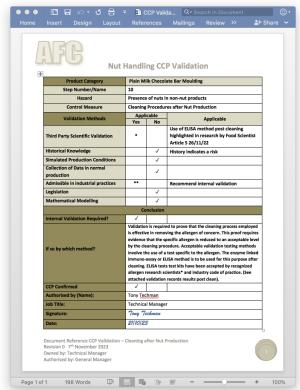
# ISO 22000: 8.5.3 Validation of control measure(s) and combinations of control measures

The food safety team need to validate that the selected control measures are capable of achieving the intended control of the significant food safety hazards.

Validation must be completed prior to implementation of control measures and combinations of control measures to be included in the hazard control plan.

When the result of validation shows that a control measures is not capable of achieving the intended control, the food safety team need to modify and re-assess the control measures and/or combination of control measures.

The food safety team should document the validation methodology and evidence of capability of the control measures to achieve the intended control.





# **Validation**

Supporting validation documentation can consist of information from:

- **✓** Regulatory limits or Industry Code of Practice Guidelines
- ✓ Scientific journals
- Documented challenge studies
- ✓ In-house data

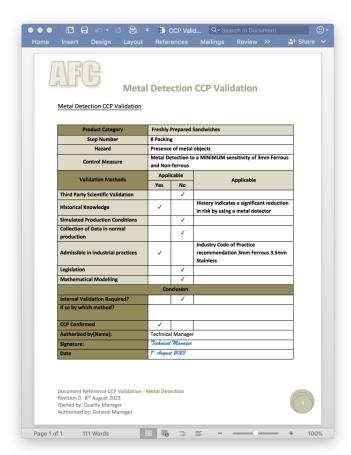








# 8.5.3 Validation of control measure(s)







# **ISO 22000 Section 8 Operation**

#### **Section 8 Operation includes requirements for:**

- 8.5.4 Hazard control plan (HACCP/OPRP plan)
- 8.5.4.1 General
- 8.5.4.2 Determination of critical limits and action criteria
- 8.5.4.3 Monitoring systems at CCPs and for OPRPs
- 8.5.4.4 Actions when critical limits or action criteria are not met
- 8.5.4.5 Implementation of the hazard control plan





# ISO 22000 8.5.4 Hazard control plan (HACCP/OPRP plan)





# ISO 22000 8.5.4 Hazard control plan (HACCP/OPRP plan)

The hazard control plan needs to include for each control measure at each CCP or OPRP:

- ✓ Food safety hazard(s) to be controlled at the CCP or by the OPRP
- ✓ Critical limit(s) at CCP or action criteria for OPRP
- ✓ Monitoring procedure(s)
- ✓ Correction(s) to be made if critical limits or action criteria are not met;
- ✓ Responsibilities and authorities
- ✓ Records of monitoring

												If Not E	ffective	Modify o	or look fo	or a differ	rent Contro	ol Measure	Y	Go	to nex	t Question				**** Modi	fy the step, process or pr	oduct to implement a con	trol measure	
					P	,	Si		a)th	b)the sev	uĝis ouj (i) (d	b (ii) inclu	establis hazi	b (iii) inc	measura b (iv) ir	any failur and/or a c) th	d) the fea		Y	That	next s	tep is a CC	•							
					b a	e v e	n i f	funct	likelihoo	erity of the	luding the ificant foot	ading the le other contr	hed and ap	e or is part control a luding whe	able/obser	e to remai neasurable e feasibiliti	rections in	Com	N		Modi	fy								
					1	r i t	c a	loning	of failure	conseque	effect on i	ol measure	plied to re	neasures ther it is si	yable actionether it is	observab of establi	case of fai	nents	Y		This is	s a CCP	С	0 P	P					
Step Number	Step Name	Hazards Identified	Hazard Category	Control Measure	t y	Y	n c e		of its	nce in the	dentified zards	elation to	duce the	ation of pecifically	n criteria a single	tical limit le action shing	lure to detect		Q 1	Q 2		Q Q .	P	R P	P	Critical Limits or Action Criterion	Monitoring Procedures	Corrections & Corrective Action	Responsibility & Authority	HACCP Record
22	Pasteurisation	Listeria monocytogenes	Biological	Pasteurisation > 71.7 ° C > 15 seconds	3	3	9	OP	PRP - S CI	CP - Ve	CCP - Eli	CCP - N	Ne CCP	- Sp CCP	- Sir CCP	- LIK CCP	- Ca CCP -	Tir Widely recognised CCP	N	Y		N Y	~			> 71.7 ° C > 15 seconds	Automatic Plant. Divert Check at Start Up	Do not start if Divert Fails	Pasteuriser Operator	Pasteuriser Recor
22	Pasteurisation	Salmonella spp. (S. typhimurium, S. enteriditis)	Biological	Pasteurisation > 71.7 ° C > 15 seconds	3	3	9	OP	RP - S CI	CP - Ve	CCP - Eli	CCP - N	Ne CCP	- Sp CCP	- Sir CCP	- Lik CCP	- Ca CCP -	Tir Widely recognised CCP	N	Υ		N Y	_			> 71.7 ° C > 15 seconds	Automatic Plant. Divert Check at Start Up	Do not start if Divert Fails	Pasteuriser Operator	Pasteuriser Recor

# **Critical Control Points (CCPs)/OPRPs**

Many control measures are commonly applied in food processing and production to control significant hazards including:

- ✓ Chilling or Freezing to temperatures that minimize microbial growth
- ✓ Cooking to specific temperatures for exact times in order to destroy microbial pathogens.
- ✓ Product Acidification such as the addition of cultures or chemicals to reduce pH
- ✓ Product Drying or water reduction to remove available water
- ✓ Processes such as sealing
- ✓ Addition of Preservatives to prevent microbial growth
- ✓ Metal Detection
- √ Filtration





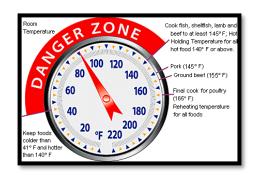






# **HACCP PRINCIPLE 3 Establish Critical Limit(s)**

A critical limit is the maximum or minimum value to which a physical, biological, or chemical hazard must be controlled at a critical control point to prevent, eliminate, or reduce to an acceptable level the occurrence of the identified food safety hazard.





# ISO 22000 Clause 8.5.4.2 Determination of critical limits and action criteria

ISO 22000 requires that as well as Critical Limits at CCPs that Action criteria for Operational Prerequisite Programmes need to be specified. The rationale for their determination shall be maintained as documented information.

Action criteria for OPRPs shall be measurable or observable. Conformance with action criteria shall contribute to the assurance that the acceptable level is not exceeded.

When monitoring an OPRP is based on subjective data from observations (e.g. visual inspection), the method shall be supported by instructions or specifications.



# ISO 22000 8.5.4 Hazard control plan (HACCP/OPRP plan)

- 8.5.4.3 Monitoring systems at CCPs and for OPRPs
- 8.5.4.4 Actions when critical limits or action criteria are not met
- 8.5.4.5 Implementation of the hazard control plan



# ISO 22000 Clause 8.5.4.3 Monitoring systems at CCPs and for OPRPs

Monitoring should ideally provide information in time to make adjustments to ensure control of the process.

Where possible, process adjustments should be made when monitoring results indicate a trend towards loss of control at a CCP or OPRP.







# ISO 22000 Clause 8.5.4.4

Actions when critical limits or action criteria are not met PRINCIPLE 5 Establish the corrective actions to be taken when monitoring indicates a deviation from a critical limit at a CCP has occurred.

### The corrective action planned needs ensure:

- the cause of the deviation has been identified and eliminated
- ✓ the CCP reverts to a controlled state after the corrective action has been taken.
- measures to prevent recurrence of the deviation have been established
- ✓ product is quarantined until it is established that it is safe.









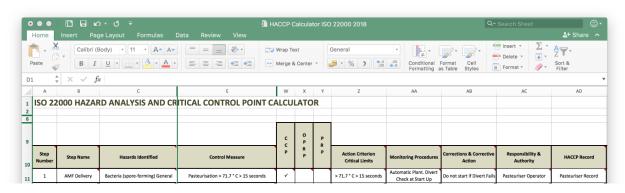
# 8.5.4.5 Implementation of the hazard control plan

The organization shall implement and maintain the hazard control plan, and retain evidence of the implementation as documented information.

	FG		Haza	ard Con	trol Plar	n Template		
Step	Step Name	Hazards Identified	Control Measure	Category of Control Measure	Action Criteria (OPRP) Critical Limits (CCP)	Monitoring Procedures/ Responsibility	Corrective Action	HACCP Record
1	Delivery of Material A	Salmonella contamination from bird droppings	Example covered and screened delivery area	OPRP	No Contaminati on Always load under cover	Supervision by Warehouse Manager	Retrain Staff. Inspect contamination. Reject if contaminated	Good Receipt Record
				ССР	Decide your critical limits and enter here	Decide your monitoring procedures and enter here	Enter the corrective action to take if outside of critical limits	Details of where CCP is recorded



# 8.5.4.5 Implementation of the hazard control plan Hazard Control Plan (CCP/OPRP Plan)



**Hazard Control Plans should include:** 

**Process Step** 

Hazard

**Control Measure** 

**Action Criteria/Critical Limits** 

**Monitoring Procedures** 

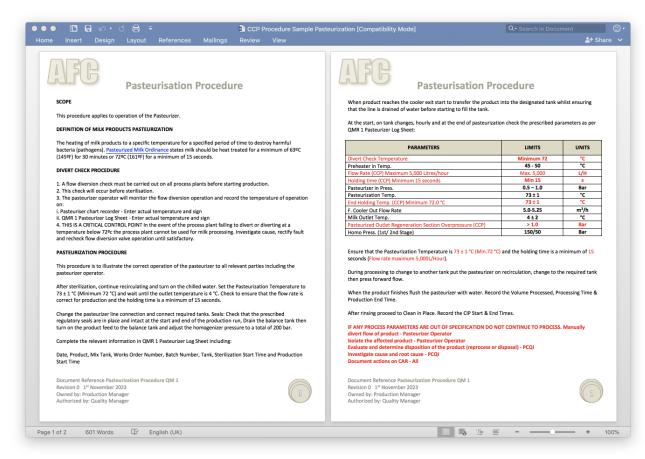
**Corrections/Corrective Action** 

Responsibilities

**Reference to relevant Records** 



# **Hazard Control Procedure**





# **Hazard Control Record**

AFG	Pas	steurizer	Log Sh	eet				
DATE:								
Product:			Tank	Product	Fat %	Total Solids	Temp. (°C)	QC. Sign
Feed Tank:	Fill Tank:					Solids		
Volume:								
Production Start Time:	Production End Time	2:	CIP Start/E	nd Time:		•	•	
PARAMETERS	LIMITS	UNITS			П	ME		
Flow Rate (CCP Maximum 5250)	5000-5250	L/h						
Pre-heater in Temperature	45 - 55	°C						
Pasteurization Temp. (Homo In Temp.)	82 ± 2	°C						
Pasteurizer Out Press.	2.8-3.0	PI						
Homo In Press.	1.8-2.0	PI						
Pressure Difference (CCP)	Minimum 0.8	PI						
End Holding Temp. (CCP)	Min. 77.0	°C						
Product Outlet Temp. (CCP)	< 5	°C						
Homo Press. (1st/ 2nd Stage)	175/50	Bar						
Homo Pressure (Total)	225	Bar						
Glass & Perspex Items Check & Sign	Intact/No Cracks							-
Sterilization Temperature	82 ± 2	°C						
Diversion Test Before Production	Minimum 77	°C						
Record Diversion Temperature & Sign								
Operator Name & Sign:					Supervisor Si	gn:		
Document Reference Pasteurizer Log Sho Revision 0 7 <sup>th</sup> November 2023 Owned by: Production Supervisor Authorised by: Production Manager	eet PAS 001						(	



# 8.6 Updating the information specifying the PRPs and the hazard control plan

Following the establishment of the hazard control plan, the Food Safety Team update the following, if necessary:

- ✓ Characteristics of raw materials, ingredients, productcontact materials and end products
- ✓ Intended use
- √ Flow diagrams
- ✓ Descriptions of processes and process environment





# **ISO 22000 Section 8 Operation**

## **Section 8 Operation includes requirements for:**

- 8.7 Control of monitoring and measuring
- 8.8 Verification related to PRPs and the hazard control plan
- 8.8.1 Verification
- 8.8.2 Analysis of results of verification activities
- 8.9 Control of product and process nonconformities
- **8.9.1 General**



# 8.7 Control of monitoring and measuring

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FSMS 8.7 Control of monitoring and measuring [Compatibility Mode]

#### Food Safety & Quality Management System

#### 8.7 Control of monitoring and measuring

#### Measuring and Monitoring

The company has identified and implemented the monitoring, measurement, and analytical processes required to maintain the Food Safety & Quality Management System.

Measurement and Monitoring Procedures have been established, documented and implemented to meet Hazard Control Plan, Quality Control Plan and PRP requirements.

Hazard Control Plan and PRP requirements are defined in the HACCP Manual and individual PRP procedures. The establishment of Hazard Control Plan control measures, monitoring procedures, critical control points, control limits, OPRPs, action criteria, corrections and corrective actions are documented in Hazard Control Plans and the HACCP Manual.

Quality requirements for measurement and monitoring have been designed using a similar approach to hazard analysis in identifying the monitoring, measurement, and analytical processes required to maintain product conformity to requirements, All the monitoring, measurement, and analytical processes required have been planned by following the process below which identifies the specific processes at each stage of manufacturing:

- A flow diagram is prepared of the steps in the process. An analysis is conducted by identifying control options
- Stage 2 The Control Points in the process are identified
- Stage 3 Monitoring, measurement and analytical limits which must be met to ensure control are

Industry Code of Practice.

- Stage 4 Measurement, monitoring and analysis procedures are established and scheduled for
- each stage.
- The corrective action to be taken when limits are exceeded are established.
- All procedures and records appropriate to the monitoring, measurement and analysis processes including acceptable limits at each stage are documented and implemented in a Product Quality Control Plan. Methodology and Standard tests are specified in the
- Verification that the monitoring, measurement and analysis processes are working effectively is carried out.

This system considers each stage of the process from ingredient intake to product despatch. Releases of ingredients, in-process and finished product are controlled and documented by authorised personnel. The result of this process is a formulated Quality Control Plan summarising the control points, monitoring procedures, action limits, responsibilities and authority and corresponding records.

Document Reference FSMS 8.7 Control of monitoring and measuring Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



#### Food Safety & Quality Management System

The experience, qualifications and training of authorised personnel engaged in monitoring, measurement or analysis is documented in their personnel and training file. All test results are recorded as evidence of conformity with the appropriate acceptance criteria. The results of monitoring of OPRPs and at CCPs are evaluated by authorised designated persons who are competent and have the authority to initiate corrections and corrective actions.

Process characteristics monitored include process and storage temperatures, pressures and cleaning chemical concentrations as listed in the Hazard Control Plans, PRP(S) and the Product Quality Control

Product characteristics are monitored, measured and analysed as per the Hazard Control Plan and Product Quality Control Plans to ensure compliance with specifications and regulatory requirements and suitability for human consumption. Key chemical, microbiological and physical parameters are specified such as temperature, water content, acidity, weight, and acceptable bacteria levels.

Test and Inspection results for all analyses are recorded and reviewed. Routine shelf life assessment is carried to ensure that product meets the criteria laid down in the product specification. Records and results validate that the product meets the minimum shelf life indicated on the product. The Corrective Action to be taken when results are unsatisfactory or adverse trends are identified in Hazard Control Plans and Product Control Plans and are recorded. Statistical techniques are used to monitor process capability for example in product weight control.

The company has a policy of providing sufficient resources to ensure that the Laboratory staff. procedures and facilities meet the principles of the ISO 17025.

These requirements include where appropriate control over the design of drainage and ventilation systems, access and security of the Laboratory, movement of personnel, protective clothing, the process of obtaining samples and disposal of Laboratory waste.

Product is only released by to customer when it has been confirmed by authorised laboratory personnel that the product has met all of the acceptance criteria as defined in the Hazard Control Plans and the Product Quality Control Plan. The dispatch of product to customer does not proceed if the product fails to meet the acceptance criteria, in this case a Non-conformance notification is raised, the product is quarantined and the process rectified. Monitoring, measurement and analysis data are continuously reviewed in order to validate the effectiveness of controls applied to the production processes.

Company approved third party laboratories are used for more specialized analysis.

Document Reference FSMS 8.7 Control of monitoring and measuring Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### Food Safety & Quality Management System

#### Calibration of Monitoring and Measuring Equipment

The company has established, documented and implemented a system for controlling monitoring and measuring equipment, which is maintained in order to ensure conformity to product requirements in accordance with international standards and best industry practice. The processes that contribute to meeting the requirements of these standards have been determined.

The scope of the system includes all equipment used for monitoring and measuring activities related to the PRP(s), product quality control plan and the hazard control plan.

When measuring and monitoring equipment is used evidence is provided in the form of equipment specification, commissioning records and calibration records to demonstrate the equipment is conforms

The company maintains this procedure for the calibration and control of monitoring and measuring

An inventory of all monitoring and measuring equipment critical to product quality and safety or whose results can affect the conformity of product requirements is maintained by the Engineering Manager.

Each piece of equipment is labelled with a unique identification code which is also used to identify it on all relevant documentation including calibration certificates.

All of the Measuring and Monitoring Equipment is subject to regular servicing and preventative maintenance as per the Preventative Maintenance Schedule for Critical Equipment. The Equipment is also covered by maintenance contracts with the supplier, Records of all work including maintenance, servicing and calibration of all equipment are maintained and retained on site for a minimum of 3 years.

All measuring and monitoring equipment on site is used and maintained in accordance with the instructions laid down in the manufacturer's handbooks/manuals. Operating and maintenance instructions are displayed or held next to the equipment. Monitoring and measuring equipment is safeguarded from maladjustment as only trained, authorized personnel are permitted to use it. All authorised personnel are fully trained in the use of equipment and records maintained in their personal training record.

All measuring and monitoring equipment is protected from damage and deterioration. This is normally by housing them away from the work environment or if this is not possible, in a protective stainless steel case. Any equipment suffering damage or that gives suspect results or malfunctions or is otherwise shown to be defective or unfit for use is immediately removed from service.

Document Reference FSMS 8.7 Control of monitoring and measuring Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





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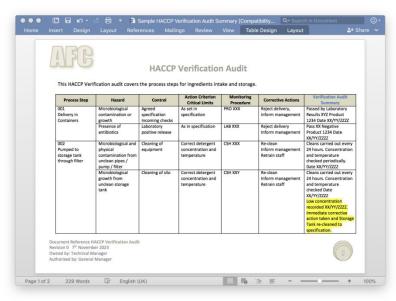




# 8.8 Verification related to PRPs and the hazard control plan

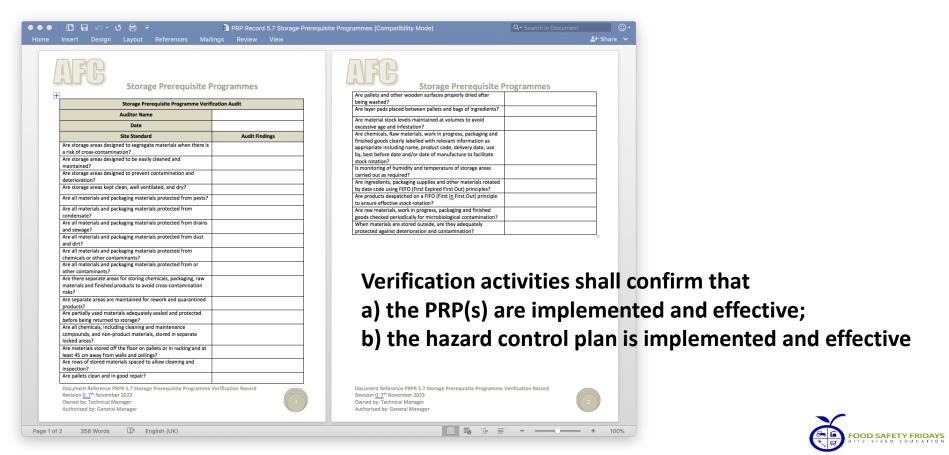
**Section 8 Operation includes requirements for:** 

- 8.8 Verification related to PRPs and the hazard control plan
- 8.8.1 Verification
- 8.8.2 Analysis of results of verification activities





# 8.8 Verification related to PRPs and the hazard control plan



# **Prerequisite Programme Verification**

Maintenance Procedure Verifi	cation	Maintenance Procedure Verification	Maintenance Procedure
Maintenance Verification Audit		- Filling Equipment?	request and returns it to the Engineering Manager?
Auditor Name		- Services?	Are the form and copy checked and filed together by the Engineering Manager?
Date		Does the Engineering Manager schedule Preventative	Does the Engineering Manager schedule any further work or
Site Standard	Audit Findings	Maintenance by issuing a Maintenance Task Card for each piece of equipment on a weekly basis?	inspections required?  Does the Engineering Manager authorise temporary repairs so
Does the Maintenance System include all areas where products are handled on site and activities conducted on site?	Addit Findings	Are maintenance requests which impact on product safety are given priority?	that product safety is not put at risk and schedules a permanent repair within a reasonable timescale?
Is special attention given to those areas critical to food safety?		Does the Maintenance Task Card list the specific jobs for the engineer to carry out on that piece of equipment?	Is there a system in place for gathering information from the daily Engineering Breakdown Sheets for each piece of
Is all equipment properly specified, commissioned, tested, and assessed prior to use?		Does the Engineer schedule the maintenance work during routine equipment downtime to prevent the risk of	equipment, which is analysed for the purpose of periodically reviewing the Preventative Maintenance System?
Is the Plant Maintenance System managed by the Engineering Manager?		contamination of product during production?  Does the Engineer completes the tasks as instructed and	Does the Engineering Manager maintain a record of critical services to the site including water, electricity, and gas?
Is a Preventative Maintenance Programme operated on Critical Equipment the critical control points (Critical equipment has a specific documented schedule		completes the task card signing off the work completed and completes a handover form back to confirm the equipment is being returned in an acceptable condition for production?	Is the supply services risk assessed by the Engineering Manager?  Is there an adequate contingency plan available should there be
inspection and calibration) including: - Screens?		Does the company maintenance system include reporting of damage to buildings and equipment and non-routine	a failure of any of these services?  Do contingency plans include emergency generators and
- Filters (including air filters)?		maintenance requests such as breakdowns?  When any specific engineering work is required is a	alternate supply for electric?  Do contingency plans include reserve water tanks and supply by
- Magnets?		Maintenance request form completed and given to the Engineering Manager?	tanker for water?  Do contingency plans include alternate supplies and emergency
- Metal detectors?		Does the Engineering Manager check the request, authorises the work and passes on a copy of the request to one of the	tanks for gas?  Are lubricants and heat transfer fluids food grade where there is
- X-ray detectors?		Engineers?  Does the Engineer request access to the equipment or area	a risk of direct or indirect contact with the product?  Is the maintenance system operated in a manner that ensures
- Process Thermometers?		from the Production Manager who authorises the work to go ahead?	conformity of product to requirements is not affected?  Is equipment and plant specified and commissioned for use in
Is a Preventative Maintenance Programme operated on all areas which may a product to requirements on site <u>including:</u>	ffect the conformity of	Is maintenance carried out in such a way that production on adjoining lines or equipment is not at risk of contamination so	production so that it does not introduce food safety hazards to the product?
- Boilers?		the equipment or area is taken out of production, segregated and released to the Engineer to complete the work required?	Are new equipment and plant maintenance programmes based on manufacturer's instructions and risk assessment
- Buildings?		Does the Engineer complete the work requested and complete a thorough clean up, accounting for components, materials and tools?	implemented?  Are maintenance personnel trained in food safety hazards
- Cooling Towers?		Is the Equipment or Area cleaned prior to resumption of	associated with their activities?  Are maintenance personnel trained how to provide hygienic
- Air Compressors?		production and a hand over form signed to confirm it is safe to return to production?	maintenance services?  Are supply of services to the site and contingency plans
- Processing Equipment?		Does the Engineer complete the Maintenance Request form by adding any further work or inspection required then signs the	available and included in supply contracts?



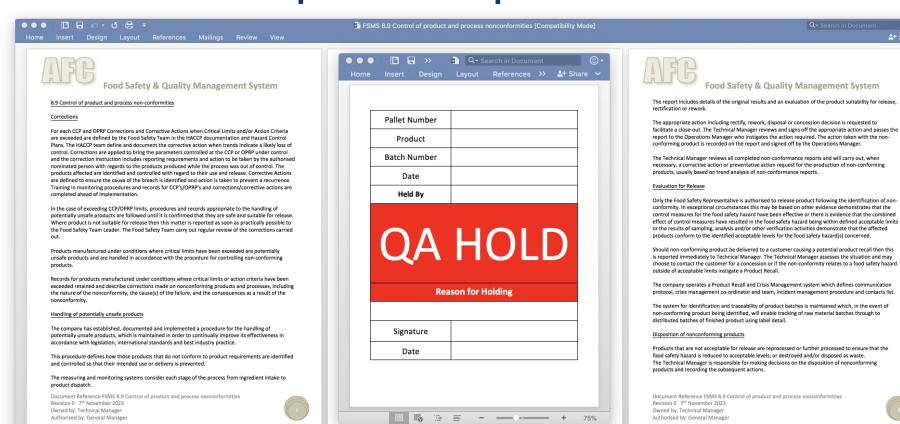
# 8.8.2 Analysis of results of verification activities

Verification records PRPs and the hazard control plan need to be reviewed.

The food safety team shall conduct an analysis of the results of verification that shall be used as an input to the performance evaluation of the FSMS (see 9.1.2).



# 8.9 Control of product and process nonconformities





## **Corrective Action Form**



#### **Corrective Action Request**

Corrective Action Request							
Corrective Action Report Number:	0056/22 NCN 1 FS Audit Report 07/11/22						
Issued to:	Olly Peraman Operations Manager						
Date:	07/11/22						
The following Non- compliance has been noted:	Pasteurizer operations were observed and found to be non-compliant: QMR 1 Pasteurization Record 07/11/22 shows the Pasteurization Temperature at 12:20pm was 71 °C. This was a possible critical non-compliance with Food Safety Requirements - Dairy regulation 1/2015 requires that products are pasteurized at a minimum of 71.7 °C for a minimum of 15 seconds						
Reference Audit Report or Food Safety System Area	Pasteurization						
Risk Assessment : High / Medium / Low	High Risk						
Corrective action required:	(i) All operators and supervisors are to be retrained in minimum pasteurization temperature and time requirements.  (ii) The pasteurizer is to be converted to auto so that there can be no forward flow at low temperature						
Person Responsible for corrective Action:	Olly Peraman						
Target Date to be completed by:	(i) All staff to be retrained.  To be completed by 14 <sup>th</sup> November 2022 (ii) Pasteurizer to be converted to an automatic plant so forward flow is not permitted until 72 °C has been reached. To be completed by 21 <sup>st</sup> November 2022						

Document Reference Corrective Action Request QMR 012 Revision 0 1<sup>st</sup> November 2022 Owned by: Technical Manager Authorized By: General Manager





#### **Corrective Action Request**

Confirmation	n of Corrective Action
Details of Action taken:	(i) All staff have been retrained. Completed on 12 <sup>th</sup> November 2022 (ii) Pasteurizer has been converted to an automatic plant so forward flow is not permitted until 72 °C has been reached. Completed on 14 <sup>th</sup> November 2022
Sign to confirm action completed:	Olly Peraman
Date Completed:	14/11/2022
Correcti	ve Action Review
Review of Corrective Action:	(i) Staff interviewed and found to understand pasteurization temperature requirements. QMR 1 Pasteurization Record checked and no issues found 2 <sup>nd</sup> - 16 <sup>th</sup> November 2022 (ii) Checked and confirm that pasteurizer has been converted to an automatic plant so forward flow is not permitted until 72 °C has been reached.
Sign to confirm action completed:	Andy Auditor
Date Completed:	16/11/22

- \* Delete as applicable

Signed: 7echnical Manager...... Technical Manager Date....16/11/22......

Document Reference Corrective Action Request QMR 012 Revision 0 1st November 2022 Owned by: Technical Manager Authorized By: General Manager



# Corrective Action Request Completed Example



# 8.9.5 Withdrawal/recall

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FSMS 8.9.5 Withdrawal:recall [Compatibility Mode]



#### Food Safety & Quality Management System

#### 8.9.5 Withdrawal/recall

This procedure details the action that should be taken if for any reason a defective product reaches a customer. The action taken would depend upon the nature of the defect. A customer is defined as anyone who receives any product that is sold by the company.

Should non-conforming product be delivered to a customer causing a potential product recall then this is reported immediately to Technical Manager. The Technical Manager assesses the situation and may choose to contact the customer for a concession or if the non-conformity relates to a food safety hazard outside of acceptable limits instigate the Initial Procedure of a Product Recall.

The handling of customer complaints is categorized into non-critical and critical. Non-Critical Quality complaints from customers are directed to the Customer Services Manager who co-ordinates the customer response with the Quality Manager.

Critical or Serious complaints such as a claim of alleged injury or poisoning are notified to the Technical Manager who will instigate an immediate investigation which may involve crisis and product recall

Critical complaint is defined as an unsafe product with an aspect of the product that will result in injury or illness to the customer. This includes metal or glass in the product, contamination with dangerous chemicals, the presence of food poisoning bacteria or their toxins.

Non-Critical complaint - A Quality Defect is defined as any attribute that is not to the specification of the customer and includes such things as poor packaging, labelling or date coding, or any product that will spoil before the Best Before date on the pack.

Information may come from many sources including, an individual consumer, an enforcement agency or retailer. The most important first action is to ensure as much information is gathered as accurately as possible.

#### Receipt of External Information

Wherever the initial communication comes from, the following questions must be asked by the recipient to ascertain:

- Product name, including pack size,
- Batch number, production date, despatch date and Best Before or Use-By date.
- Name of person reporting fault position, organisation, telephone number, address.

Document Reference FSMS 8.9.5 Withdrawal/recall Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### Food Safety & Quality Management System

- Nature of fault.
- Where found.
- Details of any action taken by complainant.

The information must be passed immediately to the Customer Services Manager who assesses if the complaint is Critical or Non-Critical, Critical Complaints are immediately referred to the Technical Manager or in his nominated deputy who will complete a Product Incident Log. An accumulation of an unusual number of Non-Critical Complaints within a short time period will also be referred to the Technical Manager.

- 1. The Technical Manager will discuss the matter immediately with the General Manager. No decisions are to be taken by anyone until the Technical Manager and the General Manager have been informed (or nominated deputies if they are absent).
- 2. The problem will be defined, including verification of the product defect and the extent of
- If a potential recall is likely, the Technical Manager and the General Manager will assemble the product recall team and classify the nature of the recall.
- A product recall can only be approved by the General Manager and in his absence his nominated
- The Product Recall Team will comprise of the: -

General Manager Operations Manager Sales Director Financial Director Technical Manager Production Manager

Distribution Manager Nominated Deputies due to absence

Document Reference FSMS 8.9.5 Withdrawal/recall Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### Food Safety & Quality Management System

#### Action Plan and Investigation

The Team will have immediate call on any Senior or Departmental Manager in its attempt to define the problem and control the situation. The problem should be investigated immediately by carrying out a full identification and traceability exercise for the suspect product including checks of:

- Compliance with Standard Instruction and Process.
- Compliance with Raw Material and Packaging Specifications.
- Department records of the product during, before and after the time of the production date, in particular Microbiological, Quality Audit, Chemical testing, Production, Cleaning, with references to final product standards, chill temperatures, product temperatures, process and time
- Checks of Cleaning procedures and condition of equipment and fabric.
- Condition of product in stores, depots and cold stores (within our control) and transport should
- Samples of the defective product should be carried out to determine the cause of defect. Analysis should be carried out at the in-house Laboratory until the Technical Manager has

All investigation results should be fully reported and circulation restricted to the Product Recall Team.

At this stage, the Product Recall consider the need to call in external expertise to provide advice and support as necessary including specialist laboratories, regulatory authority, central technical support or legal expertise (Relevant contacts are listed in the reference section).

#### Communication

An initial brief on the situation should be prepared which will contain all the relevant information including product defect and all suspect products. This should be made available to members of the

The information should be updated continually and issued with sequential numbers, date and time. From this data, a brief for the media, customer, company management and work-force should be prepared and agreed by the team.

Document Reference FSMS 8.9.5 Withdrawal/recall Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

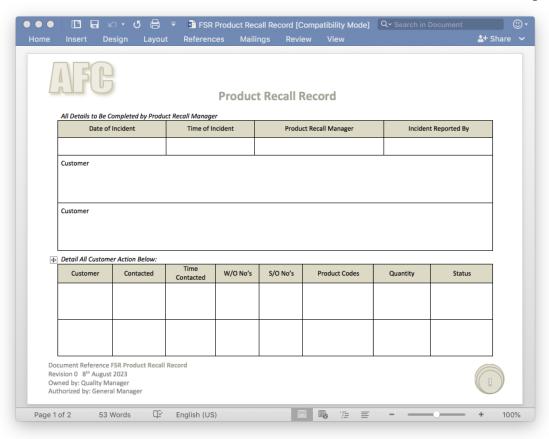


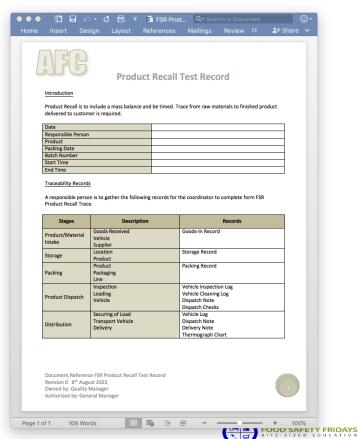






# 8.9.5 Withdrawal/recall





## ISO 22000 Section 9 Performance evaluation

## **Section 9 includes requirements for:**

- 9.1 Monitoring, measurement, analysis and evaluation
- 9.1.1 General
- 9.1.2 Analysis and evaluation



Food Safety & Quality Management System

#### 8.7 Control of monitoring and measuring

#### Measuring and Monitoring

The company has identified and implemented the monitoring, measurement, and analytical processes required to maintain the Food Safety & Quality Management System.

Measurement and Monitoring Procedures have been established, documented and implemented to meet Hazard Control Plan, Quality Control Plan and PRP requirements.

Hazard Control Plan and PRP requirements are defined in the HACCP Manual and individual PRP procedures. The establishment of Hazard Control Plan control measures, monitoring procedures, critical control points, control limits, OPRPs, action criteria, corrections and corrective actions are documented in Hazard Control Plans and the HACCP Manual.

Quality requirements for measurement and monitoring have been designed using a similar approach to hazard analysis in identifying the monitoring, measurement, and analytical processes required to maintain product conformity to requirements. All the monitoring, measurement, and analytical processes required have been planned by following the process below which identifies the specific processes at each stage of manufacturing:

A flow diagram is prepared of the steps in the process.

An analysis is conducted by identifying control options

The Control Points in the process are identified

Monitoring, measurement and analytical limits which must be met to ensure control are

Stage 4

Measurement, monitoring and analysis procedures are established and scheduled for

Stage 5 The corrective action to be taken when limits are exceeded are established. All procedures and records appropriate to the monitoring, measurement and analysis

processes including acceptable limits at each stage are documented and implemented in a Product Quality Control Plan. Methodology and Standard tests are specified in the Industry Code of Practice.

Verification that the monitoring, measurement and analysis processes are working effectively is carried out.

This system considers each stage of the process from ingredient intake to product despatch. Releases of ingredients, in-process and finished product are controlled and documented by authorised personnel. The result of this process is a formulated Quality Control Plan summarising the control points. monitoring procedures, action limits, responsibilities and authority and corresponding records.

Document Reference FSMS 8.7 Control of monitoring and measuring Revision 0 7th November 2023

Owned by: Technical Manager Authorised by: General Manager





# 9.2 Internal audit

9.2.1 The organization shall conduct internal audits at planned intervals to provide information on whether the FSMS:

- a) conforms to:
- 1) the organization's own requirements for its FSMS;
- 2) the requirements of the standard;
- b) is effectively implemented and maintained.
- 9.2.2 The organization shall:
- e) retain <u>documented information</u> as evidence of the implementation of the audit programme and the audit results;





# 9.2 Internal audit

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FSMS 9.2 Internal Audits & Inspections [Compatibility Mode]

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Food Safety & Quality Management System

#### 9.2 Internal audit

The company has established, documented and implemented an internal audit system, which is maintained in order to verify the Food Safety & Quality Management System is effectively implemented and maintained and complies with planned arrangements, legislation and the FSSC 22000 Certification Scheme.

The scope of the Internal Audit System includes all product categories, processes, activities conducted, production sites and any outsourced activities that can affect the requirements of the Food Safety & Quality Management System.

Top Management has a total commitment to the Food Safety & Quality Management System and provides adequate resource in the form of trained and qualified personnel to carry out a comprehensive internal Audit Schedule. Internal audits are performed to confirm that management systems are working effectively and to promote continuous improvement. Our philosophy is simply audit, review and improve.

#### Internal Audit Schedule

The Internal Audit Schedule is planned annually and is designed to comprehensively cover all areas of the Food Safety Management system including procedures, policies and activities.



Document Reference FSMS 9.2 Internal Audits & Inspections Revision <u>0.7</u>th November 2023 Owned by: Technical Manager Authorised by: General Manager





Food Safety & Quality Management System

The Technical Manager draws up the Internal Audit Schedule based on the following criteria:

- Importance of the processes concerned
- Changes in the FSMS
- Results of monitoring, measurement
- Risk associated with the procedure or activity
- Results of Previous audits
- Number of Corrective and/or Preventive Actions raised or outstanding
- Customer Complaint Analysis
- Results of the Management Review

The Technical Manager is responsible for allocating the audits as per the Schedule to an independent Auditor. For each audit a specific audit checklist is issued to the Auditor specifically outlining the scope of the audit, audit criteria and a list of items to be audited (Including follow up of previous audit findings and corrective excitons).

Internal Auditors are responsible for carrying out the procedure as described below:

General Procedure detailing the correct method for completing internal department audits

- The site internal audit schedule determines which audits are to be carried out. The auditor must
  make sure they have the correct audit checklist form to carry out the audits.
- A date and time for the audit to take place must be agreed with the department. A representative from the department must be present during the audit.
- The auditor uses a specific audit form and checklist designed by the Technical Manager for each department or area.
- 4. The audit report is rated based on the following criteria:
  - RED Major Non-conformance(s) identified and imminent risk. Immediate documented Corrective Action is required and a written follow-up necessary.
  - AMBER Minor Non-Conformance(s) identified there is a potential risk. The Corrective
    Action required is documented and a verbal follow up is required.
- GREEN Satisfactory or Positive with comments or suggestions for improvement
- 5. When the audit is completed and the report given a rating. Positive as well as negative comments are included in the report. Major Non-conformities are immediate highlighted to the department manager, who will is responsible for the corrective and preventive action without undur default.

Document Reference FSMS 9.2 Internal Audits & Inspections Revision <u>9 7<sup>th</sup> November 2023</u>

Owned by: Technical Manager

Authorised by: General Manager





#### Food Safety & Quality Management System

- The Department Manager reviews the audit findings with the auditor and agrees timescales to complete corrective action for the major and minor non-conformances.
- The Department Manager then signs and retains a copy of the report which includes details of the non-conformances, proposed corrective actions and the agreed time scale to complete the corrective actions. If the audit rating is red then an immediate corrective action plan is reported to the Technical Manager.
- The Departmental Manager is responsible for documenting the corrective actions taken for all the non-conformances raised.
- Completion of the corrective and/or preventive actions is checked on the next audit. Outstanding corrective actions completed are signed off whilst any uncompleted actions are escalated to the Technical Manager.

The Technical Manager reviews all audit reports, the non-conformances raised and the proposed corrective actions. Should it be deemed necessary, usually when a major non-conformance has been found, the Technical Manager will schedule another audit to ensure timely corrective action has been completed. In this case, the Internal Audit Schedule will be revised and reissued.

Document Reference FSMS 9.2 Internal Audits & Inspections Revision <u>O. 7<sup>th</sup> November 2023</u> Owned by: Technical Manager Authorised by: General Manager





# 9.2 Internal audit

Food Safety Management System Audit Form [Compatibility Mode]

● ● | □ □ □ ω · σ □ = Food Safety Management System Audit Form Food Safety Management System Audit Form Date of Audit: 1st December 2022 Time of Audit: 14:00Hrs Auditor: Anne Auditor Auditee: Warehouse Manager Procedure Document or Area Audited: Warehouse (All activities and procedures) Area: Receipt, Storage and Manual: Food Safety Document Number: Transport Number: 0 GMP 11.6 Summary of Audit including Conformances (Completed by Auditor) Generally, Receipt, Storage and Transport Procedures were found to be current and in Document GMP 11.6 Receipt, Storage and Transport was found to be the current revision and dated 7th November 2022. 3 Major and 3 minor non-conformances have been raised. The major non-conformances require urgent attention. Non-Conformances Found (Completed by Auditor) Non-Conformance Notification 0001 raised (Minor) - There was no spacing between pallets for inspection. Packaging in storage was not wrapped for protection. Non-Conformance Notification 0002 raised (Major) - Goods transferred to the factory were not covered. Where possible they should be on plastic pallets. Goods were found on the floor. Non-Conformance Notification 0003 raised (Minor) - The Quarantine Area was not separate from other storage and it was not maintained in a clean and tidy condition. Non-Conformance Notification 0004 raised (Minor) - Cold store door does not have strip curtains and was left open. Non-Conformance Notification 0005 raised (Major) - Ingredient storage was not controlled & segregation in place to prevent cross-contamination. Non-Conformance Notification 0006 raised (Major) - Each member of staff should have a



Food Safety Management System Audit Form

Action to Be Taken (To Be Agreed Between Auditor and Auditee with Timescales)

Non-Conformance Notification 0001 – All staff to be briefed. Spacing is required in

between pallets for inspection. Packaging in storage should be wrapped for protection

To be completed by 25th December 2022

Non-Conformance Notification 0002 (Major) - All staff to be briefed. Goods transferred to the factory should be covered. Where possible they should be on plastic pallets. They should never be on the floor.

To be completed by 8th December 2022

Non-Conformance Notification 0003 - A separate designated Quarantine Area is to be established. The Quarantine area is to be maintained in a clean and tidy condition. To be completed by 25<sup>th</sup> December 2022

Non-Conformance Notification 0004 - Door to have strip curtains fitted and all staff briefed to ensure that the door is kept closed as much as possible.

To be completed by 25th December 2022

Non-Conformance Notification 0005 raised (Major) - Ingredient Storage to be controlled & segregation in place to prevent cross-contamination.

To be completed by 8th December 2022

Non-Conformance Notification 0006 raised (Major) - Each member of staff to have a training record, prioritizing staff who are carrying out critical product checks.

To be completed by 8th December 2022

Log Corrective Action Request Numbers Raised in Box Below:

0001/0002/0003/004/005

Name (Auditor) Anne Auditor	 Date: 1st December 2022
Name (Auditee) Warehouse Man	Date: 1st December 2022

Actions Complete and Corrective Actions Signed Off Audit Form Closed

Name (Auditor) | Signature (Auditor) | Dai

Anne Auditor

Anne Auditor

2

25th December 2022



Food Safety Management System Audit Form

Food S	afety Management System Audit Form							
Area Conformances to requirements	Documented procedures were current an practices	d reflected current						
Opportunities for improvement	Spacing is required away from wall for inspection. A designated Quarantine Area will reduce risk of product contamination.							
Strengths and weaknesses	Product Release procedure is being followed and working well. Training of staff has been neglected.							
Confirmation if the food safety management system is adequate in the area audited	3 Major Non-compliances raised.							
Recommendations for future audit planning	Increase audit frequency based on findings.							
Items to follow up on the next audit	Training. Storage off the floor. Doors being kept close Quarantine Area							
Name (Auditor)	Signature (Auditor)	Date:						
Anne Auditor	Anne Auditor	1st December 2022						

Document Reference Food Safety Management System Audit Form Revision 0 1ts November 2022 Owned by: Quality Manager Authorized by: General Manager



Document Reference Food Safety Management System Audit Form Revision 0 1st November 2022

Owned by: Quality Manager Authorized by: General Manager



Revision 0 1st November 2022

Authorized by: General Manager

Owned by: Quality Manager

training record, especially staff who are carrying out critical product checks.

Document Reference Food Safety Management System Audit Form

# ISO 22000 Section 9 9.3 Management review

#### **Section 9 Performance evaluation:**

- 9.3 Management review
- 9.3.1 General
- 9.3.2 Management review input
- 9.3.3 Management review output



#### Food Safety & Quality Management System

#### 9.3 Management review

The company has established, documented and implemented a management review system for the site. Regular reviews are conducted in order to assess the suitability, adequacy and effectiveness of the Food Safety Management System with the aim of continually improve site effectiveness at meeting international standards and exceed customer exocertations.

The scope of the Management Review includes all product categories, processes, activities conducted, production sites and any outsourced activities that can affect food safety as per the requirements of the FSSC 22000 Certification Scheme.

Senior management review the company management systems, at planned intervals to ensure their continuing suitability, adequacy and effectiveness.

The review includes assessing opportunity for improvements and the need for amendments to the systems. The proceedings of all reviews are documented.

The review meeting is chaired by the General Manager and includes Top Management from Technical, Operations, Engineering, Planning, Distribution and Quality departments.

#### Review inputs include:

- Review of the Food Safety & Quality Policy and Objectives
- Review of Management Changes
- Minutes and Follow-up actions from previous review meetings
   Relevant changes in external and internal issues
- Review of Resources and effectiveness of Training
- Food Safety Culture performance review
- Emergencies and Accidents
- Food Safety incidents including allergen control and labelling, recalls, withdrawals, safety or legal issues
- Relevant information obtained through external and internal communication, including requests
- Opportunities for improvement
- Results of external second and third-party audits
- Trend analysis of Customer and Supplier complaints
   Key Performance Indicators Review and trend analysis
- Corrective and preventive action status
- Review of planning and development of the processes needed for the realisation of safe products including changes which could affect food safety and the Hazard Control Plans (including legislation changes and scientific information)
- Communication activities and effectiveness of communication

Document Reference FSMS 9.3 Management review

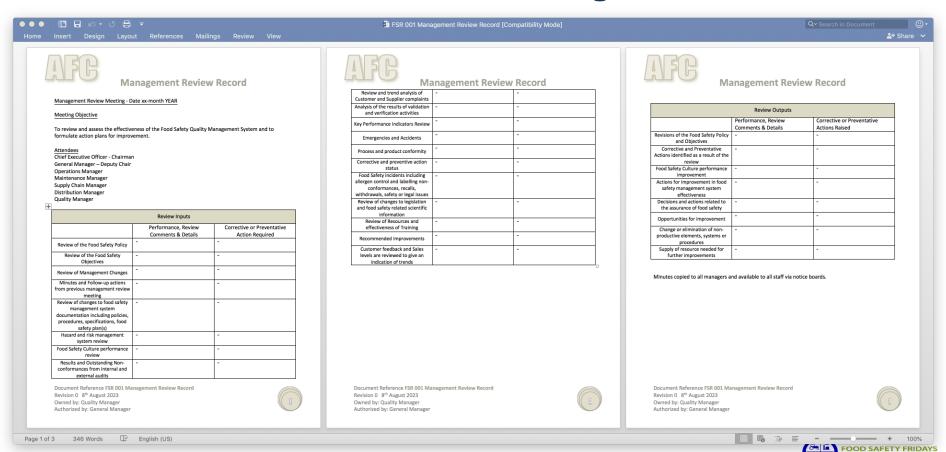
Revision 0 7th November 2023 Owned by: Technical Manager

Authorised by: General Manager





# ISO 22000 Section 9 9.3 Management review



# **ISO 22000 Section 10 Improvement**

**Section 10 Improvement includes requirements for:** 

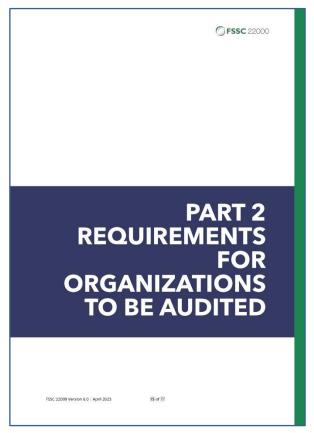
- 10.1 Nonconformity and corrective action
- **10.2 Continual improvement**
- 10.3 Update of the food safety management system





## **FSSC 22000 Version 6 Additional Requirements**







## **FSSC 22000 SCHEME VERSION 6**

The audit requirements for FSSC 22000 certification consist of:

- 1) ISO 22000:2018 food safety management system requirements;
- 2) sector specific prerequisite program (PRPs) requirements\* (ISO/TS 22002-x series or other specified PRP standard) and;
- 3) FSSC 22000 Additional requirements.
- \* The Scheme specifies mandatory application of technical specifications detailing the pre-requisite programs (PRPs) as referenced in clause 8.2 of ISO 22000:2018, with the exception of sub-category FII. Food chain category FII applies to Food brokering, trading, and E-commerce activities.



## 2.5 FSSC 22000 Additional Requirements

The following specific additional FSSC requirements for the food safety management system are included in the Scheme (All Food Chain Categories) unless stated:

- 2.5.1 Management of Services and Purchased Materials
- **2.5.2 Product Labelling and Printed Materials**
- 2.5.3 Food Defense
- 2.5.4 Food Fraud Mitigation
- **2.5.5 Logo Use**
- **2.5.6 Management of Allergens**
- 2.5.7 Environmental Monitoring (Food Chain Categories BIII, C, I & K)
- **2.5.8 Food Safety and Quality Culture**
- 2.5.9 Quality Control
- 2.5.10 Transport, Storage and Warehousing





## 2.5 FSSC 22000 Additional Requirements

The following additional FSSC requirements for the food safety management system are included in the Scheme (all Food Chain Categories) unless stated:

- 2.5.11 Hazard Control and Measures for Preventing Cross-contamination (All excluding FII)
- 2.5.12 PRP Verification (Food Chain Categories BIII, C, D, G, I & K)
- 2.5.13 Product Design and Development (Food Chain Categories BIII, C, D, E, F, I & K)
- 2.5.14 Health Status (Food Chain Category D)
- **2.5.15 Equipment Management (All excluding FII)**
- 2.5.16 Food Loss and Waste (All excluding I)
- **2.5.17 Communication Requirements**
- 2.5.18 Requirements for Organization with Multi-Site Certification (Food Chain Categories A, E, F & G)

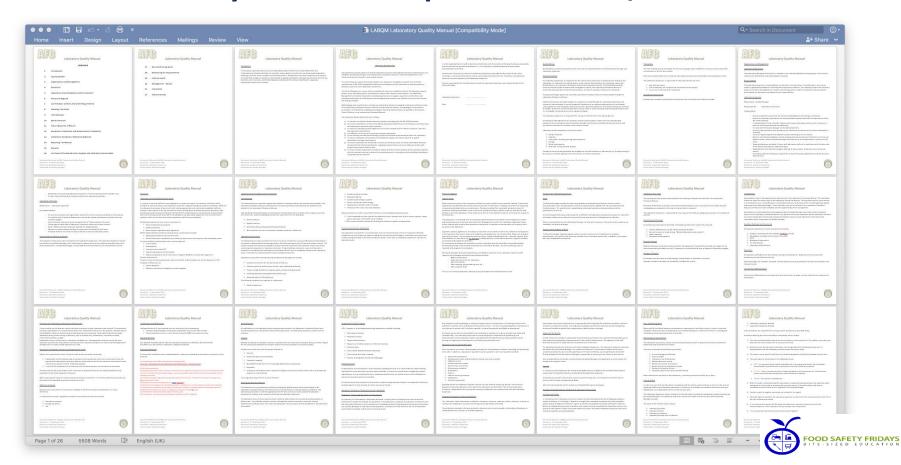
In addition to clause 7.1.6 of ISO 22000:2018, the organization shall ensure that where laboratory analysis services are used for the verification and/or validation of food safety, these shall be conducted by a competent laboratory (including both <u>internal</u> and external laboratories as applicable) ... using validated test methods and best practices .....

(e.g. successful participation in proficiency testing programs, regulatory approved programs or accreditation to international standards such as ISO 17025).





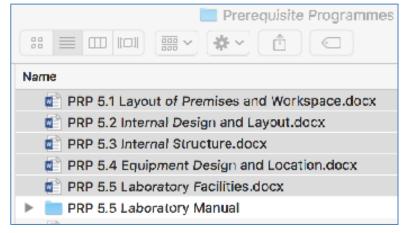
## **Laboratory Manual compliant with ISO/IEC 17025**



ISO/IEC 17025 is an ISO standard for General Requirements for the Competence of Testing and Calibration Laboratories. ISO/IEC 17025 enables laboratories to demonstrate that they operate competently and generate valid results.



PRP 5.5 Laboratory Manual			
		Q Search	
Name	Date Modified	Size	Kind
虐 LABQM Laboratory Quality Manual	21/11/2023	57 KB	Microsoftt (.docx)
LABR 001 Laboratory Audit Form.docx	11/08/2023	47 KB	Microsoftt (.docx)
LABR 002 Laboratory Training Form.docx	11/08/2023	32 KB	Microsoftt (.docx)
LABR 003 Laboratory Autoclave Record.docx	11/08/2023	28 KB	Microsoftt (.docx)
LABR 004 Microbiological Sample Plan.docx	11/08/2023	29 KB	Microsoftt (.docx)
🛍 LABR 005 Filler Sample Plan.docx	11/08/2023	29 KB	Microsoftt (.docx)
🛍 LABR 006 QΛ Sample Plan.docx	11/08/2023	27 KB	Microsoftt (.docx)
LABR 007 Factory Sample Plan.docx	11/08/2023	41 KB	Microsoft1 (.docx)
LABR 007 Factory Sample Plan.xisx	11/08/2023	17 KB	Microsoftok (.xlsx)
LABR 008 Daily Balance Calibration Sheet.docx	11/08/2023	28 KB	Microsoftt (.docx)
LABR 009 Laboratory Exception Report.docx	11/08/2023	31 KB	Microsoftt (.docx)
LABR 010 QC Online Check Sheet.docx	11/08/2023	32 KB	Microsoftt (.docx)
LABR 011 Accelerated Keeping Quality Log.docx	31/08/2023	28 KB	Microsoft1 (.docx)
E LPOL 001 Laboratory Quality Policy.docx	11/08/2023	30 KB	Microsoftt (.docx)
LPPRO 001 Laboratory Operatinrocedure for the Autoclave.docx	11/08/2023	42 KB	Microsoftt (.docx)
MICRO 001 Enumeration of Total Viable Counts.docx	21/11/2023	34 KB	Microsoftt (.docx)





Document Reference LABQM Laboratory Quality Manual

Revision 0 1st November 2023

Owned by: Laboratory Supervisor Authorized by: Quality Manager

LABOM Laboratory Quality Manual [Compatibility Mode] **ISO/IEC 1702** ♣+ Share ∨ for the Comp Laboratory Quality Manual **Laboratory Quality Manual ISO/IEC 1702** CONTENTS Non-Conforming Work Introduction Monitoring for Improvements operate com Quality System Internal Audits Organization and Management Management Review Personnel Complaints Laboratory Accommodation and Environment Subcontracting Personnel Hygiene Confirmation of Work and Client Requirements Handling Test Items Test Methods **Bench Practices** Assuring Quality of Results Equipment, Calibration and Measurement Traceability Calibration Standards / Reference Materials Reporting Test Results Purchase of Outside Services, Supplies and Laboratory Consumables

Document Reference LABQM Laboratory Quality Manual

English (UK)

Revision 0 1st November 2023

Page 1 of 26

Owned by: Laboratory Supervisor

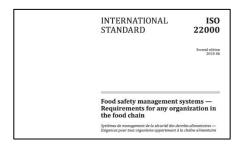
5508 Words





ISO 22000:2018 7.1.6 Control of externally provided processes, products or services requires organisations to:

- a) establish and apply criteria for the evaluation, selection, monitoring of performance and re- evaluation of external providers of processes, products and/or services;
- b) ensure adequate communication of requirements to the external provider(s);
- c) ensure that externally provided processes, products or services do not adversely affect the organization's ability to consistently meet the requirements of the FSMS;
- d) retain documented information of these activities and any necessary actions as a result of the evaluations and re-evaluations.





In addition to clause 7.1.6 of ISO 22000:2018, the organization needs to have a documented procedure for procurement in emergency situations to ensure that products still conform to specified requirements and the supplier has been evaluated.





In addition to ISO/TS 22002-1:2009 clause 9.2, Selection and management of suppliers, where applicable the organization shall have a policy for the procurement of animals, fish and seafood that are subject to control of prohibited substances such as veterinary medicines and pesticides.

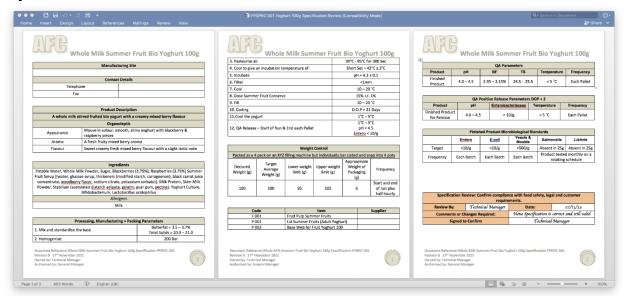


### Harmful Substances in Food Regulations (Cap. 132AF)

- Schedule 2 –
- sets out the prohibited substances not allowed in any fish, meat or milk
- under Regulation 3A, no person shall import, sell or consign or deliver for sale for human consumption, any fish, meat or milk which contains any substance specified in Schedule 2
- As the definition of "milk" in Cap. 132AF excludes dried milk, condensed milk and reconstituted milk, the concentration limits in Schedule 1 or prohibition of prohibited substances in Schedule 2 do not apply to dried milk, condensed milk and reconstituted milk (except melamine)

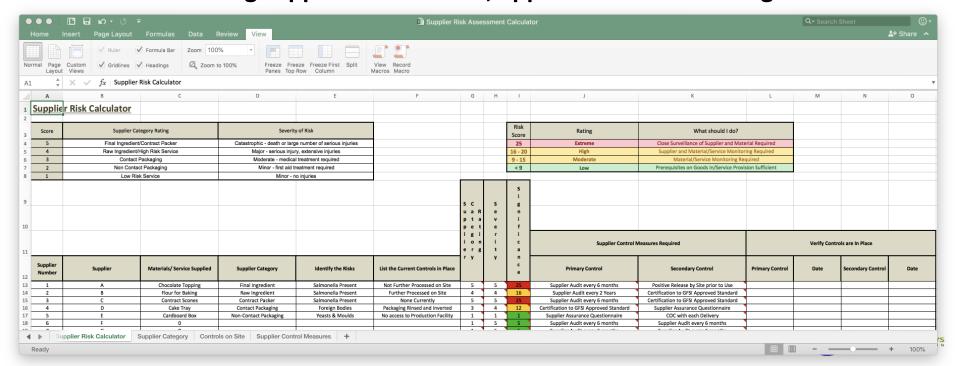


For food chain categories C, D, I, G and K, the following additional requirement applies: The organization shall establish, implement, and maintain a review process for product specifications to ensure continued compliance with food safety, legal and customer requirements.





A compliant FSSC 22000 Food Safety Management System needs to include documentation for managing the process of purchasing materials and services including supplier assessment, approval and monitoring.



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PRP 9.3 Control of Incoming Materials [Compatibility Mode]

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#### Control of Incoming Materials

#### Introduction

The company has established and implemented a programme of prerequisites including standards for the control of incoming materials.

#### Control of Incoming Materials

Material acceptance is based on a combination of product sampling and testing, visual inspection and receipt certificates of analysis or conformance. Each delivery of material is inspected on arrival for damage or soiling and where appropriate to confirm if the seals are intact. The site's food defense plan contains details of the measures considered necessary to secure incoming materials and ingredients and protect them from deliberate act of sabotage or terrost-tike incidents. The food fraud mitigation plan contains details of the methods by which the identified food safety vulnerabilities from ingredients and materials are controlled

Incoming raw materials is, where appropriate, thoroughly checked on arrival for the absence of pest infestation. Records of these checks are maintained. Delivery notes are verified against the original purchase order and supplied with a Certificate of Conformity or Certificate of Analysis to confirm the material meets the current specification. Critical Raw materials as defined in the HACCP Documentation must be accompanied by a Certificate of Analysis. The parameters of the C.O.A. are defined in the Raw Material Specification. Goods Receipt notes are signed by the Warehouse Manager to signify preliminary acceptance.

A register of raw materials with the parameters for acceptance and for the frequency of testing is issued by the Technical Manager and followed by the Laboratory to clear each delivery of raw material. It is company policy to ensure that all incoming materials meet the required standards prior to release. In order to achieve this objective all raw materials delivered to site are subject to positive release by <u>authorised</u> QA staff prior to use.

When a material is received, it is given a unique pallet number. This pallet is used by all personnel to identify product. Good in operators are responsible for applying a Material QA Clearance Label (with the unique pallet identification number) on each pallet of material received and recording the details of the material on the pallet label.

The QA staff check all incoming materials as per the testing schedule issued by the Laboratory Supervisor and authorised by the Technical Manager. Materials are released to production by authorised QA staff only when it has been confirmed that the material meets specification.

This process requires the Laboratory Supervisor to complete and sign the Material Release Checklist. Once complete authorised QA staff complete the relevant section on the Pallet QA Release/Hold label and detach the Hold section of the label indicating the material has been released.

Document Reference PRP 9.3 Control of Incoming Materials Revision 0 21st November 2023 Owned by: Technical Manager Authorised by: General Manager





#### **Control of Incoming Materials**

The receipt of materials containing animals, fish and seafood that are subject to control of prohibited substances must be accompanied by appropriate assurance that residues do not exceed published MRLs such as a certificate of analysis.

The Laboratory Supervisor reports to Senior Management on a daily basis all materials released and any material that has been held pending further investigation.

The Technical Manager is responsible for ensuring that packaging complies with relevant food safety legislation and is fit for purpose. The Purchasing Manager retains certificates of food grade conformity and PIRA migration data.

Only by arrangement with the Technical Manager can non-conforming product be accepted by the factory. This is providing that all the parameters for Food Safety are satisfied. A signed concession form is required to allow the product to be accepted on site.

Non-conforming goods are isolated in a Quarantine area for supplier assessment or collection

Non-conforming materials which do not fall into the above category and are therefore deemed rejectable. Such materials are labeled "REJECTED" and placed in the quarantine area. The material is also labeled with the nature of non-conformity, date held and disposal or return instructions.

The delivery of non-conforming product should be communicated to the Technical, Purchasing and Planning Departments. A non-compliance notification is sent to the Technical Manager who reports the issue to the supplier.

Raw materials, ingredients, and packaging materials received from other facilities under the same corporate ownership, are subject to the same specification requirements and approved supplier requirements as all other material providers.

#### Verification of the Control of Incoming Materials

Verification activities are carried out for prerequisites in the form of audits, inspections and laboratory routine testing as per the internal audit schedule and Laboratory Testing Schedule.

#### References

PRP 9.3A Incoming Material Specification Requirements (in PRP 9 Supplier RA folder)

Document Reference PRP 9.3 Control of Incoming Materials Revision 0 21st November 2023 Owned by: Technical Manager Authorised by: General Manager





#### **Control of Incoming Materials**

## Product QA Clearance Label Pallet Number Product Date of Production Expiry Date

## **QA PASS**

Released By	
Date	

Pallet Number
Product
Date of Production
Expiry Date

Time/No. of Packs

Packs Released/Held



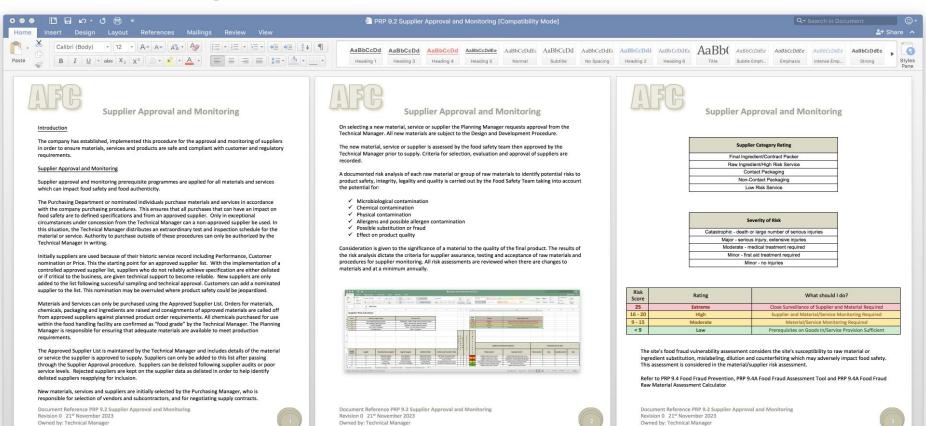
Reason for Holding

Signature								
Date								

Document Reference PRP 9.3 Control of Incoming Materials Revision 0 21<sup>st</sup> November 2023 Owned by: Technical Manager Authorised by: General Manager





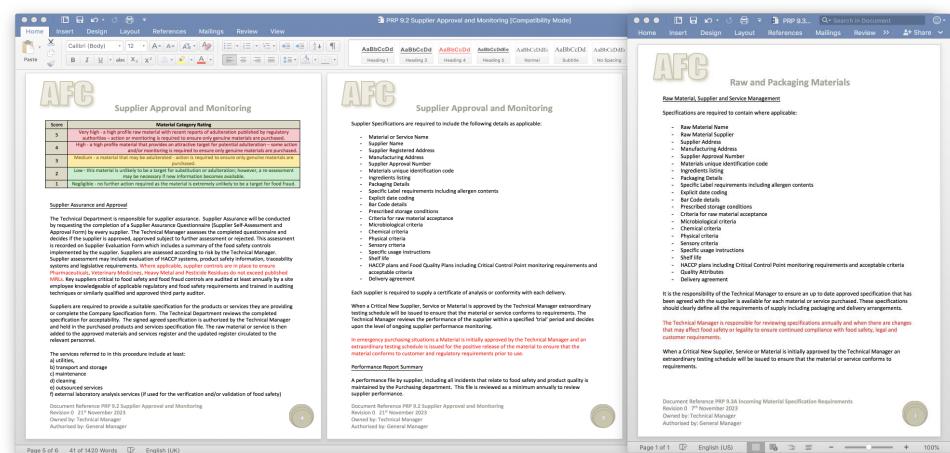


Authorised by: General Manager

Authorised by: General Manager



Authorised by: General Manager



In addition to clause 8.5.1.3\* of ISO 22000:2018, the organization shall ensure that finished products are labelled according to all applicable food safety (including allergens and customer specific requirements) statutory and regulatory requirements in the country of intended sale.

ISO 22000:2018 8.5.1.3 \* Characteristics of end products

Where product is unlabelled, all relevant product information shall be made available to ensure the safe use of the food by the customer or consumer.





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PRP 17.2 Product Labelling Controls [Compatibility Mode]



#### **Product Labelling Controls**

#### Introduction

The company has established a programme of prerequisites for product labelling controls. All product labels are approved by the Technical Manager who ensures that the label meets product specifications and that the finished product label is in accordance with customer specific requirements, where specified, and the applicable food regulations in the country manufacture and of intended sale. The Operations Manager is responsible for ensuring that the correct approved product label is applied to finished products.

#### Approval of Product Labels

The Technical Manager is responsible for ensuring that product labels comply with legal requirements and contains information to enable the safe handling, display, storage and preparation of the product within the food supply chain or by the customer. The Technical Manager verifies that the labeling information is correct labelling is correct based on the product recipe and ingredient specifications including:

- ingredient and allergen labeling based on the product recipe and ingredient specifications
- storage conditions
- preparation and serving instructions
- customer information meets legislation for the destination country

Labelling information is reviewed whenever there are changes to:

- the product recipe
- raw materials
- supplier of raw materials
- country of origin of raw materials

For all products, the New Product Development Manager validates the product formulation and product process are capable of meeting any product claims prior to launch and verifies that ingredient and allergen labelling is correct based on the product recipe.

Where the label information is the responsibility of a customer or third party the New Product Development Manager provides information to ensure labelling is correct and also communicates changes which may affect label information.

For each delivery of printed packaging or labels the QA Staff are required to check the printed packaging or labels against 'Approved Samples' provided by the Technical Manager prior to release.

Document Reference PRP 17.2 Product Labelling Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### **Product Labelling Controls**

#### **Product Label Prerequisites**

Based on risk assessment product labelling control requirements considering any hazards associated with the labelling systems are documented. Product labelling system prerequisites are as follows:

- Traceability records by Label and Expiry date are maintained and retained for all product
- Procedures are in place to check product labelling and coding at regularly intervals as well as every product change over.
- Copies of labels and coding are retained by the Laboratory for traceability purposes.
- Trained production personnel carry out label and date checks, every check is countersigned by a second check so that two members of staff verify that the label and code are correct.
- It is potentially as dangerous to mix allergen product packaging with non-nut packaging. If a nut
- free packaging is filled with a nut product there is no indication to the customer that the product contains nuts.
- All allergen packaging is kept in the designated locked areas which is additionally identified by red lines and hatched on the floor and walls.
- All allergen packaging is returned to that area once production has finished.
- Only the Shift Manager and Senior Shift Managers have keys to this area.
- On no account is any allergen free packaging stored in the allergen packaging designated area - All allergen packaging is clearly marked by a prominent label and sealed in a red coloured bag
- If there is packaging which could be confused with an allergen product then this will be treated
- in a similar way and will be packed in sealed blue bags.

#### **Process Specifications**

The Technical Manager translates the product specification for every new product into a Process Specification, The process specification details manufacturing instructions to be followed and contains recipes as defined in customer specifications.

#### The Process Specification describes:

Ingredient Details including unique identification code Packaging Details including unique identification code Specific Label requirements Explicit date coding instructions Bar Code requirements Specific process or production conditions

Recipes Mixing instructions

Equipment process settings

Document Reference PRP 17.2 Product Labelling Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### **Product Labelling Controls**

Processing times and temperatures Cooling times and temperatures

Criteria for product acceptance Specific test or analysis procedures

Prerequisite programmes

Relevant operational procedures/Work Instructions

HACCP plans including Critical Control Point monitoring requirements and acceptable criteria

The process specification is authorised by the Technical Manager and issued to both the laboratory and

production departments.

Product checks are carried out at regular intervals during the packaging run, following packaging changes and when changing batches of packaging materials to ensure correct packaging materials are used and the code is correct.

#### **Product Labelling Checks**

Procedures are in place to ensure that product is being packed into the correct packaging with the

- ✓ At start of packing
- ✓ During the production run at a frequency based on volume and risk
- ✓ When batches of packaging materials are changed
- ✓ When label reels are changed
- ✓ At the end of the production run

QA checks include verification of the following printed information where appropriate:

- ✓ Date coding
- ✓ Batch coding ✓ Label
- ✓ Quantity declared
- ✓ Pricing
- ✓ Bar code
- ✓ Country of origin

Packaging materials are supplied to packing lines such that that only the packaging for immediate use is available at the packaging machines. Traceability records by Label and Expiry date are maintained and retained for all product batches. Procedures are in place to check product labelling and coding at regularly intervals as well as every product change over. Copies of labels and coding are retained by the Laboratory for traceability purposes on PRP 17.2A Label Retention and Check Record.

Document Reference PRP 17.2 Product Labelling Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager









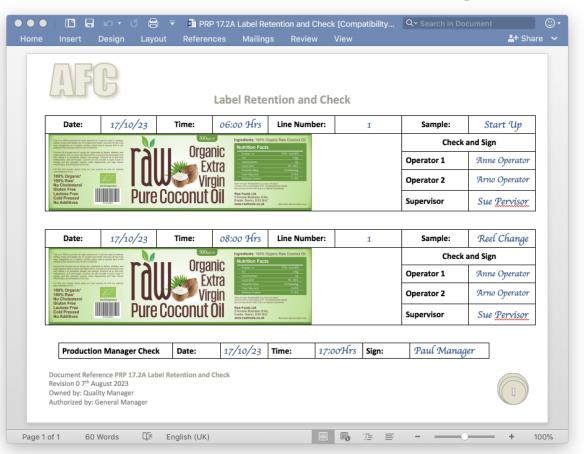
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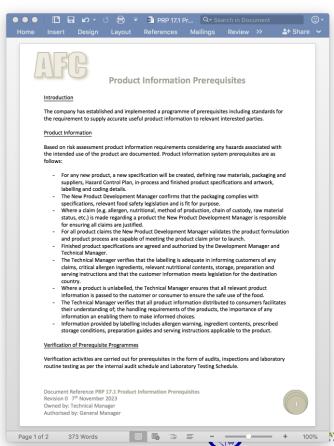




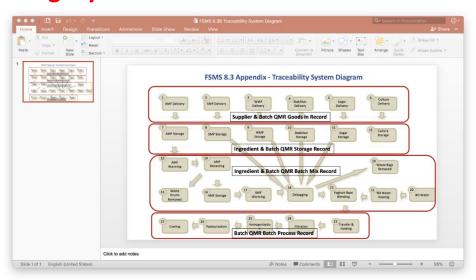






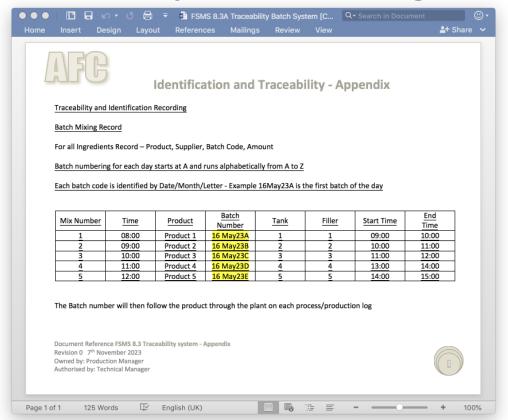


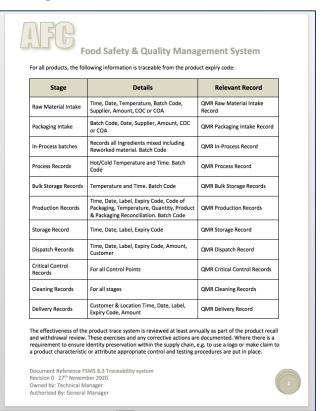
Where a claim (e.g. allergen, nutritional, method of production, chain of custody, raw material status, etc.) is made on the product label or packaging, the organization shall maintain evidence of validation to support the claim and shall have verification systems in place, including traceability and mass balance, to ensure product integrity is maintained.





## **Verification Systems including Traceability and Mass Balance**







## 2.5.3 Food Defense

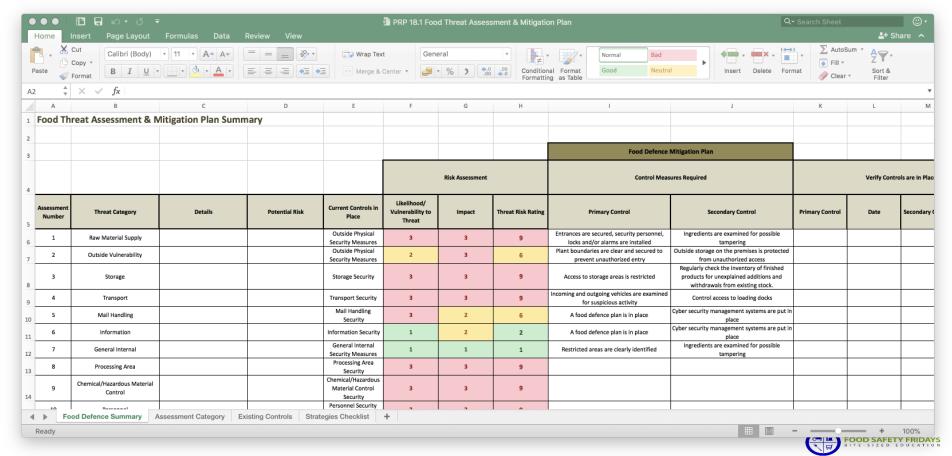
## **Threat Assessment**

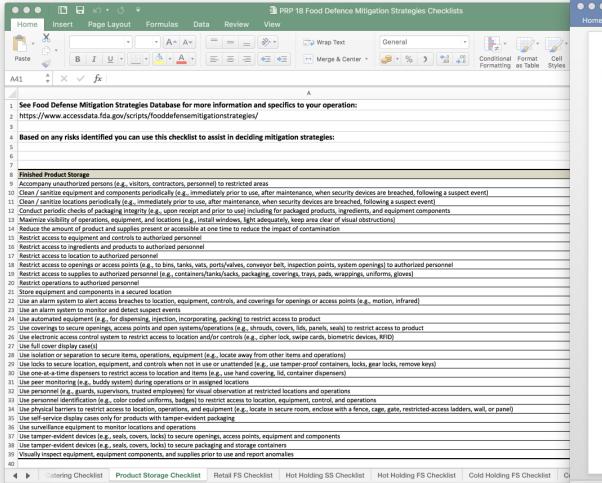
- a) Conduct and document a food defense threat assessment, based on a defined methodology, to identify and evaluate potential threats linked to the processes and products within the scope of the organization; and
- b) Develop and implement appropriate mitigation measures for significant threats.

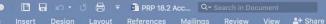
Food Th	reat Assessment	& Mitigation Plan S	ummary						
								Food Defence	Mitigation Plan
						Risk Assessment		Control Meas	ures Required
Assessment Number	Threat Category	Details	Potential Risk	Current Controls in Place	Likelihood/Vulnera bility to Threat	Impact	Threat Risk Rating	Primary Control	Secondary Control
1	Raw Material Supply			Monitoring of Product in Market Place	3	3	9	Entrances are secured, security personnel, locks and/or alarms are installed	Ingredients are examined for possible tampering
2	Outside Vulnerability			Outside Physical Security Measures	2	3	6	Plant boundaries are clear and secured to prevent unauthorized entry	Outside storage on the premises is protected from unauthorized access
3	Storage			Storage Security	3	3	9	Access to storage areas is restricted	Regularly check the inventory of finished products for unexplained additions and withdrawals from existing stock.
4	Transport			Transport Security	3	3	9	Incoming and outgoing vehicles are examined for suspicious activity	Control access to loading docks
5	Mail Handling			Mail Handling Security	3	2	6	A food defence plan is in place	Cyber security management systems are put in place
6	Information			Information Security	1	2	2	A food defence plan is in place	Cyber security management systems are put in place
7	General Internal			General Internal Security Measures	1	1	1	Restricted areas are clearly identified	Ingredients are examined for possible tampering



## 2.5.3 Food Defense









#### Access Controls

#### Introduction

The company has established and implemented a programme of prerequisites including the requirement to restrict access to only authorized personnel on site.

#### Access Controls

Based on risk assessment access control requirements for facilities proportional to the hazard posed to the process area or product are established and documented. The following standards are applied as to ensure only authorized personnel have access to production equipment and vehicles, manufacturing and storage areas:

- The access control system operates with the prerequisite that the facility has a secure site and ensures that all visitors and contractors are authorised, supervised and introduced to our standards of operation.
- Entry and exit from the facility is restricted and only authorised drivers, visitors and subcontractors are permitted.
- Potentially sensitive areas including food processing areas are identified and marked on a site
- All sensitive areas are protected by access controls including 24/7 security camera surveillance
- and doors that require access codes for entry. - Visitors are required to sign in and out of the site and are made aware of the site codes of practice and rules.
- All visitors and contractors are accompanied at all times on site.
- All personnel are encouraged to challenge unknown or unidentified visitors.
- Sensitive Processing areas are restricted to authorised employees only.
- Raw Materials, Finished Products, Packaging, Equipment and Chemicals are stored in specific storage areas and secured.
- Products are delivered to customers on secure vehicles which are sealed with a tamper evident

By following this system, the company reduces the risk of dangerous behaviour and deliberate product contamination occurring on site.

#### Verification of Access Controls

Verification activities are carried out for prerequisites in the form of audits as per the internal audit schedule. The Technical department and line management are required to conduct documented audits of the access control system including the control of visitors and sub-contractors throughout the site at monthly intervals. External audits are also conducted at periodic intervals by independent parties.

Document Reference PRP 18.2 Access Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





## 2.5.3 Food Defense

## <u>Plan</u>

- a) The organization shall have a documented food defense plan, based on the threat assessment, specifying the mitigation measures and verification procedures.
- b) The food defense plan shall be implemented and supported by the organization's FSMS.
- c) The plan shall comply with applicable legislation, cover the processes and products within the scope of the organization and be kept up to date.



## 2.5.3 Food Defense

PRP 18.1 Food Defence System [Compatibility Mode]





#### **Food Defence System**

The company has established and implemented a programme of prerequisites including food defence

#### Food Defence

The company has established, documented and implemented a Food Defence Plan which is maintained to minimise the risk of a full spectrum of threats including natural, criminal, terrorist, and accidental.

#### Food Defence Threat Assessment

The company identifies and reduces the risk of any deliberate attempt to inflict contamination or damage to its products by carrying out a documented Threat Assessment and implementing control measures proportional to the level of threat and vulnerability. The Crisis Management Team are responsible for assessing the level of threat and vulnerability of the facility and determine the controls necessary to mitigate the risks.

The Crisis Management Team complete a risk assessment form for each area and product group. Extra security measures required are identified for areas where products are vulnerable. The application of the system is based on specific risk assessment that looks at threat, vulnerability, and consequences by the Crisis Management Team. The application of the food defence system is based on specific risk assessment that looks at threat, vulnerability, and consequences by the Crisis Management Team.

The first step is a threat assessment, which considers the full spectrum of threats including natural, criminal, terrorist, and accidental. Natural and accidental threats are considered in the Crisis Management procedure. Types of Threat include: Sabotage, Fraud, Extortion, Counterfeiting, Malicious contamination, Deliberate infestation of premises, Strike on IT Systems & Espionage

For each of the threats the team log and describe the threat and the step where the product is vulnerable. For each of the threats identified, an assessment of vulnerability to the threat is performed.

The assessment examines supporting information to evaluate the potential risks to products from any deliberate attempt to inflict contamination or damage. The attractiveness of the facility as a target is considered as well as vulnerability of IT systems and data protection.

The assessment considers the potential impact of loss from a successful attack as well as the vulnerability of the facility/location to an attack. Impact of loss is the degree to which the company is affected by a successful attack

Document Reference PRP 18.1 Food Defence System Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### **Food Defence System**

Vulnerability is defined to be a combination of the attractiveness of a facility as a target and the level of deterrence and/or defence provided by the existing measures. Target attractiveness is a measure of the asset or facility in the eyes of an aggressor.

Once the credible threats are identified, a vulnerability to threat assessment is performed. The vulnerability assessment considers the potential impact of loss from a successful attack as well as the vulnerability of the facility/location to an attack. Impact of loss is the degree to which the company is affected by a successful attack.

Vulnerability is defined to be a combination of the attractiveness of a facility as a target and the level of deterrence and/or defence provided by the existing measures. Target attractiveness is a measure of the asset or facility in the eyes of an aggressor.

A combination of the impact of loss rating and the vulnerability rating can be used to evaluate the potential risk to the facility from a given threat. A risk matrix is used to conduct the risk analysis by combining the vulnerability to threat with the impact of loss for the facility.

	Vulnerability to Threat							
mpact of Loss	High	Medium	Low					
Severe								
Noticeable								
Minor								
High risk - act	ons are implemented	d immediately.						
Medium risk -	Medium risk - actions should be planned in the near future.							
Low risk - acti	ons will enhance secu	Low risk - actions will enhance security but are lower priority.						

Based on the findings from the risk analysis, the Crisis Management Team identify and implement actions in a documented Food Defence Plan that will lower the various levels of risk.

See PRP 18 Food Defence Mitigation Strategies Checklists for options on strategies:

Document Reference PRP 18.1 Food Defence System Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### **Food Defence System**

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The assessments and control measures are summarised in PRP 18 Food Threat Assessment & Mitigation

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Document Reference PRP 18.1 Food Defence System Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



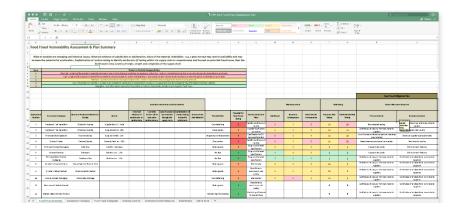




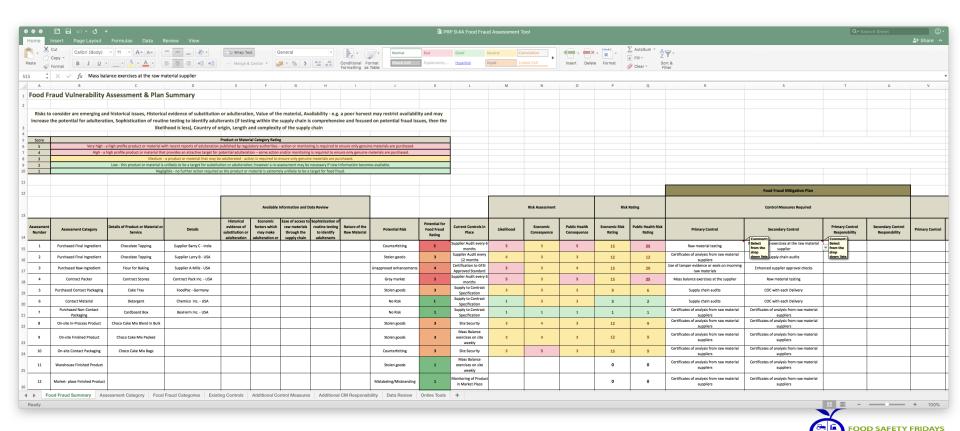
## 2.5.4 Food Fraud Mitigation

## **Vulnerability assessment**

- a) Conduct and document the food fraud vulnerability assessment, based on a defined methodology
- b) Develop and implement appropriate mitigation measures for significant vulnerabilities.











# Food Fraud Assessment & Mitigation Plan Summary Instructions

## <u>Plan</u>

- a) The organization shall have a documented food fraud mitigation plan, based on the output of the vulnerability assessment,
- b) The food fraud mitigation plan shall be implemented and supported
- c) The plan shall comply with the applicable legislation, cover the processes and products within the scope of the organization and be kept up to date.



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PRP 9.4 Food Fraud Prevention [Compatibility Mode]





#### **Food Fraud Prevention**

The company has established, documented and implemented this procedure to identifying the site's vulnerability to food fraud.

#### Scope

The scope of the food fraud risk assessment and prevention procedure covers the site's susceptibility to material or product substitution, mislabelling/misbranding, dilution, concealment, unapproved enhancements, grey markets, diversion counterfeiting or stolen goods which may adversely impact food

#### Food Fraud Team

The food fraud risk assessment and prevention procedures are developed and maintained by the Food Fraud Team, The Food Fraud Team includes members from purchasing, logistics management, technical, operations, quality and the sales departments. All team members are trained in product fraud vulnerability assessment and mitigation techniques.

Food Fraud Team	Name	Job Title	Details of Training	Date
Team Leader		Purchasing		
realii Leadei		Manager		
Team Member		Logistics Manager		
Team Member		Warehouse		
realli Mellibel		Manager		
Team Member		Technical Manager		
Team Member		Operations		
		Manager		
Team Member		Quality Manager		
Team Member		Sales Manager		

Note: Food Fraud Initiative at Michigan State University (MSU) http://foodfraud.msu.edu.provides free on line training for sites and auditors on food fraud called Massive Open On-line Courses or MOOCs, Other resources that could be considered include Vulnerability Assessment Assistance Information:

#### SSAFE Food Fraud tool

A food fraud vulnerability assessment tool that companies can use free-of-charge. The tool is a first-of-itskind solution to help companies fight food fraud and give consumers greater confidence in the safety and integrity of their food. The tool will support the food industry in preparing for new GFSI\*\* requirements that require for GFSI certified food companies to undertake food fraud vulnerability assessments and develop control plans to reduce risks.

https://www.pwc.nl/en/industries/agrifood/ssafe-food-fraud-tool.html

Document Reference PRP 9.4 Food Fraud Prevention Revision 0 7th November 2023 Owned by: Technical Manager





#### Food Fraud Prevention

#### EMAlert - GMA + Battelle Partnership

GMA and Battelle have partnered to provide EMAlert, a secure, comprehensive and intuitive software tool that enables food manufacturers to rapidly analyse and understand EMA vulnerabilities. EMAlert produces quantitative vulnerability results, allowing for the prioritization of mitigation efforts associated with EMA

#### https://emalert.org/About/Overview

#### FDA Food Defence Programs?

FDA conducts vulnerability assessments (VA) on food systems to identify, quantify and prioritize (or rank) the vulnerabilities in a system.

https://www.fda.gov/food/fooddefense/fooddefenseprograms/default.htm

The Food Fraud Team Leader is the Purchasing Manager and Senior Management Representative in the

#### **Data Sourcing**

Processes are put in place to access information on historical and developing threats which may present a risk of material or product fraud including trade associations, government sources and technical resource centres. The Food Fraud Team members from purchasing, logistics management, technical, operations, quality and the sales departments are allocated responsibility to source relevant information and report in to the team. The Food Fraud Team members source relevant information to the materials and products including historical evidence of substitution or adulteration, economic factors such as cost of the material/product, ease of access to raw materials/products through the supply chain, sophistication of routine testing to identify adulterants and nature of the raw material/products.



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#### Food Fraud Prevention

#### Sources of information include Data Source/Data value:

Internal - Historical information on previous material/product fraud incidents

Networking - General information on material/product fraud incidents Internet Searches - Information on material/product fraud incidents

Media - General information on material/product fraud incidents

Trade Associations - Information on material/product fraud risks. Commodity price - forecasts and

fluctuations, Product supply information and shortages.

Research Associations - Guidance and information such as food fraud detection methodology Authorities/Food Authorities - Guidance and information. Information on material/product fraud & safety

incidents. Information on material/product customs seizures.

Food and Feed Safety Alerts - e.g. RASFF - Information on material/product fraud & safety incidents Food Fraud Data bases & Information Services - Guidance and information, Trend analysis on food fraud

issues. Information on material/product fraud incidents. Data on food fraud incidents.

Analytical Services - Guidance and information such as food fraud detection methodology

Supply Chain Platforms - Information on country governance classification

Country Indexes - Information on country corruption level

#### Documented Vulnerability Assessment

A documented vulnerability assessment is carried out by the Food Fraud Team to assess the potential risk of food fraud for the following material/service/product categories:

#### Raw materials

Ingredients Packaging

Outsourced processing

In-process materials and products

Finished products on site Finished products in warehouse

Finished products in the market place

The scope of the assessment includes the following food fraud categories:

Counterfeiting - The process of copying the brand name, packaging concept, recipe, processing method etc. of food products for economic gain.

Stolen goods - Theft, something stolen, obtained in an illegal or dishonest way.

Dilution - The process of mixing a liquid ingredient with high value with a liquid of lower value. Substitution - The process of replacing an ingredient or part of the product of high value with another

ingredient or part of the product of lower value.

Concealment - The process of hiding the low quality of a food ingredients or product.

Document Reference PRP 9.4 Food Fraud Prevention

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## **2.5.5 Logo Use**

Certified organizations are entitled to use the FSSC 22000 logo for marketing activities.

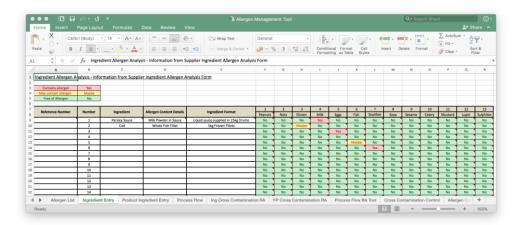
The FSSC 22000 logo may be used on the organization's printed matter, website and other promotional material but is subject to prescribed design specifications.

There are specified restrictions where the logo cannot be used such as on product, labels, packaging, COAs & COCs.

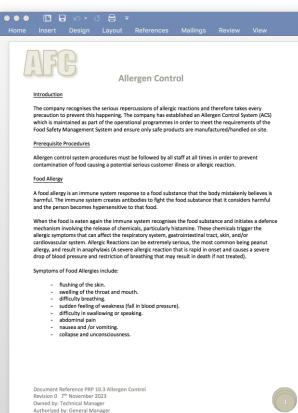


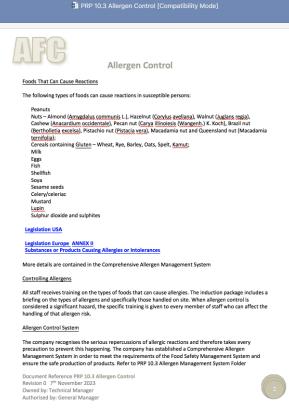
The organization shall have a documented allergen management plan that includes:

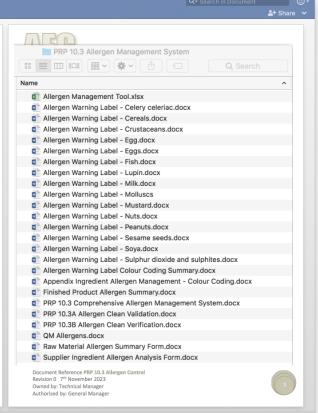
- a) A list of all the allergens handled on site, including in raw materials and finished products
- b) Risk assessment covering all potential sources of allergen cross-contamination
- c) Identification and implementation of control measures to reduce or eliminate the risk of cross-contamination ...
- d) Validation and verification of these control measures

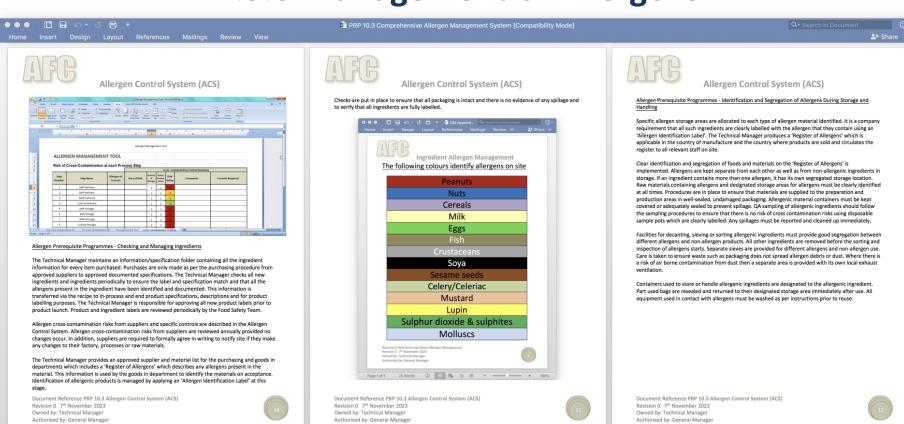






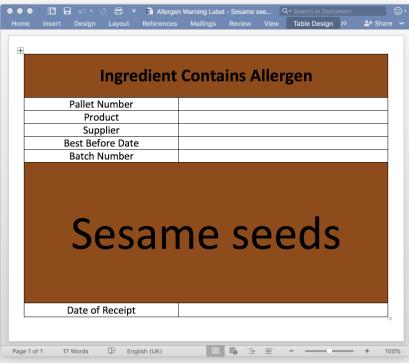








		Supplier I	ngredient All	ergen Analys	is Form	
Com	pany Name:					
	Ma	nterial	Specifi	cation Number		
Allergen		Allergen Details		Allergen Limit Stipulated by Legislation	Contains/ Likely to Contain/ Unlikely to Contain/ Does not Contain	Comments
Peanuts		Peanuts				
Nuts	Nuts – Almond Pistachi	, Hazelnut, Walnut, Cashew, Pe o nut, Macadamia nut and Que	can nut, Brazil nut, ensland nut			
Gluten	Cereals containing Gluten – Wheat, Rye, Barley, Oats, Spelt, Kamut.					
Milk		Milk				
Eggs		Eggs				
Fish		Fish				
Shellfish		Shellfish				
Soya		Soya				
Sesame		Sesame seeds				
Celery		Celery/celeriac				
Mustard		Mustard		·		
Lupin		Lupin				
Sulphites		Sulphur dioxide and sulphite	S			
Molluscs		Molluscs				
cument Re	ference Supplier I h November 2023 chnical Manager	Molluscs ngredient Allergen Analysis Fo	rm			





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PRP 10.3 Comprehensive Allergen Management System [Compatibility Mode]



#### Allergen Control System (ACS)

#### Summarizing Cross-Contamination Risks in Operations

The food safety team summarize the risk identified in the process flow steps worksheets 'Ing Cross Contamination RA' and 'FP Cross Contamination RA' in the Allergen Management Tool worksheet



#### Risk Assessment of Cross-contamination in Operations

From the information summarized in the Allergen Management Tool worksheet 'Process Flow RA Tool', the risks at each step of the process are identified and summarized in Allergen Management Tool worksheet 'Cross Contamination Control'. A risk assessment to quantify the risk accurately is carried out using the Allergen Management Tool worksheet 'Cross Contamination Control'.

The food safety team carry out the risk assessment taking into consideration (unless otherwise directed by the Technical Manager as per Legislation) that there are no established safe levels for any allergen and that consumers can vary in their reaction to allergens from an extreme response such as anaphylactic shock in one consumer but merely a mild intolerance in another.

The risk assessment criteria are based on the likelihood of cross-contamination occurring and the quantity of the allergen present.

#### Risk Assessment Scoring - Likelihood

Low Risk Unlikely to Occur

Medium Risk Possible High Risk Likely to Occur

Document Reference PRP 10.3 Allergen Control System (ACS) Revision 0 7th November 2023

Owned by: Technical Manager Authorised by: General Manager





#### Allergen Control System (ACS)

#### Risk Assessment Scoring - Quantity

- Minute Allergen is present in small quantities
- Allergen is present but not in substantial quantity
- Allergen is present at levels where if contamination occurred there would be significant levels in the final product

When considering the likelihood of contamination occurring, the food safety team consider the physical form of the allergen such as liquid or powder. Powders have more potential for cross-contamination in the air, so this is considered as well as the ability to remove the allergen during cleaning.

In reaching a judgment on the risks involved with a particular allergen the food safety team considers a number of factors including the following:

- the amount of the allergenic food generally needed to provoke a reaction in a sensitive individual
- how common adverse reactions are to that particular food in the population to which it will be
- whether there are particular subgroups of the population likely to be at particular risk, such as babies and young children
- the relative allergenicity of the particular ingredient being used. For example, possible crosscontamination with refined nut oils which are highly processed ingredients, is likely to pose a lower risk than cross-contamination with either whole, or pieces of, nut.
- the physical nature of the particular ingredients being used and the geography of the manufacturing environment. The physical form of the allergen is important, for example a liquid and a powder represent different types of risk. Milk powder may represent a greater risk in situations where air-borne contamination of products is possible, but liquid milk may be of less concern if there was sufficient separation.

By using the Allergen Management Tool worksheet 'Cross Contamination Control' the food safety team rate the risk Cross-contamination in each step of the operation. The risk assessment multiplies the likelihood factor by the quantity factor to produce a risk rating score for each area where crosscontamination could occur. The lowest risk scores 1 up to high risks which score 9.

The risk of trace amounts of allergenic materials being transferred to products from clothes, incorrect ingredient selection, spillages, and inadequate cleaning is assessed during this process.

The worksheet 'Cross Contamination Control' highlights lower risks in green (cross-contamination risk rating of 1 or 2); these risks are to be managed by prerequisite controls. Medium risks are highlighted in orange (cross-contamination risk rating of 3 or 4); these risks are to be managed by allergen prerequisite controls.

Document Reference PRP 10.3 Allergen Control System (ACS) Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### Allergen Control System (ACS)

High risks are highlighted in red (cross-contamination risk rating of 6 or 9); these risks are to be managed by an Allergen Control Plan.

Cross- Contamination Control Summary					
Quantity of Allergen	Risk of Contamination	Risk Rating	Comments		
1	1	1			
1	2	2			
1	3	3			
2	2	4			
3	2	6			
3	3	9			

Based on the risk rating the food safety team should implement appropriate controls, based on prerequisite programmes, specific allergen prerequisite programmes and in particular with high risks being managed in an Allergen Control Plan.

The Allergen Control Plan reflects controls required at a specific risk point and is summarized in Allergen Management Tool worksheet 'Allergen Control Plan'. Lower risks are managed by HACCP and Allergen pre-requisite procedures.

Based on the risk assessment findings relevant procedures, training and controls are implemented. Production scheduling is revised to reflect risk of cross-contamination with production starting with allergen free products to products containing allergens with any peanut product being the least to run on a production line before a full clean and clean validation. Whenever possible high risks are managed by complete segregation and separate production lines for non-allergenic and allergenic products.

The risk assessment is reviewed and updated if there are any changes to:

Materials Supplier

Manufacturing process Equipment

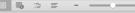
Product

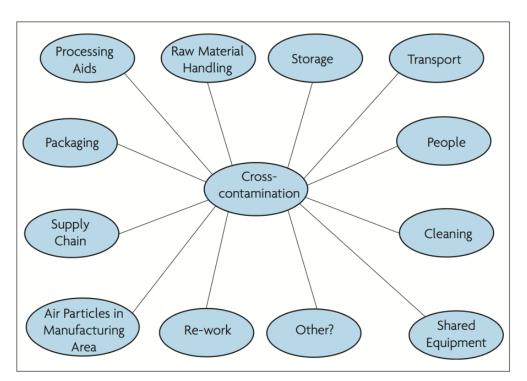
Site design

Document Reference PRP 10.3 Allergen Control System (ACS) Revision 0 7th November 2023

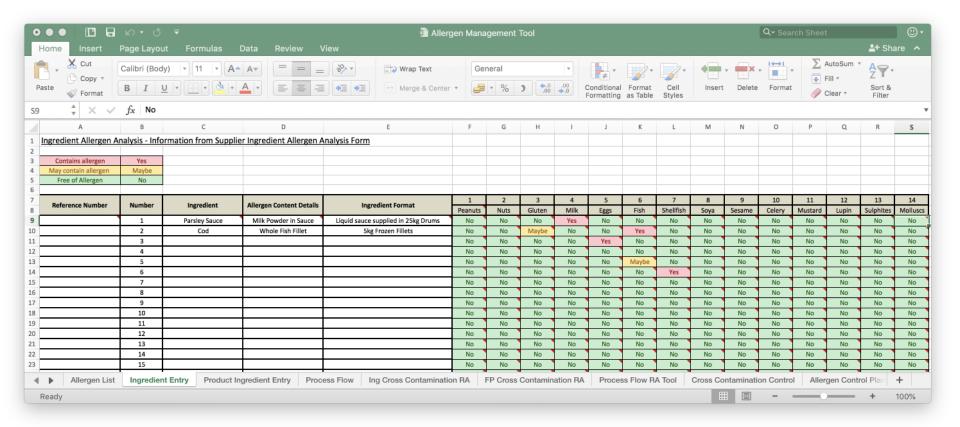
Owned by: Technical Manager Authorised by: General Manager













#### Allergen Clean Validation

#### Allergen Clean Validation

Company policy requires validation and verification of cleaning and sanitizing procedures for the product contact equipment, and therefore the use of finished product testing for validation of cleaning is not considered adequate. Validation must prove that the cleaning process employed is effective in removing the allergen of concern. This proof requires evidence that the specific allergen was in fact removed, or reduced to an acceptable level by the cleaning procedure.

The purpose of a validated cleaning program is to confirm that the specifics of the cleaning process used are complete, effective, sufficient, and when implemented, will produce that same results every time.

Validation studies need to demonstrate that the cleaning process and testing used are effective to give the desired results consistently. If the cleaning process cannot be validated then separate equipment or an alternative cleaning process must be established and subjected to validation studies again.

Once the cleaning process has been validated as effective, each clean is monitored by verification program established by the food safety team. Procedures for verification of allergen cleaning effectiveness are based on the validation study that identifies the target allergen(s), threshold levels, and the severity of contamination.

Finished product testing is not sufficient by itself to validate cleaning methods since any allergen present is diluted by the product.

Sometimes an inert product flush may be the most effective method to remove allergens. In this case, the food safety team are required to validate the number of product flushes required to assure removal of the material of concern.

Where the allergen risk is high for example with peanut protein which causes serious allergic reactions in trace quantities or the processing equipment design does not permit adequate cleaning, separate and isolated production equipment must be provided to avoid cross-contact.

Acceptable validation testing methods involve the use of a test specific to the allergen being removed. These generally require the use of a test method which uses an antigen (the allergen) and an antibody specific to the antigen. One example of the antigen and antibody test is the enzyme linked immunoassay or ELISA method. The ELISA method can be either quantitative or qualitative and can be conducted in a laboratory or with test

kits available for in plant use; either is acceptable. ELISA test kits are available from several manufacturers and are commonly used in the food processing industry.

Document Reference PRP 10.3B Allergen Clean Validation Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager







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#### Allergen Clean Verification

#### Allergen Clean Verification

Once the cleaning process has been validated as effective, each clean is monitored by verification program established by the food safety team. Procedures for verification of allergen cleaning effectiveness are based on the validation study that identifies the target allergen(s), threshold levels, and the severity of contamination.

Allergen Clean verification methods are documented by the food safety team who are responsible for approving validated cleaning method. Verification of cleaning is carried out by the production supervisor ensuring the validated cleaning procedure is followed during the sanitation process. Additional verification in critical areas is by the use of highly sensitive swabs that test for proteins. The swabs detect total protein at approximately 20 ppm and verify that equipment has been thoroughly cleaned. When sensitive ATP test swabs are used the ATP sensitive swabs must be calibrated with the validated cleaning procedure by taking duplicate swabs and recording the results of both the allergen specific test and the ATP swab test.

When in doubt verification testing methods use a test specific to the allergen being removed. These generally require the use of a test method which uses an antigen (the allergen) and an antibody specific to the antigen. Both the ELISA tests and lateral flow test kits have been accepted by recognized allergen research scientists and meet the requirements for verification of sanitation.

When there is a mixture of different allergens in use, the acceptable method for confirming the thoroughness of cleaning is to test for the highest risk allergens, the highest concentration allergens, or the ones that are most difficult to remove.

Document Reference PRP 10.3B Allergen Clean Verification Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager











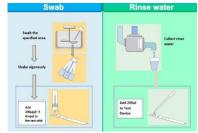


# Allergen Management – Validation & Verification of Cleaning Performance



**Validation/Verification Monitoring method** 





**Food Contact Surface – Filler Nozzle** 

Verification Monitoring method: ATP Swab after cleaning before Start Up



### **Action Limits:**

< 10 rlu - Okay to Start Up 10 - 20 rlu - Sanitise and Re-Swab > 20 rlu - Full Clean and Re-Swab

The organization shall have a documented allergen management plan that includes:

- e) Precautionary or warning labels shall only be used where the outcome of the risk assessment identifies allergen cross-contamination as a risk to the consumer, even though all the necessary control measures have been effectively implemented.
- f) All personnel shall receive training in allergen awareness and specific training on allergen control measures associated with their area of work
- g) The allergen management plan shall be reviewed at least annually, and following any significant change that impacts food safety, a public recall or a product withdrawal by the organization as a result of an allergen/s, or when trends in industry show contamination of similar products relating to allergens.



### 2.5.7 Environmental Monitoring (Categories BIII, C, I & K)

The organization shall have in place:

- a) Risk-based environmental monitoring program for the relevant pathogens, spoilage, and indicator organisms;
- b) Documented procedure for the evaluation of the effectiveness of all controls on preventing contamination from the manufacturing environment and this shall include, at a minimum, the evaluation of microbiological controls present and comply with legal and customer requirements.
- c) Data of the environmental monitoring activities including regular trend analysis.

**Environmental Monitoring** 





### 2.5.7 Environmental Monitoring (Categories BIII, C, I & K)





## **Environmental Monitoring**



Food Contact Surface - Inside Storage Tank

Food Contact Surface - Filler Nozzle

Food Contact Surface - Foil Lidding

Non-Food Contact Surface - Inside Door Filler Cabinet

Non-Food Contact Surface - Floor under Filler

Non-Food Contact Surface – Outside Storage Tank

Non-Food Contact Surface - Drain

Non-Food Contact Surface - Wall

Non-Food Contact Surface – Floor near Entrance

Non-Food Contact Surface – Cleaning Equipment

Non-Food Contact Surface – Hand Wash Sink

For Environmental Monitoring – Key Areas are Open Product and Filling/Processing Areas:

The priority will then be food contact surfaces, then surfaces that could contaminate product such as from condensation or from packaging contact surfaces.

Next will be filling equipment parts then other environmental areas.

These planning diagrams are provided to help you understand typical environmental surveillance.



### 2.5.7 Environmental Monitoring

- d) The environmental monitoring program shall be reviewed for continued effectiveness and suitability, at least annually, and more often if required, including when the following triggers occur:
- i. Significant changes related to products, processes, or legislation;
- ii. When no positive testing results have been obtained over an extended period of time;
- iii. Trend in out of specification microbiological results, related to both intermediate and finished products, linked to environmental monitoring;
- iv. A repeat detection of pathogens during routine environmental monitoring; and
- v. When there are alerts, recalls or withdrawals relating to product/s produced by the organization.



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# Environmental Monitoring Schedule

### **Standards for Clean Surfaces**



Food Contact Surface – Inside Storage Tank Food Contact Surface – Filler Nozzle Food Contact Surface – Foil Lidding Non-Food Contact Surface – Inside Door Filler Cabinet Non-Food Contact Surface – Cleaning Equipment Non-Food Contact Surface – Floor under Filler Non-Food Contact Surface – Outside Storage Tank Non-Food Contact Surface – Drain Non-Food Contact Surface – Wall	Weekly Weekly Weekly Weekly Weekly Wonthly Monthly Monthly	TVC Y&M Entero E.Coli	Target Levels < 100 < 10 Entero < 1 E.Coli < 1	Monthly Monthly Monthly Monthly Monthly Monthly Quarterly Quarterly Quarterly	Salmonella Listeria E.Coli O157 Staph aureus*	Target Levels Absent Absent Absent *Absent Contact *< 10 Non-
Non-Food Contact Surface – Floor near Entrance Non-Food Contact Surface – Hand Wash Sink	Monthly Monthly			Quarterly Quarterly		contact

a) In accordance with and in addition to clause 5.1 of ISO 22000:2018, as part of the organizations' commitment to cultivating a positive food safety and quality culture, senior management shall establish, implement and maintain a food safety and quality culture objective(s) as part of the management system. The following elements shall be addressed as a minimum:

Communication, Training, Employee feedback and engagement, and Performance measurement of defined activities covering all sections of the organization impacting on food safety and quality.

### ISO 22000:2018 clause 5.1 Leadership and Commitment

Top management shall demonstrate leadership and commitment with respect to the FSMS by:

- a) ensuring that the food safety policy and the objectives of the FSMS are established and etc.
- b) h) .....

### **Expected Behaviours of all Personnel**



- ✓ Contribute to company objectives
- √ Compliance with company procedures
- Correctly completing documentation and records as required by your role within the organisation
- ✓ Adhere to Hygiene rules and comply with expected personnel standards
- ✓ Report non-conforming products or equipment
- Report any issues or areas of concern that may affect product safety, authenticity, legality or quality
- √ Report any problems with pests
- ✓ Ensure site security procedures are followed and unknown visitors are challenged
- √ Adopt a 'clean as you go' policy
- ✓ Contribute to hygiene and housekeeping standards
- √ Make suggestions for improvement





















a) In accordance with and in addition to clause 5.1 of ISO 22000:2018, as part of the organizations' commitment to cultivating a positive food safety and quality culture, senior management shall establish, implement and maintain a food safety and quality culture objective(s) as part of the management system. The following elements shall be addressed as a minimum:

Communication, Training, Employee feedback and engagement, and Performance measurement of defined activities covering all sections of the organization impacting on food safety and quality.



FSMS 5.1 Leadership and commitment [Compatibility Mode]

Food Safety & Quality Management System

#### 5.1 Leadership and commitment

Top management demonstrate clear and visible commitment to the Food Safety & Quality Management System by establishing and implementing, then fully communicating and supporting its policies. procedures and objectives. Top Management is committed to continually improve the effectiveness of the Food Safety & Quality Management System by regular monitoring, review and pro-active actions.

Top Management has a total commitment to food safety and quality observing all legal, moral and ethical codes and this is the concern of every employee.

Top management demonstrate clear and visible leadership commitment by:

- Developing a Food Safety & Quality Culture within the organisation
- Establishing and implementing a Food Safety & Quality Policy compatible with the strategic direction of the organization
- Communicating and Maintaining the Food Safety & Quality Policy
- Establishing and implementing Food Safety & Quality Objectives compatible with the
- strategic direction of the organization
- Communicating and Maintaining the Food Safety & Quality Objectives
- Ensuring the integration of the Food Safety & Quality Management System requirements into business processes
- Conducting regular pro-active management reviews and communicating outputs.
- Communicating commitment to satisfying customer requirements including food safety,
- Communicating commitment to meeting applicable statutory and regulatory requirements related to food safety
- Supporting and planning the development and operation of the Food Safety & Quality Management System
- Ensuring the Food Safety & Quality Management System is maintained when changes are planned and implemented.
- Establishing documentation required for the effective development, implementation and updating of the Food Safety & Quality Management System and communicating pertinent information throughout the organisation.
- Providing the resources and training to achieve company Policies and Objectives
- Providing the infrastructure and work environment to meet company Policies and Objectives - Supporting other relevant management roles to ensure that the Food Safety Management
- System is effectively implemented
- Promoting an ethic of continuous improvement throughout the company.
- Directing and supporting persons to ensure the strict observation of all food safety and quality system procedures, the use of correct materials and equipment, recording and reporting of both standard and non-standard events and compliance with the company rules

Document Reference FSMS 5.1 Leadership and commitment Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### ood Safety & Quality Management System

- Providing the resources to ensure that the Food Safety & Quality Management System is evaluated and maintained
- Providing the resources to effectively implement a Food Safety HACCP plan
- Carrying out regular Management Reviews
- Implementing and maintaining Corrective Action, Preventative Action and Continuous
- Communicating effectively throughout the food chain from primary suppliers to end consumers including any relevant food safety information

#### Food Safety & Quality Culture

The company recognizes that a successful Food Safety & Quality culture is the product of individual and group values, attitudes, competencies and patterns of behaviour that determine the commitment to. and the style and proficiency of the Food Safety & Quality Management System. The site's senior management plan for the development and continuing improvement of food safety & quality culture.

Senior management are responsible for delivering a "It is how we do things here" food safety & quality culture by:

Leadership - starting from the top Demonstrating visible commitment

Effective communication of company philosophy and policy

Ensuring there is accountability from the top of the organization to the bottom

Developing employee confidence and mutual trust

Developing reward schemes including 'Employee of the Month' award

Ensuring all employees are accountable, engaged and understand the value of integrity and proactivity Developing an action plan for the development and continuing improvement of food safety & quality

#### Developing a Food Safety & Quality Culture

A successful food safety & quality culture can be achieved only by following safe working practices and procedures developed through effective hazard analysis, training and experience. In order to achieve these aims, a robust Food Safety Hazard Analysis Critical Control Points System (HACCP) has been introduced following a full hazard analysis of all food related operations. All instructions and control mechanisms within the Food Safety (HACCP) System are designed to control any risk to food safety.

To ensure success of this policy Senior Management are directly responsible for food safety and quality by ensuring adequate; organization and support, equipment and facilities, training and education of all employees, reviewing and auditing performance, and driving continuous improvement.

Document Reference FSMS 5.1 Leadership and commitment Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

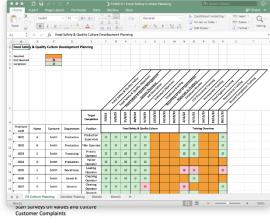




Food Safety & Quality Management System

Detailed organizational arrangements and food safety and quality responsibilities for all levels of management are contained in the food safety and quality manual and job descriptions.

Achievement of this policy involves all staff being individually responsible for the quality of their work, resulting in a continual improvement culture and working environment for all. All employees are provided with the food safety and quality training necessary to enable them to perform their tasks and are responsible for ensuring that they do so in a hygienic manner so that the safety of the food they handle is not put at risk. All employees are required to co-operate with any authorized person to ensure that customer, statutory and regulatory obligations are properly complied with.

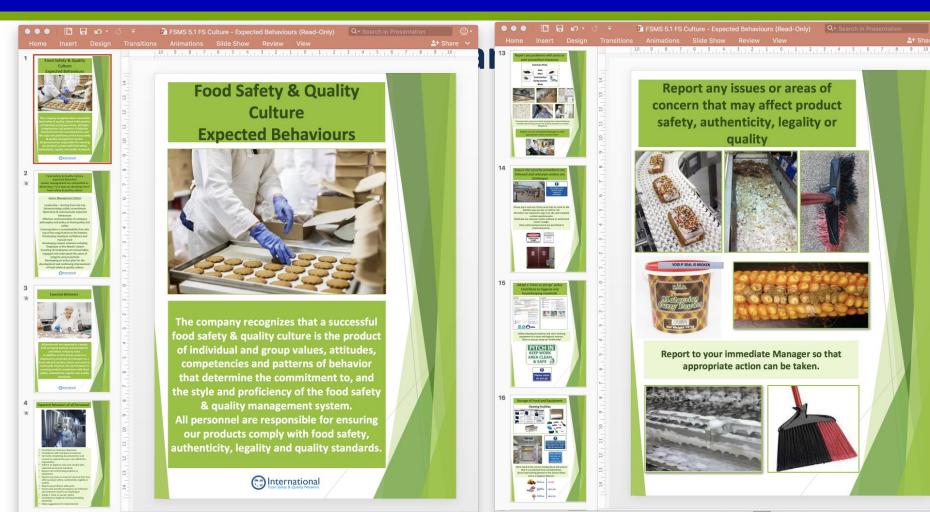


Document Reference FSMS 5.1 Leadership and commitment Revision 0 7th November 2023 Owned by: Technical Manager

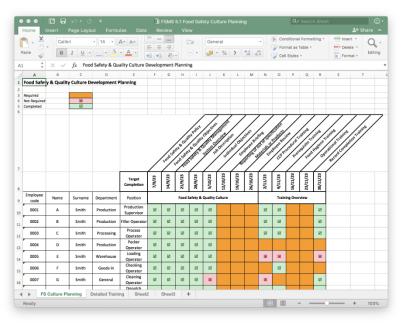
Authorised by: General Manager







b) The objective(s) shall be supported by a documented food safety and quality culture plan, with targets and timelines and included in the management review and continuous improvement processes of the management system.





### a) The organization shall:

- i. In addition to, and aligned with, clauses 5.2 and 6.2 of ISO 22000:2018, establish, implement and maintain a quality policy and quality objectives.
- ii. Establish, implement and maintain quality parameters in line with finished product specifications, for all products and/or product groups within the scope of certification, including product release that addresses quality control and testing.
- iii. In addition to, and aligned with, clauses 9.1 and 9.3 of ISO 22000:2018, undertake analysis and evaluation of the results of the quality control parameters, as defined above, and include it as an input for the management review; and
- iv. In addition to, and aligned with, clause 9.2 of ISO 22000:2018, include quality elements as defined in this clause, within the scope of the internal audit.



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### Food Safety & Quality Manag

#### 5.2 Food Safety & Quality Policy

The company's food safety and quality policy is to provide con services of the highest standards of performance and reliabilit the company will consistently satisfy the mutually agreed food and expectations of its customers, achieve business success ar are always safe to consume, conform to statutory and regulate of the FSSC 22000 Certification Scheme.

This is achieved through adoption of a Food Safety & Quality N containing food safety and quality policies, objectives and prorequirements and industry best practices so reflecting the conto customers and independent authorities.

The company recognises that a successful food safety and qua only by following safe working practices and procedures devel hazard analysis, training and experience. In order to achieve the Analysis Critical Control Points System (HACCP) has been intro hazard analysis of all food related operations. All instructions a within HACCP are designed to control any risk to food safety.

To ensure success of this policy Senior Management are direct safety and quality by ensuring adequate; organisation and supfacilities, training and education of all employees, internal and reviewing and auditing performance, and driving continuous in organisational arrangements and food safety responsibilities fi are contained in the food safety and quality manual.

Achievement of this policy involves ensuring all staff have the related to food safety and quality and being individually respo their work, resulting in a continual improvement culture and v All employees are provided with the food safety and quality tr them to perform their tasks and are responsible for ensuring t manner so that the safety of the food they handle is not put at

Document Reference FSMS 5.2 Food Safety & Quality Policy Revision 0 7th November 2023 Owned by: General Manager Authorised by: Managing Director



### Food Safety & Quality Management System

#### Food Safety & Quality Objective Planning

The company's aim is to provide competitive products and services of the highest standards of performance and reliability. By achieving this goal, the company will consistently satisfy the mutually agreed needs and expectations of its customers, achieve business success and ensure that our products are always safe to consume, conform to statutory and regulatory requirements and those of the international standard ISO 22000.

Top Management establish and maintain objectives that are consistent with the Food Safety & Quality policy for the FSQMS at relevant functions and levels. The objectives of the FSMS are measurable (where possible) and take into account applicable food safety and quality requirements, including statutory, regulatory and customer requirements. Relevant objectives are prescribed in job descriptions and reviewed during staff performance appraisals.

Performance against prescribed objectives is monitored and verified by Top Management during Management Review and Key Performance Indicators during Management meetings and updated as necessary.

For each objective, Top Management define and communicate:

- the objective and what is required to be achieved
- the resources required
- responsibility
- target completion dates
- evaluation criteria



### Food Safety & Quality Management System

#### The Company Food Safety & Quality Objectives are:

- a) To maintain an effective Food Safety & Quality Management System complying with FSSC 22000 Certification Scheme.
- b) To ensure that all food is produced, stored, handled and transported in accordance with relevant customer, regulatory and statutory food safety and quality requirements.
- c) To ensure that all premises used for the preparation of food are registered with the appropriate Local Authority.
- d) To ensure that all risks associated with food provision are reduced to a tolerable level
- e) To ensure that all food handlers have received basic food hygiene training
- f) To ensure at all times that there is an authorised release of products only when they have been confirmed as complying with agreed specifications.
- g) To ensure at all times that product released into the market place complies with relevant customer, statutory and regulatory requirements.
- h) To endeavour, at all times, to maximize customer satisfaction and reduce complaint levels by 10% year on year.
- i) To pro-actively promote and encourage a culture of continuous improvement within the company by measuring performance and taking action meet the following criteria:
  - > 98% food safety audit score
  - 100% investigation of incidences of ill health or injury.
  - < 1% downgraded product
  - > 99.9% compliance with microbiological criteria
  - No major GMP non-conformances

Managing Director

Managing Director

Date

7th November 2023

Document Reference FSMS 6.2 Food Safety & Quality Objectives Revision 0 7th November 2023 Owned by: General Manager Authorised by: Managing Director

















#### Food Safety & Quality Management System

#### 9.2 Internal audit

The company has established, documented and implemented an internal audit system, which is maintained in order to verify the Food Safety & Quality Management System is effectively implemented and maintained and complies with planned arrangements, legislation and the FSSC 22000 Certification

The scope of the Internal Audit System includes all product categories, processes, activities conducted, production sites and any outsourced activities that can affect the requirements of the Food Safety & Quality Management System.

Top Management has a total commitment to the Food Safety & Quality Management System and provides adequate resource in the form of trained and qualified personnel to carry out a comprehensive Internal Audit Schedule. Internal audits are performed to confirm that management systems are working effectively and to promote continuous improvement. Our philosophy is simply audit, review and improve.

#### Internal Audit Schedule

The Internal Audit Schedule is planned annually and is designed to comprehensively cover all areas of the Food Safety Management system including procedures, policies and activities.



Document Reference FSMS 9.2 Internal Audits & Inspections Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

#### Food Safety & Quality Management System

The Technical Manager draws up the Internal Audit Schedule based on the following criteria:

- Importance of the processes concerned
- Changes in the FSMS
- Results of monitoring, measurement
- Risk associated with the procedure or activity
- Results of Previous audits
- Number of Corrective and/or Preventive Actions raised or outstanding
- Customer Complaint Analysis
- Results of the Management Review

The Technical Manager is responsible for allocating the audits as per the Schedule to an independent Auditor. For each audit a specific audit checklist is issued to the Auditor specifically outlining the scope of the audit, audit criteria and a list of items to be audited (Including follow up of previous audit findings and corrective actions).

Internal Auditors are responsible for carrying out the procedure as described below:

#### General Procedure detailing the correct method for completing internal department audits

- 1. The site internal audit schedule determines which audits are to be carried out. The auditor must make sure they have the correct audit checklist form to carry out the audits.
- 2. A date and time for the audit to take place must be agreed with the department. A representative from the department must be present during the audit.
- 3. The auditor uses a specific audit form and checklist designed by the Technical Manager for each department or area.
- 4. The audit report is rated based on the following criteria:
  - RED Major Non-conformance(s) identified and imminent risk. Immediate documented Corrective Action is required and a written follow-up necessary.
  - AMBER Minor Non-Conformance(s) identified there is a potential risk. The Corrective Action required is documented and a verbal follow up is required.
  - GREEN Satisfactory or Positive with comments or suggestions for improvement
- 5. When the audit is completed and the report given a rating. Positive as well as negative comments are included in the report. Major Non-conformities are immediate highlighted to the department manager, who will is responsible for the corrective and preventive action without undue delay.

Document Reference FSMS 9.2 Internal Audits & Inspections Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



#### Food Safety & Quality Management System

- 6. The Department Manager reviews the audit findings with the auditor and agrees timescales to complete corrective action for the major and minor non-conformances.
- 7. The Department Manager then signs and retains a copy of the report which includes details of the non-conformances, proposed corrective actions and the agreed time scale to complete the corrective actions. If the audit rating is red then an immediate corrective action plan is reported to the Technical Manager.
- The Departmental Manager is responsible for documenting the corrective actions taken for all the non-conformances raised.
- 9. Completion of the corrective and/or preventive actions is checked on the next audit. Outstanding corrective actions completed are signed off whilst any uncompleted actions are escalated to the

The Technical Manager reviews all audit reports, the non-conformances raised and the proposed corrective actions. Should it be deemed necessary, usually when a major non-conformance has been found, the Technical Manager will schedule another audit to ensure timely corrective action has been completed. In this case, the Internal Audit Schedule will be revised and reissued.

Document Reference FSMS 9.2 Internal Audits & Inspections Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





- b) Quantity control procedures, including for unit, weight, and volume, shall be established, and implemented, to ensure products meet the applicable customer and legal requirements. This shall include a program for calibration and verification of equipment used for quality and quantity control.
- c) Line start-up and change-over procedures shall be established and implemented to ensure products, including packaging and labelling, meet applicable customer and legal requirements. This shall include having controls in place to ensure labelling and packaging from the previous run have been removed from the line.



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FSMS 8.7 Control of monitoring and measuring [Compatibility Mode]





#### Food Safety & Quality Management System

#### 8.7 Control of monitoring and measuring

#### Measuring and Monitoring

The company has identified and implemented the monitoring, measurement, and analytical processes required to maintain the Food Safety & Quality Management System.

Measurement and Monitoring Procedures have been established, documented and implemented to meet Hazard Control Plan, Quality Control Plan and PRP requirements.

Hazard Control Plan and PRP requirements are defined in the HACCP Manual and individual PRP procedures. The establishment of Hazard Control Plan control measures, monitoring procedures, critical control points, control limits. OPRPs, action criteria, corrections and corrective actions are documented in Hazard Control Plans and the HACCP Manual.

Quality requirements for measurement and monitoring have been designed using a similar approach to hazard analysis in identifying the monitoring, measurement, and analytical processes required to maintain product conformity to requirements, All the monitoring, measurement, and analytical processes required have been planned by following the process below which identifies the specific processes at each stage of manufacturing:

A flow diagram is prepared of the steps in the process. Stage 1

An analysis is conducted by identifying control options Stage 2 The Control Points in the process are identified

Stage 3

Monitoring, measurement and analytical limits which must be met to ensure control are established

Stage 4 Measurement, monitoring and analysis procedures are established and scheduled for

Stage 5 The corrective action to be taken when limits are exceeded are established. Stage 6

All procedures and records appropriate to the monitoring, measurement and analysis processes including acceptable limits at each stage are documented and implemented in a Product Quality Control Plan. Methodology and Standard tests are specified in the Industry Code of Practice.

Stage 7 Verification that the monitoring, measurement and analysis processes are working

effectively is carried out.

This system considers each stage of the process from ingredient intake to product despatch. Releases of ingredients, in-process and finished product are controlled and documented by authorised personnel. The result of this process is a formulated Quality Control Plan summarising the control points, monitoring procedures, action limits, responsibilities and authority and corresponding records.

Document Reference FSMS 8.7 Control of monitoring and measuring Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



#### Food Safety & Quality Management System

The experience, qualifications and training of authorised personnel engaged in monitoring, measurement or analysis is documented in their personnel and training file. All test results are recorded as evidence of conformity with the appropriate acceptance criteria. The results of monitoring of OPRPs and at CCPs are evaluated by authorised designated persons who are competent and have the authority to initiate corrections and corrective actions.

Process characteristics monitored include process and storage temperatures, pressures and cleaning chemical concentrations as listed in the Hazard Control Plans. PRP(S) and the Product Quality Control

Product characteristics are monitored, measured and analysed as per the Hazard Control Plan and Product Quality Control Plans to ensure compliance with specifications and regulatory requirements and suitability for human consumption. Key chemical, microbiological and physical parameters are specified such as temperature, water content, acidity, weight, and acceptable bacteria levels.

Test and Inspection results for all analyses are recorded and reviewed. Routine shelf life assessment is carried to ensure that product meets the criteria laid down in the product specification. Records and results validate that the product meets the minimum shelf life indicated on the product. The Corrective Action to be taken when results are unsatisfactory or adverse trends are identified in Hazard Control Plans and Product Control Plans and are recorded. Statistical techniques are used to monitor process capability for example in product weight control.

The company has a policy of providing sufficient resources to ensure that the Laboratory staff, procedures and facilities meet the principles of the ISO 17025.

These requirements include where appropriate control over the design of drainage and ventilation systems, access and security of the Laboratory, movement of personnel, protective clothing, the process of obtaining samples and disposal of Laboratory waste.

Product is only released by to customer when it has been confirmed by authorised laboratory personnel that the product has met all of the acceptance criteria as defined in the Hazard Control Plans and the Product Quality Control Plan. The dispatch of product to customer does not proceed if the product fails to meet the acceptance criteria, in this case a Non-conformance notification is raised, the product is quarantined and the process rectified. Monitoring, measurement and analysis data are continuously reviewed in order to validate the effectiveness of controls applied to the production processes.

Company approved third party laboratories are used for more specialized analysis.

Document Reference FSMS 8.7 Control of monitoring and measuring Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### Food Safety & Quality Management System

#### Calibration of Monitoring and Measuring Equipment

The company has established, documented and implemented a system for controlling monitoring and measuring equipment, which is maintained in order to ensure conformity to product requirements in accordance with international standards and best industry practice. The processes that contribute to meeting the requirements of these standards have been determined.

The scope of the system includes all equipment used for monitoring and measuring activities related to the PRP(s), product quality control plan and the hazard control plan.

When measuring and monitoring equipment is used evidence is provided in the form of equipment specification, commissioning records and calibration records to demonstrate the equipment is conforms

The company maintains this procedure for the calibration and control of monitoring and measuring equipment on site.

An inventory of all monitoring and measuring equipment critical to product quality and safety or whose results can affect the conformity of product requirements is maintained by the Engineering Manager.

Each piece of equipment is labelled with a unique identification code which is also used to identify it on all relevant documentation including calibration certificates.

All of the Measuring and Monitoring Equipment is subject to regular servicing and preventative maintenance as per the Preventative Maintenance Schedule for Critical Equipment. The Equipment is also covered by maintenance contracts with the supplier. Records of all work including maintenance. servicing and calibration of all equipment are maintained and retained on site for a minimum of 3 years.

All measuring and monitoring equipment on site is used and maintained in accordance with the instructions laid down in the manufacturer's handbooks/manuals. Operating and maintenance instructions are displayed or held next to the equipment. Monitoring and measuring equipment is safeguarded from maladjustment as only trained, authorized personnel are permitted to use it. All authorised personnel are fully trained in the use of equipment and records maintained in their personal

All measuring and monitoring equipment is protected from damage and deterioration. This is normally by housing them away from the work environment or if this is not possible, in a protective stainless steel case. Any equipment suffering damage or that gives suspect results or malfunctions or is otherwise shown to be defective or unfit for use is immediately removed from service.

Document Reference FSMS 8.7 Control of monitoring and measuring Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager







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PRP 17.2 Product Labelling Controls [Compatibility Mode]



#### **Product Labelling Controls**

#### Introduction

The company has established a programme of prerequisites for product labelling controls. All product labels are approved by the Technical Manager who ensures that the label meets product specifications and that the finished product label is in accordance with customer specific requirements, where specified, and the applicable food regulations in the country manufacture and of intended sale. The Operations Manager is responsible for ensuring that the correct approved product label is applied to finished products.

#### Approval of Product Labels

The Technical Manager is responsible for ensuring that product labels comply with legal requirements and contains information to enable the safe handling, display, storage and preparation of the product within the food supply chain or by the customer. The Technical Manager verifies that the labeling information is correct labelling is correct based on the product recipe and ingredient specifications including:

- ingredient and allergen labeling based on the product recipe and ingredient specifications
- storage conditions
- preparation and serving instructions
- customer information meets legislation for the destination country

Labelling information is reviewed whenever there are changes to:

- the product recipe
- raw materials
- supplier of raw materials
- country of origin of raw materials

For all products, the New Product Development Manager validates the product formulation and product process are capable of meeting any product claims prior to launch and verifies that ingredient and allergen labelling is correct based on the product recipe.

Where the label information is the responsibility of a customer or third party the New Product Development Manager provides information to ensure labelling is correct and also communicates changes which may affect label information.

For each delivery of printed packaging or labels the QA Staff are required to check the printed packaging or labels against 'Approved Samples' provided by the Technical Manager prior to release.

Document Reference PRP 17.2 Product Labelling Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### **Product Labelling Controls**

#### Product Label Prerequisites

Based on risk assessment product labelling control requirements considering any hazards associated with the labelling systems are documented. Product labelling system prerequisites are as follows:

- Traceability records by Label and Expiry date are maintained and retained for all product
- Procedures are in place to check product labelling and coding at regularly intervals as well as every product change over.
- Copies of labels and coding are retained by the Laboratory for traceability purposes.
- Trained production personnel carry out label and date checks, every check is countersigned by a
- second check so that two members of staff verify that the label and code are correct. - It is potentially as dangerous to mix allergen product packaging with non-nut packaging. If a nut
- free packaging is filled with a nut product there is no indication to the customer that the product contains nuts.
- All allergen packaging is kept in the designated locked areas which is additionally identified by red lines and hatched on the floor and walls.
- All allergen packaging is returned to that area once production has finished.
- Only the Shift Manager and Senior Shift Managers have keys to this area.
- On no account is any allergen free packaging stored in the allergen packaging designated area - All allergen packaging is clearly marked by a prominent label and sealed in a red coloured bag
- If there is packaging which could be confused with an allergen product then this will be treated
- in a similar way and will be packed in sealed blue bags.

#### **Process Specifications**

The Technical Manager translates the product specification for every new product into a Process Specification. The process specification details manufacturing instructions to be followed and contains recipes as defined in customer specifications.

#### The Process Specification describes:

Ingredient Details including unique identification code Packaging Details including unique identification code Specific Label requirements Explicit date coding instructions Bar Code requirements Specific process or production conditions

Recipes

Mixing instructions Equipment process settings

Document Reference PRP 17.2 Product Labelling Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### **Product Labelling Controls**

Processing times and temperatures Cooling times and temperatures Criteria for product acceptance

Specific test or analysis procedures

Prerequisite programmes

Relevant operational procedures/Work Instructions

HACCP plans including Critical Control Point monitoring requirements and acceptable criteria

The process specification is authorised by the Technical Manager and issued to both the laboratory and production departments.

Product checks are carried out at regular intervals during the packaging run, following packaging changes and when changing batches of packaging materials to ensure correct packaging materials are used and the code is correct.

#### Product Labelling Checks

Procedures are in place to ensure that product is being packed into the correct packaging with the

- ✓ At start of packing
- ✓ During the production run at a frequency based on volume and risk
- ✓ When batches of packaging materials are changed
- ✓ When label reels are changed
- ✓ At the end of the production run

QA checks include verification of the following printed information where appropriate:

- ✓ Date coding
- ✓ Batch coding ✓ Label
- ✓ Quantity declared
- ✓ Pricing
- ✓ Bar code
- ✓ Country of origin

Packaging materials are supplied to packing lines such that that only the packaging for immediate use is available at the packaging machines. Traceability records by Label and Expiry date are maintained and retained for all product batches. Procedures are in place to check product labelling and coding at regularly intervals as well as every product change over. Copies of labels and coding are retained by the Laboratory for traceability purposes on PRP 17.2A Label Retention and Check Record.

Document Reference PRP 17.2 Product Labelling Controls Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager









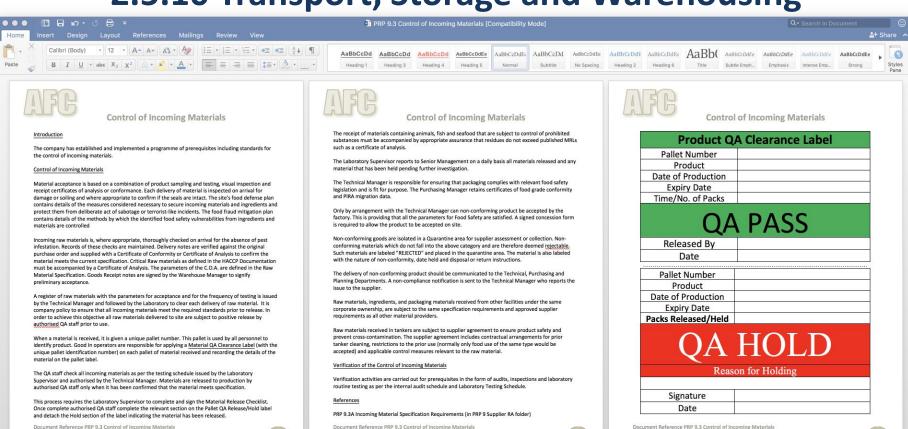
English (UK)

# 2.5.10 Transport, Storage and Warehousing (All Food Chain Categories)

A requirement to establish, implement, and maintain a procedure and specified stock rotation system that includes FEFO (First Expired, First Out) principles in conjunction with the FIFO (First In, First Out) requirements. For food chain category CO, in addition to ISO/TS 22002-1:2009 clause 16.2 Warehousing requirements, where applicable, there needs to specified requirements in place that define post-slaughter time and temperature for chilling or freezing of the products.

For food chain category FI Retail /Wholesale/ E-commerce, in addition to BSI/PAS 221:2013 clause 9.3, the organization shall ensure that product is transported and delivered under conditions which minimize the potential for contamination.





Revision 0 21st November 2023

Authorised by: General Manager

Owned by: Technical Manager

Revision 0 21st November 2023

Authorised by: General Manager

Owned by: Technical Manager







Revision 0 21st November 2023

Authorised by: General Manager

Owned by: Technical Manager

PRP 16.3 Appendix - Dispatch and Distribution Procedure [Compatibility Mode]



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#### Dispatch and Distribution

#### Introduction

The company has established a programme of prerequisites to ensure the effective Dispatch and Distribution operations.

Should the site be required to sub-contract any dispatch or distribution that may affect product conformity to the defined standards of the Food Safety Management System then the Distribution Manager will assume control over this process.

#### Procedure

Instruction for delivery of finished product is sent in the form of a Purchase Order from the Customer to the Sales Manager.

The Sales Manager authorises the order and passes it on to the Planning Manager who arranges production and then lialses with the Dispatch Manager to arrange vehicle loading and the Distribution Manager to arrange delivery.

The Dispatch Manager checks the product stocks and arranges to load the vehicle using the Sales Order Copy as a checklist.

The Distribution Manager schedules a vehicle to be loaded and arranges a delivery time with the customer. The Distribution Manager arranges a delivery driver and provides the driver with the necessary documentation, including a delivery note and specific delivery instructions.

The driver inspects the vehicle for damage ethen ensures the vehicle is cleaned prior to collecting the product from the Warehouse. The driver collects the ordered product from the Warehouse at the scheduled time. The Dispatch Manager ensures the vehicle is inspected for cleanliness and to ensure there is no risk of contamination prior to loading. The Dispatch Manager is responsible for ensuring that vehicle loading is carried out at the correct temperature and that products are evenly and securely spaced to optimize product conditions and reduce the risk of product damage.

Chilled distribution vehicle trailers are fitted with refrigeration to maintain temperature permanently between 1 and 5° C. For frozen distribution vehicle trailers are fitted with refrigeration to maintain temperature permanently below .18° C. Thermograph data loggers are installed on every vehicle and are fitted with alarms to sound if this temperature is exceeded. Ambient distribution vehicles are checked to ensure they are dry and that there is no likely contamination risk to the product.

Document Reference PRP 16.3 Appendix Dispatch and Distribution Procedure Revision 0 7th November 2023

Owned by: Technical Manager Authorised by: General Manager





#### Dispatch and Distribution

After loading the Dispatch Manager checks the vehicle and load with the driver. A Delivery checklist is completed with confirmation of the following:

- Date and time vehicle was cleaned
- The vehicle was inspected prior to loading and found to be clean
- The vehicle was inspected prior to loading and found to be undamaged and free from
- The vehicle was inspected after loading and the vehicle and product were in a satisfactory
- condition and at the correct temperature.

   The load has been checked and the correct products and quantities have been loaded and
- the load has been checked and the correct products and quantities have been loaded and the load is secure.

When the delivery checklist is completed and it has been confirmed that the product loaded matches both the Sales Order Copy and the Delivery Note then the Dispatch Manager seals the vehicle with a tamper-evident closure and records the closure tag number on the delivery checklist.

The driver delivers the product to the Customer as per delivery instructions from the Distribution Manager at the scheduled time. Any delays are reported to the Distribution Manager who communicates the delay to the customer.

In the case of vehicle or refrigeration equipment breakdown the distribution refrigeration breakdown procedure is followed. Product is checked to ensure it is still within the acceptable temperature limits and transferred to an alternative vehicle, if not it is returned to site for cooling and assessment by the Technical Manager. All incidence of vehicle or refrigeration equipment breakdown is recorded and the corrective action taken documented.

When a third party is used for the distribution of products the same process applies, however the third party is treated as a supplier and subject to the Supplier Approval Procedure.

#### Responsibility

The Dispatch Manager is responsible for managing the Warehouse and Vehicle loading and ensuring that the Warehouse. The Dispatch Manager is responsible for ensuring the Warehouses and the Products, Raw Materials, and Packaging contained within them are secure, especially when they are not in use.

The Distribution Manager is responsible for providing an on-time delivery service of product to customer and for customer liaison on deliveries and amendments and for scheduling distribution movements. This also includes responsibility for managing third party distribution.

Document Reference PRP 16.3 Appendix Dispatch and Distribution Procedure Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





Dispatch and Distribution

#### References

Driver's Handbook Distribution Breakdown Procedures PRP Prerequisite Programmes

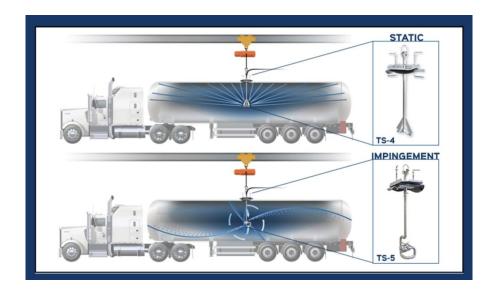
Document Reference PRP 16.3 Appendix Dispatch and Distribution Procedure Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





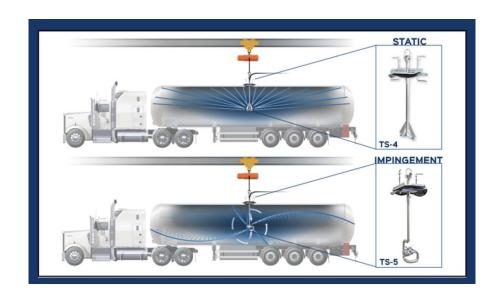
- d) Where transport tankers are used, the following shall apply in addition to clause 8.2.4 of ISO 22000:2018:
- i) Organizations that use tankers for transportation of their final product shall have a documented risk-based plan to address transport tank cleaning.

••••





ii) For organizations receiving raw material in tankers, the following shall be included in the supplier agreement as a minimum to ensure product safety and prevent cross-contamination: tanker cleaning validation, restrictions linked to prior use and applicable control measures relevant to the product being transported.





# 2.5.11 Hazard Control and Measures for Preventing Crosscontamination (ALL FOOD CHAIN CATEGORIES, EXCLUDING FII)

For food chain categories BIII, C and I, Production of food packaging and packaging materials, there are SPECIFIC requirements for packaging used to impart or provide a functional effect on food such as shelf life extension.

For food chain category CO, Processing of perishable animal products, in addition to ISO/TS 22002- 1:2009 10 Measures for prevention of cross-contamination clause 10.1 General requirements there needs to be specified requirements for an inspection process at lairage and/or at evisceration to ensure animals are fit for human consumption.

For food chain category D Animal Feed Production, the following requirement applies in addition to ISO/TS 22002- 6:2016 clause 4.7: The organization shall have in place procedures to manage the use of ingredients/additives that contain nutrients components that can have an adverse animal health impact.



### 2.5.11 Hazard Control and Measures for Preventing Crosscontamination

- d) For all food chain categories, excluding FII, the following requirements relating to foreign matter management apply, in addition to clause 8.2.4 (h) of ISO 22000:2018:
- i. The organization shall have a risk assessment in place to determine the need and type of foreign body detection equipment required. Where the organization deems no foreign body detection equipment is necessary, justification shall be maintained as documented information. Foreign body detection equipment includes equipment such as magnets, metal detectors, X-ray equipment, filters, and sieves.
- ii. A documented procedure shall be in place for the management and use of the equipment selected.
- iii. The organization shall have controls in place for foreign matter management including procedures for the management of all breakages linked to potential physical contamination (e.g., metal, ceramic, hard plastic).

# 2.5.11 Hazard Control and Measures for Preventing



The company has established, implemented a programme of prerequisites for the site, which is maintained in order to ensure effective operation of the Food Safety Management system.

The scope of the Prerequisite programmes includes all products manufactured on site and activities conducted on site.

Hazard Control measure Critical limit Monitoring procedure

#### **HACCP Prerequisite Programmes**

The following standards have been implemented as prerequisite programmes prior to Hazard Assessment-

nazaru	Control measure	Citical illilic	Worldoning procedure
Allergens	Allergen Control Policy	No deviation permitted	Supervision of Production Monitoring of allergen cleans by ATP
		Specific swab	& ELISA swabs
		limits	& ELISA SWADS
		minica	
Chemical -	Conductivity meter	<5 millisiemens	PLC will continue flushing until set
Cleaning	controlling rinse		point is met.
Chemicals	duration		
Chemical -	Physical breaks	No deviation	Flow plate sensors monitor physical
Cleaning	between product and	permitted	break.
Chemicals	cleaning chemicals		
Chemical -	Physical breaks and	No deviation	Supervision of Production
Food Additives	cleaning between	permitted	
	product	· ·	
Chemical -	Nut Control Policy	No deviation	Supervision of Production
Aflatoxins	Physical breaks and	permitted	
	cleaning between		
	product		
Chemical -	Recipe Control	No deviation	Supervision of Production
Vitamins	Physical breaks and	permitted	Mass balance of product and raw
	cleaning between	·	materials
	product		
Chemical -	Hygienic design of plant	No deviation	Hygiene and Housekeeping Audits
Lubricants	and equipment	permitted	Supervision of Production
	Only Food Grade		
	Lubricants used in		

Document Reference PRP 2 HACCP Prerequisite Programmes Revision 0 7th November 2023

Owned by: Technical Manager Authorised by: General Manager



	factory		
Chemicals General	Controlled by	No deviation	Hygiene and Housekeeping Audits
	segregated secure	permitted	Supervision of Production
	storage of chemicals		
Chemical &	Stationary Policy	No deviation	Hygiene and Housekeeping Audits
Physical -	Stationary Issuing and	permitted	Supervision of Production
Physical -	Retrieval procedure		
Stationary e.g.			
Metal Detectable			
pens			
Microbiological -	Cleaning of equipment	ATP testing	Temperature, detergent
Dirty Equipment		Rinse < 150	concentration, time set points all
		Swab < 100	confirmed by PLC
Microbiological-	Fogging	No deviation	Random testing by ATP swab  Microbiological Exposure plates
Environmental	Progging Drain cleaning	no deviation permitted	Swabs of drains and floor
pathogens	Floor cleaning	permitted	Hygiene and Housekeeping Audits
patriogens	High level cleaning		nygierie and nousekeeping Addits
	Air Filtration		
	Pest Control Policy and	No deviation	Pest Control Contract
Microbiological	Procedures	permitted	
and Physical -		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Pacts			
	Hygienic design of	No deviation	Hygiene and Housekeeping Audits
Microbiological	building.	permitted	Supervision of production
and Physical	No wooden pallets in		
Wood	process or production		
*******	areas		
Microbiological	Deboxing Procedure	No deviation	Hygiene and Housekeeping Audits
and Physical -	No cardboard permitted	permitted	Supervision of production
and Physical -	in process or production		
Cardboard	areas		
Discolard	Glass and Perspex Policy	No deviation	Critical glass/perspex register and
Physical -	Breakage report	permitted	inspection
Glass/Perspex			
	Ceramics Policy	No deviation	Critical ceramics register and
Physical -Ceramics			

Document Reference PRP 2 HACCP Prerequisite Programmes Revision 0 7th November 2023 Owned by: Technical Manager

Authorised by: General Manager





HACCP	Prereau	iisite	Progr	rammes
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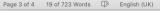
	Personal Hygiene Policy	No deviation	Hygiene and Housekeeping Audits	
Physical -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	permitted	Supervision of Production	
Hair				
Physical - Foreign bodies	Hygienic design of Equipment & Buildings Controlled maintenance Clean as you go policy	No deviation permitted	Hygiene and Housekeeping Audits weekly	
Physical - Jewellery & Personal effects	Personal Hygiene Policy	No deviation permitted	Hygiene and Housekeeping Audits Supervision of Production	
Physical - Packaging materials	Incoming goods policy Incoming goods procedure	No deviation permitted	Hygiene and Housekeeping Audits Supervision of Production	
Physical - Cleaning Equipment and Materials	Visual check of equipment prior to use. No equipment with damage to be used.	No deviation permitted	Hygiene and Housekeeping Audits Supervision of Production	
Physical/ Chemical/ Microbiological General	Controlled by the hygienic design of equipment & buildings, controlled preventative maintenance, clean as you go policy and general GMP procedures and GMP training	No deviation permitted	Hygiene and Housekeeping Audits Supervision of Production	
Biological	Note FSSC 22000 6 Additional requirement	Specified requirements for an inspection process at lairage and/or at evisceration to ensure animals are fi for human consumption		

#### Verification of Prerequisite Programmes

All Prerequisite programmes are approved by the Food Safety Team, their relevance and the reason for their inclusion is documented in the Hazard analysis including details of why the PRP is appropriate to the organisation and the control of food safety hazards.

Document Reference PRP 2 HACCP Prerequisite Programmes Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

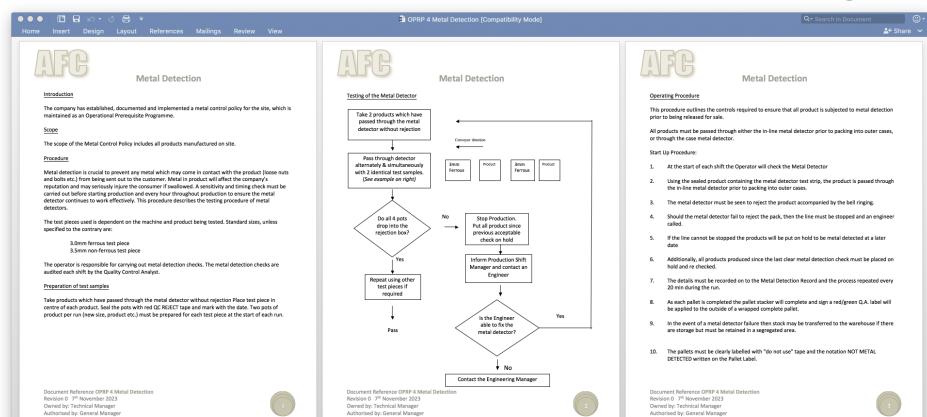








# 2.5.11 Hazard Control and Measures for Preventing









#### Introduction

The company has establishe materials on site, which is n dealt with specifically in OPI

#### Scope

The scope of the Brittle Mat plastic, polycarbonate, and activities conducted on site. to be familiar with and follo

#### Procedure

This procedure has been im

Use of brittle material on th materials to brittle material production areas by staff.

When it is impossible to rep factory production areas, m

These items must be checke production and at the end of must be recorded on a Britt

Any breakage of brittle mat Material Breakage Record. I by reporting directly to a M

#### Brittle Material Used in Equ

Brittle Material used on foo must be replaced where pothe production process.

Brittle Material component: must be replaced with suita

Document Reference OPRP Revision 0 7th November 2 Owned by: Technical Manag Authorised by: General Mar



#### Glass & Brittle Material Breakage Procedure

#### Introduction

The company has established, documented and implemented a Glass & Brittle Material Breakage Procedure for the site, which is maintained as an Operational Prerequisite Programme.

The scope of the Glass & Brittle Material Breakage Procedure includes all products handling areas on

#### Glass & Brittle Material Breakage Procedure

This Glass and Brittle Plastic Breakage procedure applies to all Glass and Brittle Plastic in the factory manufacturing and storage areas. This procedure is to ensure that product contamination is avoided.

- In the event of a glass or brittle plastic breakage production must be stopped immediately.
- A Shift Manager must be informed immediately.
- All Personal must remain at their work place until the Shift Manager arrives to instruct and supervise the relevant staff as per this procedure.
- The area must be quarantined.
- Any pieces of glass or brittle plastic must be removed. 5.
- Collect all the pieces of glass or brittle plastic and place into a strong labelled disposable plastic bag and pass to the Technical Manager for further investigation.
- The surrounding area must be cleaned with a dedicated red broom and dedicated red dustpan and the contents placed into another strong disposable bag together with the red broom and red
  - The bag must be safely discarded in the outside waste container.
- All staff must be checked for glass or brittle plastic debris in their footwear and protective
- All protective clothing must be changed.
- The Engineering Manager must be informed of the breakage so that repairs may be carried out
- All Products in the surrounding area of the glass or brittle plastic breakage must be quarantined immediately and disposed of safely.
- An Investigation must be carried out to ascertain which products have been packed or processed since the previous satisfactory glass audit in the affected area in order to assess the risk of any broken glass or brittle plastic having contaminated the product.
- Record all the actions taken must be recorded on the glass/brittle plastic breakage report.
- 15. If there is any risk that product may have been despatched containing glass then Senior Management must be informed immediately.
- If any 'at risk' product is still on site it must be put it on hold pending a full investigation.

Document Reference OPRP 8 Glass & Brittle Material Breakage Procedure Revision 0 7th November 2023

Owned by: Technical Manager







#### Glass & Brittle Material Breakage Procedure

- The equipment and area must be cleaned
- A member of the Senior Management team must inspect the equipment and area prior to starting production.
- The Senior Manager must then sign off the breakage report to confirm that they have authorised production to start again.

The glass/ plastic breakage report must be given to the Technical Manager.

If glass or plastic are found to be missing or damaged a Shift Manager must be informed immediately and this must be recorded onto the appropriate inspection record and a breakage log completed.

All breakage incidents must be recorded in the glass/brittle material breakage log and must include products contaminated (if any), date, time, place and actions taken.

#### Validation and Verification of Glass & Brittle Material Breakage Procedure

All operational prerequisite programmes are approved by the Food Safety Team, their relevance and the reason for their inclusion is documented in the Hazard Assessment including details of why the Operational PRP is appropriate to the organisation and the control of food safety hazards.

#### References

Hazard Control Plan Operational Prerequisites Manual



be guarantined and clearly

cing, isolation and holding

d immediately (cordoned ed immediately from the I for breakages. This

in-depth inspection and

kage Record must be ne area prior to ispatched until cleared by

reas such offices, canteens, pection of the surrounding isposed of and the incident

am, their relevance and the details of why the ety hazards.













#### Control of Knives



#### Control of Knives

a) The register will form a checklist - each must be inspected daily for damage and any issues reported. Each item must be checked weekly by a Shift Manager and this check recorded on the knife register.

OPRP 7 Control of Brittle Materials [Compatibility Mode]



#### Control of Knives

Before Restarting Production:

♣+ Share ∨



#### Control of Brittle Materials

#### Introduction

The company has established, documented and implemented a procedure for the control of brittle materials on site, which is maintained as an operational prerequisite programme. The control of glass is dealt with specifically in OPRP 2 Glass Policy.

#### Scope

The scope of the Brittle Materials procedure includes the control of 'glass-like materials' (applies to hard plastic, polycarbonate, and other similar materials) and ceramics in all food handling on site and activities conducted on site. All employees including agency staff, visitors and contractors are required to be familiar with and follow the Brittle Material procedure.

#### Procedure

This procedure has been implemented to ensure that products are free from contamination.

Use of brittle material on the manufacturing site must be minimised. Wherever possible, alternative materials to brittle material must be used. No brittle material must be allowed to be taken into production areas by staff.

When it is impossible to replace a brittle material, a comprehensive list of all brittle materials in the factory production areas, must be compiled on a departmental basis.

These items must be checked every day by the Supervisor responsible for the department at the start of production and at the end of production to ensure they are not damaged. The results of the inspection must be recorded on a Brittle Material Register which must be signed off.

Any breakage of brittle material occurring must be reported and dealt with immediately using the Brittle Material Breakage Record, Responsibility for action is carried out by the person who finds any breakage by reporting directly to a Manager.

#### Brittle Material Used in Equipment

Brittle Material used on food vessels such as 'sight glass' in viewing ports and vessel level indicators must be replaced where possible with suitable alternative materials which are capable of withstanding the production process.

Brittle Material components which are present in equipment such as temperature recorders and clocks must be replaced with suitable non-brittle alternatives.

Document Reference OPRP 7 Control of Brittle Materials Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### Control of Brittle Materials

Mirrors where permitted outside of production areas should be made of non-glass material or covered in a security film.

#### Ingredient Containers

Brittle material bottles or containers should not be used for delivery of food ingredients.

Where the use of brittle material containers is unavoidable, each container must be carefully examined for any sign of chipping or breakage and must be safely disposed of or rejected where necessary.

Any contents of brittle material containers destined for use in production areas must be either sieved or filtered in a separated area prior to transfer for production. This process must be recorded together with appropriate action taken where brittle material contamination is evident.

#### **Brittle Material Auditing and Recording Procedures**

The location of all brittle material within all production areas must be identified and recorded on a Brittle Material Register.

These must be inspected daily, in the case of production areas, at the beginning and end of production. The time and date of the check is also recorded.

The auditing of light fittings must include inspection for damaged or missing protective units/covers in addition to any obvious signs of breakage of glass tubes.

In the event of any incident of brittle material breakage or damage a Brittle Material Record must be

All records must be signed and dated by the Manager of the department concerned and retained for a minimum of one year by the Technical department.

#### Brittle Material Breakage and Investigation Procedures

All employees must be required to report immediately to management any broken or damaged brittle material, resulting in a Brittle Material Breakage Record being completed. This applies to any location on the factory site, and also includes any damage to security film which has been applied to brittle material

Any broken brittle material components on processing equipment such as unavoidable 'sight glass' or another breakage incident which could in any way have affected any products must result in production

Document Reference OPRP 7 Control of Brittle Materials Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



#### Control of Brittle Materials

being stopped immediately. All products which may have been affected must be quarantined and clearly

Where the exact timing of the breakage is not known, this will require the tracing, isolation and holding of all products manufactured since the last satisfactory check was recorded.

The area and all equipment involved in the breakage incident must be isolated immediately (cordoned off) and thoroughly searched for any fragments. All fragments must be removed immediately from the area for safe disposal. Dedicated colour coded cleaning equipment is provided for breakages. This equipment is used on a once only basis and must be disposed of after use.

Production equipment which may have been affected must be dismantled for in-depth inspection and cleaning.

When the area has been declared free of fragments, the Brittle Material Breakage Record must be completed and signed-off by relevant Senior Management to formally clear the area prior to recommencement of production. No product from the incident area can be dispatched until cleared by Senior Management.

For brittle material breakages in areas remote from storage and production areas such offices, canteens, where it is not possible that products could have been affected, a detailed inspection of the surrounding area must still take place immediately. All glass fragments must be carefully disposed of and the incident

#### Validation and Verification of Control of Brittle Materials

All operational prerequisite programmes are approved by the Food Safety Team, their relevance and the reason for their inclusion is documented in the Hazard Assessment including details of why the Operational PRP is appropriate to the organisation and the control of food safety hazards.

#### References

Brittle Material Register Brittle Material Breakage Log PRP 1 Prerequisite Programmes Operational Prerequisites Manual

Document Reference OPRP 7 Control of Brittle Materials Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager











# 2.5.12 PRP Verification (Food Chain Categories BIII, C, D, G, I & K)

The following additional requirement applies to ISO 22000: 2018 clause 8.8.1\*: There needs to be routine (e.g. monthly) site inspections/PRP checks to verify that the site (internal and external), production environment and processing equipment are maintained in a suitable condition to ensure food safety. The frequency and content of the site inspections/PRP checks based on risk (high risk and open product areas are normally the priority) with defined sampling criteria and linked to the relevant technical specification.

ISO 22000 8.8 Verification related to PRPs and the hazard control plan Clause 8.8.1 Verification:



### 2.5.12 PRP Verification

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FSMS 9.2 Internal Audits & Inspections [Compatibility Mode]





#### Food Safety & Quality Management System

#### 9.2 Internal audit

The company has established, documented and implemented an internal audit system, which is maintained in order to verify the Food Safety & Quality Management System is effectively implemented and maintained and complies with planned arrangements, legislation and the FSSC 22000 Certification

The scope of the Internal Audit System includes all product categories, processes, activities conducted, production sites and any outsourced activities that can affect the requirements of the Food Safety & Quality Management System.

Top Management has a total commitment to the Food Safety & Quality Management System and provides adequate resource in the form of trained and qualified personnel to carry out a comprehensive Internal Audit Schedule. Internal audits are performed to confirm that management systems are working effectively and to promote continuous improvement. Our philosophy is simply audit, review and improve.

#### Internal Audit Schedule

The Internal Audit Schedule is planned annually and is designed to comprehensively cover all areas of the Food Safety Management system including procedures, policies and activities.



Document Reference FSMS 9.2 Internal Audits & Inspections Revision 0 7th November 2023 Owned by: Technical Manager



#### Food Safety & Quality Management System

The Technical Manager draws up the Internal Audit Schedule based on the following criteria:

- Importance of the processes concerned
- Changes in the FSMS
- Results of monitoring, measurement
- Risk associated with the procedure or activity
- Results of Previous audits
- Number of Corrective and/or Preventive Actions raised or outstanding
- Customer Complaint Analysis
- Results of the Management Review

The Technical Manager is responsible for allocating the audits as per the Schedule to an independent Auditor. For each audit a specific audit checklist is issued to the Auditor specifically outlining the scope of the audit, audit criteria and a list of items to be audited (Including follow up of previous audit findings and corrective actions).

Internal Auditors are responsible for carrying out the procedure as described below:

#### General Procedure detailing the correct method for completing internal department audits

- 1. The site internal audit schedule determines which audits are to be carried out. The auditor must make sure they have the correct audit checklist form to carry out the audits.
- 2. A date and time for the audit to take place must be agreed with the department. A representative from the department must be present during the audit.
- 3. The auditor uses a specific audit form and checklist designed by the Technical Manager for each
- 4. The audit report is rated based on the following criteria:
  - RED Major Non-conformance(s) identified and imminent risk. Immediate documented Corrective Action is required and a written follow-up necessary.
  - AMBER Minor Non-Conformance(s) identified there is a potential risk. The Corrective Action required is documented and a verbal follow up is required.
  - . GREEN Satisfactory or Positive with comments or suggestions for improvement
- 5. When the audit is completed and the report given a rating. Positive as well as negative comments are included in the report. Major Non-conformities are immediate highlighted to the department manager, who will is responsible for the corrective and preventive action without undue delay.

Document Reference FSMS 9.2 Internal Audits & Inspections Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



#### Food Safety & Quality Management System

- The Department Manager reviews the audit findings with the auditor and agrees timescales to complete corrective action for the major and minor non-conformances.
- 7. The Department Manager then signs and retains a copy of the report which includes details of the non-conformances, proposed corrective actions and the agreed time scale to complete the corrective actions. If the audit rating is red then an immediate corrective action plan is reported to the Technical Manager.
- The Departmental Manager is responsible for documenting the corrective actions taken for all the non-conformances raised.
- 9. Completion of the corrective and/or preventive actions is checked on the next audit. Outstanding corrective actions completed are signed off whilst any uncompleted actions are escalated to the Technical Manager.

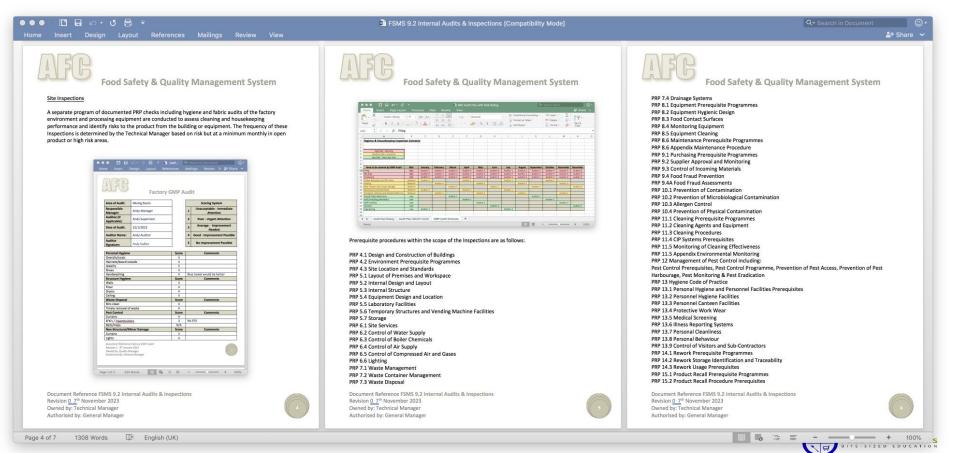
The Technical Manager reviews all audit reports, the non-conformances raised and the proposed corrective actions. Should it be deemed necessary, usually when a major non-conformance has been found, the Technical Manager will schedule another audit to ensure timely corrective action has been completed. In this case, the Internal Audit Schedule will be revised and reissued.

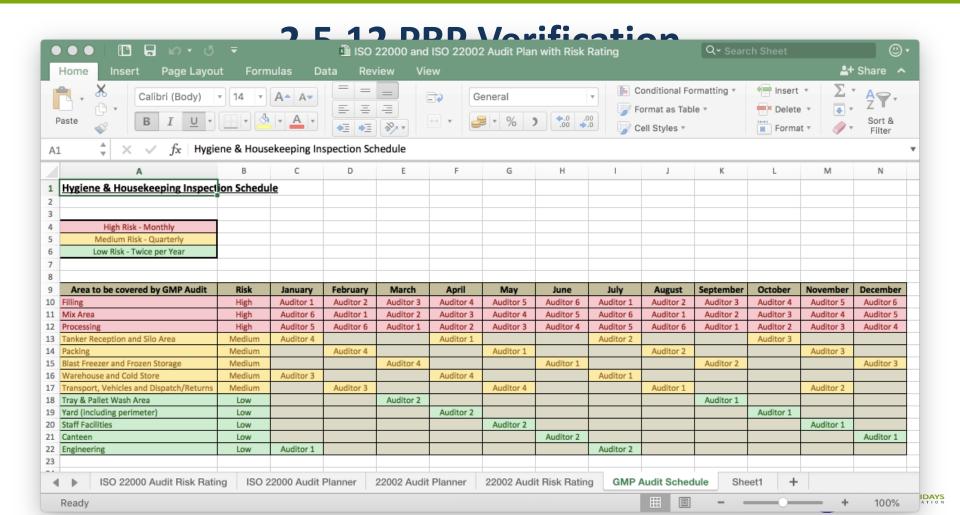
Document Reference FSMS 9.2 Internal Audits & Inspections Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

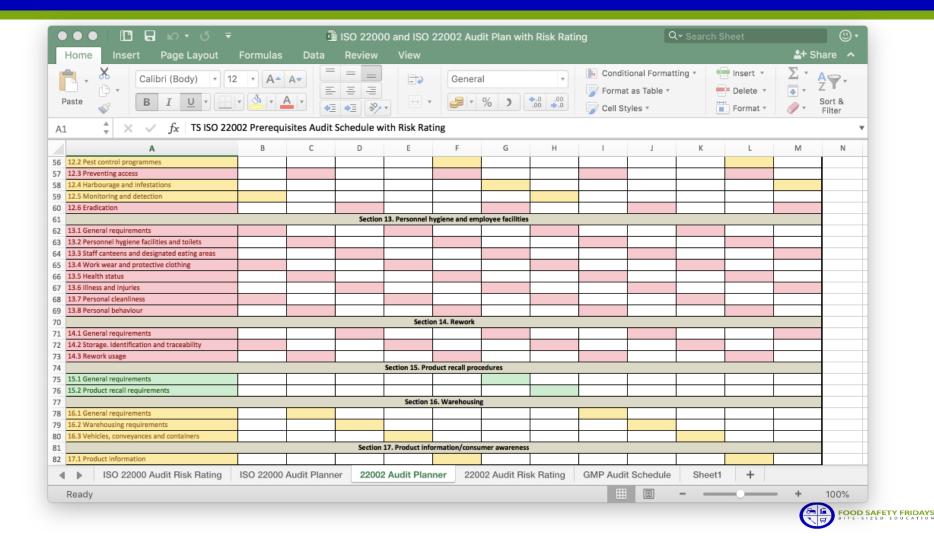


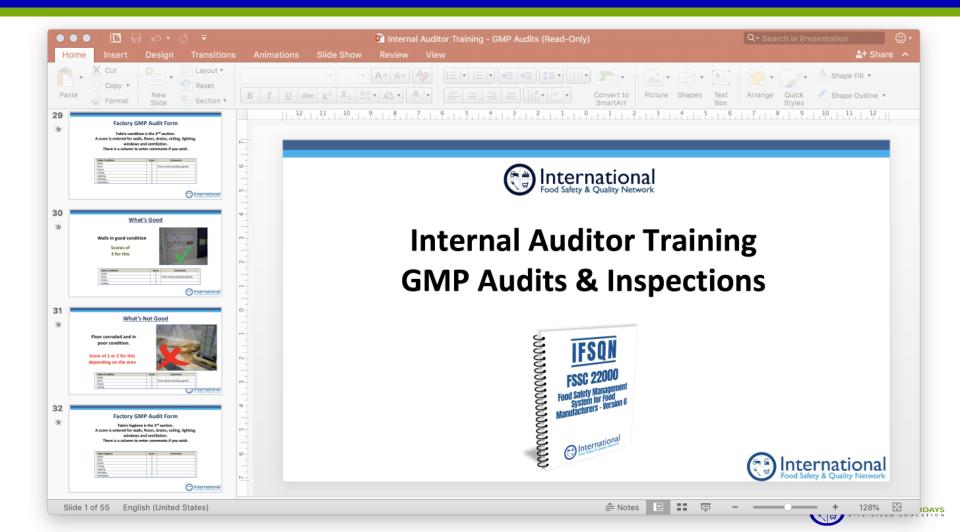


## 2.5.12 PRP Verification









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#### **Factory GMP Audit**

Area of Audit:	Mixing Room
Responsible Manager:	Andy Manager
Auditee (If Applicable):	Andy Supervisor
Date of Audit:	22/1/2023
Auditor Name:	Andy Auditor
Auditor Signature:	Andy Auditor

	Scoring System					
1	Unacceptable - Immediate Attention					
2	Poor - Urgent Attention					
3	Average - Improvement Needed					
4	Good - Improvement Possible					
5	No Improvement Possible					

Personal Hygiene	Score	Comments
Overalls/coats	4	
Hairnets/beard snoods	4	
Jewelry	5	
Shoes	4	
Handwashing	4	Blue towel would be better
Structure Hygiene	Score	Comments
Walls	4	
Floor	4	
Drains	4	
Ceiling	4	
Waste Disposal	Score	Comments
Bins clean	4	
Timely removal of waste	4	
Pest Control	Score	Comments
Curtains	4	
EFK's / insectocutors	3	No EFK
Baits/traps	N/A	
Non-Structural/Minor Damage	Score	Comments
Curtains	4	
Lights	4	

Document Reference Factory GMP Audit Revision 1 8<sup>th</sup> January 2023 Owned by: Quality Manager Authorized By: General Manager



#### **Factory GMP Audit**

Doors	2	Door handle missing
Displays/panels	4	
Flexible pipes	3	Records of CIP
Hose pipes	4	
Leaks	4	
Hygiene & Housekeeping (Non-Structure)	Score	Comments
Doors	4	
Lights	4	
Curtains	4	
Overhead pipework	4	
Other fixed pipework	4	
Flexible pipes	3	
Hose pipes	3	
Cleaning equipment	2	Remove brush & squeegee with wooden handles
Chemicals	N/A	
Tanks	4	
Maintenance tools	N/A	
Plungers/paddles	N/A	
Soak baths/tanks	N/A	
Pumps	4	
Steps/tables	4	
Filling Areas Only	Score	Comments
Filler Name		
Filler Perspex/metal guards	N/A	
Filling heads	N/A	
Conveyor	N/A	
Packaging	N/A	
	al Comment	s
Glass and Perspex items require numbering		
Some end caps are required	,	·

Overall a good standard of hygiene and housekeeping was observed in this area

Document Reference Factory GMP Audit

Revision 1 8<sup>th</sup> January 2023 Owned by: Quality Manager Authorized By: General Manager











## The F Imple FSM<sup>§</sup> FSM! PRP \

#### **Inspection Corrective Action Summary**

Area of Audit:	Mixing Room	Date of Audit:	2/11/22
Responsible Manager:	Andy Manager	Auditor Name:	Andy Auditor
Auditee (If Applicable):	Andy Supervisor	Auditor Signature:	Andy Auditor

		Summary of Corrective Actions Rai	ised			
CAR No.	Non-Conformance	Corrective Action Details	Person Responsible for Action	Target Completion Date	Completed Date	Signed Off By
CART	'	Glass and Perspex items to be numbered	Andy Manager	8/11/22		
CAR 2	End caps missing on XY & Z	End caps replaced	Andy Manager	15/11/22		
CAR 3	Missing handle on door x	Replace missing handle on door	Andy Manager	15/11/22		
CAR 4		Replace wooden handles on cleaning equipment	Andy Manager	28/11/22		

Document Reference Inspection Corrective Action Summary Revision 0 1st November 2022

Owned by: Quality Manager Authorized By: General Manager



100%



# 2.5.13 Product Design and Development (Food Chain Categories BIII, C, D, E, F, I & K)

Requirements for a product design and development procedure for new products and changes to product or manufacturing processes to ensure safe and legal products are produced including:

- ✓ Evaluation of the impact of the change taking into account any new food safety hazards (including allergens)
- ✓ Resource and training needs
- ✓ Equipment and maintenance requirements
- ✓ The need to conduct production and shelf-life trials
- ✓ On-going shelf-life verification must be in place, at a frequency based on risk.
- ✓ Where a ready-to-cook product is produced, the cooking instructions provided on the product label or packaging must be validated to ensure food safety is maintained.

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FSMS 8.1 Operational planning and control [Compatibility Mode]

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Food Safety & Quality Management System

#### 8.1 Operational planning and control

The company plans and develops the processes needed for the realization of safe products by establishing, documenting and implementing a procedure for design and development which is maintained in order to meet the requirements of the Food Safety & Quality Management system. In this way planned changes are controlled. Top Management are responsible for reviewing the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.

The scope of the procedure for design and development includes all product categories, processes, activities conducted, production sites and any outsourced activities. Should the site be required to outsource any process that may affect product conformity to the defined standards then the site will assume control over the design and development process.

#### Design and Development

The design and development procedure ensures the implementation and operation of planned activities and any changes to those activities. This includes ensuring the effectiveness of activities, prerequisite programmes, operational prerequisite programmes and/or the HACCP plan.

All design and development activities are co-ordinated by the development team and the New Product Development Manager has overall responsibility for all design and development on site.

The development team are responsible for planning, identifying inputs, generating outputs, reviewing and verifying the design and development process. Each stage of the process is documented by the New Product Development Manager who is given clear guidelines on the scope of new product developments by the General Manager. The stages of product development are as follows:

- STAGE 1: Product Brief
- STAGE 2: Kitchen work stage
- STAGE 3: Approval of Kitchen Product
- STAGE 4: Factory trials
- STAGE 5: Approval of Factory Product & Product Analysis
- STAGE 6: Artwork Process
- STAGE 7: Pre-production trials
- STAGE 8: Product Launch
- STAGE 9: Post Launch

There are reviews at the end of each stage to ensure that the project is feasible and that the new products or processes and any changes to product, packaging or manufacturing processes be safe and legal and not affect current product for example the introduction of allergens, glass packaging or microbiological risks.

Document Reference FSMS 8.1 Operational planning and control Revision 0 7th November 2023

Owned by: Technical Manager

Authorised by: General Manager





Food Safety & Quality Management System

At the product brief stage the development team will carry out a risk assessment to ensure that the intended product does not jeopardise factory operations. Clear guidelines on any restrictions to the scope of new product developments to control the introduction of hazards which would be unacceptable to the company or customers are issued by the Senior Management team.

The Development team take into consideration possible allergens and cross-contamination, crosscontamination of vegetarian products with meat products and preservation of products and how these materials will be handled to ensure food quality, safety and legality are maintained. For Id preserved products including organic, GMO, and certified origin, the product development team carry out a risk assessment of the raw material to identify routes of contamination and confine compliance with specification throughout the purchasing and supply chain. Consideration is given to the impact on the process flow for the new product. The appropriate procedures are then applied to handling raw material, intermediate product and end product to prevent cross-contamination and preserve the identity status of the product.

Where packaging materials pose a product safety risk, special handling procedures are introduced to prevent product contamination or spoilage. Where packaging materials have a functional effect on the food such as shelf life extension this functionality is reflected in agreed specifications and the functionality validated during shelf life trials.

When special procedures are introduced, new production records are developed, established and maintained to log failures and corrective actions taken. The result of this review is recorded and actions included in the design and development plan.

#### New Products, Plant and Equipment

New Plant and Equipment requirements are authorised by the General Manager. The Engineering Manager is responsible for sourcing new Plant and Equipment and the Senior Management Team including the New Product Development Manager and Technical Manager approved the equipment meets quality, food safety and hygiene requirements. It is company policy that all new plant and equipment meets relevant legislation and also in the European Union bears a CE marking.

The Engineering Manager ensures that all plant and equipment is supplied with a Certificate of Conformity confirming it is fit for purpose (Suitable for use in a Food Environment). The Engineering Manager is responsible for the installation and commissioning of new plant and equipment in a hygienic and controlled manner such that it does not represent a risk to product.

The Technical Manager is responsible for approving the release of new Plant and Equipment for shelf life trials and then production.

Document Reference FSMS 8.1 Operational planning and control Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





Food Safety & Quality Management System

The Development team co-ordinate production proving trials and confirms acceptable quality, shelf life and transit stability of the product. Correct operation of processing and packing equipment is conflict. Shelf life is established, taking into account product formulation, packaging, factory environment and subsequent storage conditions.

Initial production and product shelf life trials use documented protocols as per customer codes of practice (or where not specified as per standard company) that reflect conditions expected during manufacture, storage, transport/ distribution, use and handling to determine product shelf life. Trial results documented and retained and confirm compilance with the agreed microbiological, chemical and organolegite circleia/sensory analysis.

For long-life products where shelf-life trials prior to production are impractical accelerated shelf life tests are conducted and the NPD Manager produces a documented justification for the assigned shelf life

When cooking instructions are provided to ensure product safety, the instructions are fully validated by the NPD Team to ensure that, when the product is cooked according to the instructions, a safe, readyto-eat product is consistently produced.

The Development team carry out design and development verifications and maintain a record of design and development verifications. At this stage, the Technical Manager also verifies that design requirements can be met.

Following completion of a new design of product or process the Technical team perform design and development validations to affirm continual compliance with the input requirements and maintain a record of these validations.

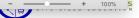
The development team perform systematic design and development reviews throughout the design and development process and maintain a record of the reviews. The reviews are held prior to agreement for full production to confirm that the site can meet design inputs agreed with the customer. The need for FSOMS and HACCP system updating is also addressed with the Food Safety team at this time. The appropriate FSQMS review is conducted by the Food Safety team taking into account verification and validation data from the development trials.

The HACCP system is reviewed when there are significant changes such as new raw materials or raw material supplier, new ingredients or recipe, process conditions or equipment and new products. Changes to the HACCP plan are fully validated and documented.

After each design or redesign of the HACCP Plan the Food Safety Team update and amend as necessary all the information that was used prior to the Hazard Analysis including:

Document Reference FSMS 8.1 Operational planning and control Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



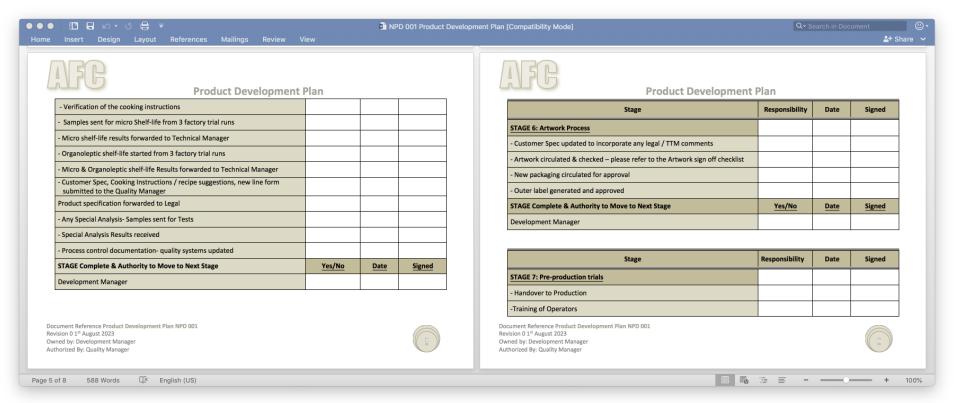


FSR Process Change Approval Record [Compatibility Mode]

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	Process Change Approval		Prerequisites Required for		Qu	uality Manager	The Need for New or Revised HACCP			Quality Manager
P	rocess Change Proposed	Proposer	Approval	Process Change Validati	on		Plans Is Reviewed  Quality Manager			Quality
			Requirement	Details	Date	Responsibility	Authorises The Process Changes			Manager
Description			Production Trials Acceptable Quality Production Trials	2000		Development Manager	Operations Manager Authorises The Process Changes			Operations Manager
Reason for Change		-	Acceptable Shelf			Development Manager	New Specification			Quality
Raw Material	Process Change Category  Supplier  Process Change	Equipment 🗆	Life Production Trials Acceptable Transit Stability of The			Development Manager	Created Finished Product Specifications Are Authorized by The Quality Manager			Manager Quality Manager
Recipe	Personnel □ Customer □	New Product □	Product Correct Operation				Quality Manager	Process Change Approved		
			of Process Equipment			Development Manager	Name	Signature	Date	General
Full details of proposed change		Proposer	Correct Operation of Forming Equipment			Development Manager				Manager
Risk Assessment			Correct Operation of Packing Equipment			Development Manager				
Summary and Change		Quality Manager		Process Change Review	v					
Categorisation			Requirement	Details	Date	Responsibility				
	Risk Categorisation		Reviews Held Prior To Agreement for							
High Risk □	Medium Risk □ Low Risk □	Quality Manager	Full Production to Confirm That the			Development Manager				
Food Safety □	Quality  Health & Safety	Quality Manager	Site Can Meet the Changes Agreed							
ocument Reference FS evision 0 8 <sup>th</sup> August 2 <sup>th</sup> wned by: Quality Man uthorized by: General I	ager		Document Reference FSR Proce Revision 0 8 <sup>th</sup> August 2023 Owned by: Quality Manager Authorized by: General Manage			2	Document Reference FSR Prov Revision 0 8th August 2023 Owned by: Quality Manager Authorized by: General Manager			3

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Product Developn	nent Plan			Product Development	Plan		
Stage	Responsibility	Date	Signed	- All recipes documented  STAGE Complete & Authority to Move to Next Stage	Yes/No	Date	Signed
STAGE 1: Product Brief				Development Manager	100/110	<u> </u>	<u>J.B.I.c.a</u>
- Product Brief supplied to NPD							
- Critical path generation				÷ Stage	Responsibility	Date	Signed
STAGE Complete & Authority to Move to Next Stage	Yes/No	<u>Date</u>	Signed		Responsibility	Date	Jigileu
Development Manager				STAGE 3: Approval of Kitchen Product			
				- Product Approval by Customer			
Stage	Responsibility	Date	Signed	- Reference sample saved			
STAGE 2: Kitchen work stage				<ul> <li>-Full raw material Specification &amp; Supplier Questionnaire or audit, checked, completed and to be signed by both parties</li> </ul>			
- Specification sent for New Ingredients				- Audit Schedule updated			
- Preliminary Specification Checked and signed off				- Handover to process development			
- Raw Material evaluated by Quality against the Spec				STAGE Complete & Authority to Move to Next Stage	Yes/No	Date	Signed
- Initial Product costing done				Development Manager			
usument Reference Product Development Plan NPD 001 vision 0 1 <sup>st</sup> August 2023 vned by: Development Manager thorized By: Quality Manager				Document Reference Product Development Plan NPD 001 Revision 0 1 <sup>st</sup> August 2023 Owned by: Development Manager Authorized By: Quality Manager			2
of 8 588 Words					% <b>≡</b> -	_	+







# 2.5.14 Health Status (Food Chain Category D Production of Animal Feed)

2.5.14 Health Status (Food Chain Category D)
In addition to ISO/TS 22002-6 clause 4.10.1, the organization shall have a procedure to ensure that the health of personnel does not have an adverse effect on the feed production operations.

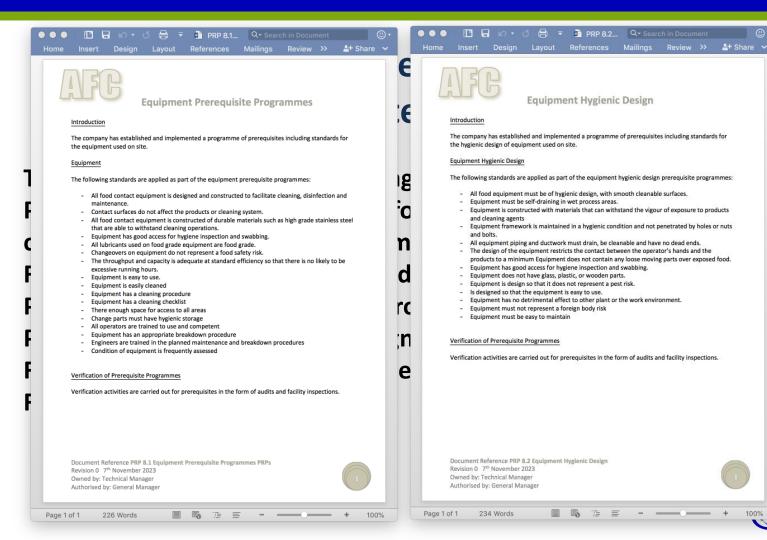


# 2.5.15 Equipment Management (All Food Chain Categories, Excluding FII)

In addition to clause 8.2.4 of ISO 22000:2018, the organization shall:

- a) Have a documented purchase specification in place, which addresses hygienic design, applicable legal and customer requirements, and the intended use of the equipment, including product handled. The supplier shall provide evidence of meeting the purchase specification prior to installation.
- b) Establish and implement a risk-based change management process for new equipment and/or any changes to existing equipment, which shall be adequately documented including evidence of successful commissioning. Possible effects on existing systems shall be assessed and adequate control measures determined and implemented.





FOOD SAFETY FRIDAYS

## 2.5.15 Equipment Management

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FSMS 8.1 Operational planning and control [Compatibility Mode]

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#### Food Safety & Quality Management System

#### 8.1 Operational planning and control

The company plans and develops the processes needed for the realization of safe products by establishing, documenting and implementing a procedure for design and development which is maintained in order to meet the requirements of the Food Safety & Quality Management system. In this way planned changes are controlled. Top Management are responsible for reviewing the consequences of unintended changes. Taking action to militate are vadverse effects, as necessary.

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STAGE 8: Product Launch

STAGE 9: Post Launch

There are reviews at the end of each stage to ensure that the project is feasible and that the new products or processes and any changes to product, packaging or manufacturing processes be safe and legal and not affect current product for example the introduction of allergens, glass packaging or microbiological risks.

Document Reference FSMS 8.1 Operational planning and control

Revision 0 7<sup>th</sup> November 2023

Owned by: Technical Manager

Authorised by: General Manager





#### Food Safety & Quality Management System

At the product brief stage the development team will carry out a risk assessment to ensure that the intended product does not jeopardise factory operations. Clear guidelines on any restrictions to the scope of new product developments to control the introduction of hazards which would be unacceptable to the company or customers are issued by the Senior Management team.

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When special procedures are introduced, new production records are developed, established and maintained to log failures and corrective actions taken. The result of this review is recorded and actions included in the design and development plan.

#### New Products, Plant and Equipment

New Plant and Equipment requirements are authorised by the General Manager. The Engineering Manager is responsible for sourcing new Plant and Equipment and the Senior Management Team including the New Product Development Manager and Technical Manager approve the equipment meets quality, food safety and hygiene requirements. It is company policy that all new plant and equipment meets relevant legislation and also in the European Union bears a CE marking.

The Engineering Manager ensures that all plant and equipment is supplied with a specification and a Certificate of Conformity confirming it is fit for purpose (Suitable for use in a Food Environment). The Engineering Manager is responsible for the installation and commissioning of new plant and equipment in a hygienic and controlled manner such that it does not represent a risk to product.

The Technical Manager is responsible for approving the release of new Plant and Equipment for shelf life trials and then production.

Document Reference FSMS 8.1 Operational planning and control Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### Food Safety & Quality Management System

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The HACCP system is reviewed when there are significant changes such as new raw materials or raw material supplier, new ingredients or recipe, process conditions or equipment and new products. Changes to the HACCP plan are fully validated and documented.

After each design or redesign of the HACCP Plan the Food Safety Team update and amend as necessary all the information that was used prior to the Hazard Analysis including:

Document Reference FSMS 8.1 Operational planning and control Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





## 2.5.15 Equipment Management

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#### **Equipment Commissioning Checklist**

Insert Design Layout References Mailings Review View Table Design Layout

Equipment Commissioning	Checkli	st
Food Safety/Quality	Yes/ No	Remarks
Does it meet standards for foreign body control?		
2. Any loose moving parts?		
3. Is there good access for hygiene?		
4. Is the equipment made from suitable material?		
5. Does it contain glass/plastic?		
6. Are all lubricants food grade?		
7. Is there a pest risk?		
8. Is it covered by the HACCP plan?		
9. Check for hollow sections?		
10. Will it enable the business to comply with customer and industry best practices?		
Production	Yes/ No	Remarks
1. Will changeovers cause problems?		
2. Is the capacity adequate?		
3. Will it meet sensible efficiencies?		
4. Is the equipment easy to use?		
5. What skills / training are required?		
6. Is there enough space?		
7. Will it cause bottlenecks?		
B. Are spare parts easily available?		
9. Will it be able to be adapted for future requirements?		
10. Are the tolerances acceptable?		
11. What are the wastage factors?		
12. Does the machine meet labor standards?		
13. What time and labor will be needed?		

Document Reference FSR Equipment Commissioning Checklist Revision 0 8th August 2023 Owned by: Quality Manager Authorized by: General Manager





#### **Equipment Commissioning Checklist**

14. Will it have an effect on other kit?		
New Product Development	Yes/ No	Remarks
<ol> <li>Will it take a different product / package size?</li> </ol>		
Will it be able to be adapted for future requirements?		
Process development	Yes / No	Remarks
Will the equipment deliver the concept?		
2. What is the range & flexibility of the equipment		
3. Will it handle a variety of equipment?		
What accessories & change parts are needed& what is their range?		
5. Will the tolerances be acceptable?		
6. Will the equipment deliver quid consistently?		
7. Will the yield be acceptable?		
8. What are the likely sources and levels of waste?		
9. Can process settings be set securely?		
10. Is there a data acquisition system? Will this link to existing system?		
11. Will it be able to be adapted for future requirements?		
12. Will the machine reach commercial requirements?		
Hygiene	Yes/ No	Remarks
1. Is it easy to clean / deep clean		
2. Can all parts including underneath be accessed?		
3. Is any special training required?		
4. Should it be screened off?		·
5. Is it resistant to the cleaning chemicals used?		
6. Is there a CIP system?		

Document Reference FSR Equipment Commissioning Checklist Revision 0 8th August 2023 Owned by: Quality Manager Authorized by: General Manager





Equipment Commission	onin	g Checklist
7. Are special tools / engineers required for cleaning?		
8. Is it water proof to IP66?		
9. Is it electrically safe when cleaning?		
10. Is it easy to take swab samples?		
11. Is the equipment mobile?		
12. Are there any dead legs?		
13. Practical to Clean of conduit points?		
14. Is special cleaning kit needed?		
15. Are services available?		
Engineering	Yes/ No	Remarks
1. What essential spares are required?		
2. Has it good reliability?		
3. What is the commission time?		
4. Will there be a need for training?		
5. Is there good manufacture support?		
6. Is there a good emergency call out?		
7. Is there good access?		
8. Will it cause an environmental problem?		
9. Will the machine be fit for purpose?		
10. Are permits to work required?		
11. Are spare parts easily available?		
12. Are future upgrades included?		
13. What preventative maintenance and services are needed?		
14. Will the warranty be annulled if equipment is second hand?		
15. How do we get it in?		
16. What is the lead time?		
Health & Safety	Yes/	Remarks

Document Reference FSR Equipment Commissioning Checklist Revision 0 8th August 2023 Owned by: Quality Manager Authorized by: General Manager





# 2.5.16 Food Loss and Waste (All Food Chain Categories, Excluding I)

In addition to clause 8 of ISO 22000:2018, the organization shall:

- a) Have a documented policy and objectives detailing the organization's strategy to reduce food loss and waste within their organization and the related supply chain.
- b) Have controls in place to manage products donated to not-for-profit organizations, employees, and other organizations; and ensure that these products are safe to consume.
- c) Manage surplus products or by-products intended as animal feed/food to prevent contamination of these products.
- d) These processes shall comply with the applicable legislation, be kept up to date, and not have a negative impact on food safety.





#### Waste Management Overview including FLW

#### Introduction

It is company policy to reduce food and packaging loss and waste within the site and the related supply chain on an ongoing basis.

Senior Management are responsible for establishing and leading the company commitment to reduce waste and have analysed company processes and identified key areas to address:

Loss of raw materials in conversion to processed product

Loss of product during the process

Downgraded product due to non-conformance

Finished product waste due to damages

Product waste from edible but out-of-specification product

Customer rejections and returns dues to incorrect orders, damage or product non-conformance.

Senior Management have agreed on the following objective which all personnel on site are required to contribute towards:

- Site: < 1% raw material loss reduced by 10% year-on year
- Site: < 1% process product loss reduced by 10% year-on year
- Site: < 1% downgraded finished product reduced by 10% year-on year
- Site: < 1% finished product waste due to damages, reduced by 10% year-on year Site: > 30% product waste recovered for donation or animal feed, increased by 10% year-on year

Customer: Reduction in rejections/returns by 10% year-on year

Company objectives are monitored by key performance indicator reporting on a weekly basis whereby all management are brief on company performance. This information is cascaded by managers to their teams

#### Introduction to Food Loss and Food Waste (FLW)

Food loss occurs before the food reaches the consumer as a result of issues in the supply chain (production, processing, storage, and distribution phases).

Food waste refers to food that is fit for consumption but consciously discarded at the retail or consumption levels.

#### FLW Strategies Priority Ranking:

- Reduction at Source Reduce total Volume/Weight
- 2. Food Redistribution Donations
- 3. Animal Feed Food downgrade recovered for animal feed

Document Reference PRP 7 Waste Management Overview including FLW Revision 0 7th November 2023

Owned by: Technical Manager

Authorised by: General Manager





#### Waste Management Overview including FLW

- 4. Industrial Uses and Fertilizers
- 5. Anaerobic Digestion
- 6. Composting
- 7. Landfill last resort for disposal

Food loss and waste only relates to food - it does not include packaging material wastage. Therefore, the weight of packaging material is to be excluded from the measurement of food loss and waste.

#### Management of Food Loss and Food Waste (FLW)

Initially Senior Management quantify what waste the company generates and where this material goes including:

Food Material collected by the waste management company

Food Material going down the sewer

Food Material disposal on-site (e.g. going to an on-site incinerator or anaerobic digester); Food Materials downgraded and donated to charities or similar

Food Materials downgraded and recovered for animal feed

Senior Management quantify the current food loss and waste by analysis of monthly quantities of waste in order to establish a baseline quantity for each area of the scope:

Purchasing/Supply/Incoming Deliveries

Raw Material Storage

Raw Material Use Mixing

Processing Intermediate Product

Filling Finished Product

Packing Storage

Distribution

Senior Management define the current processes that are in place to manage the food loss and waste generated by the organization and they are summarised in the PRP Food Loss & Waste Tables

#### Establish the scope of their food loss and waste by step:

Step	Food Loss/Waste
Purchasing/Supply/Incoming Deliveries	Damages/Rejections
Purchasing/Supply/Incoming Deliveries	Loss of stock from Short Shelf Life Raw
	Materials/Ingredients
Raw Material Storage	Damages/Rejections
Raw Material Storage	Loss of stock from Short Shelf Life

Document Reference PRP 7 Waste Management Overview including FLW Revision 0 7th November 2023

Owned by: Technical Manager

Authorised by: General Manager



#### Waste Management Overview including FLW

Raw Material Use Mixing	Loss during mixing operations	
	Non-Conforming Product	
Processing Intermediate Product	Product Change Overs	
	Water Purges	
	Non-Conforming Product	
Filling Finished Product	Product Change Overs	
	Water Purges	
	Non-Conforming Product	
Packing	Damages/Rejections	
	Non-Conforming Product	
Storage	Loss of stock from Short Shelf Life	
	Damages	
Distribution	Damages/Rejections	
Retail	Short Shelf Life	
Other General	Product Development – Redundant	
	Ingredients	
Other General	QA Samples	
Other General	Finished Product Shelf Life	

Based on the baseline quantity of food loss for each area on site and food waste at retail level, Senior Management investigate the root causes of current food loss and waste and determine the priorities for action at each stage in the process. Priorities are set based on the type, quantity and value of the food loss and/or waste.

From the priorities, Senior Management establish as food loss and waste prevention measure and set site objectives and targets with an overall target to achieve a minimum reduction of food loss and waste of 10% year on year.

Ongoing monitoring includes the initial areas assessed for food loss for each area on site: Food Material collected by the waste management company

Food Material going down the sewer

Food Material disposal on-site (e.g. going to an on-site incinerator or anaerobic digester);

Food Materials downgraded and donated to charities or similar

Food Materials downgraded and recovered for animal feed

In addition, a mass balance is conducted from incoming ingredients through the process to customer sales with the losses calculated at each stage:

Purchasing/Supply/Incoming Deliveries Raw Material Storage

Raw Material Use Mixing

Processing Intermediate Product

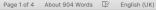
Document Reference PRP 7 Waste Management Overview including FLW Revision 0 7th November 2023

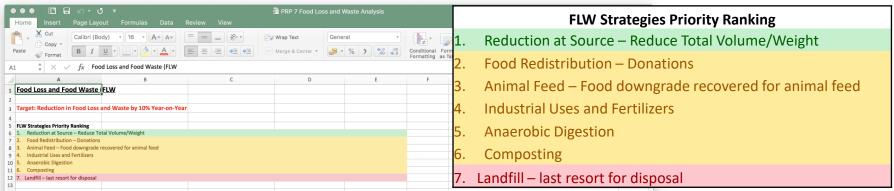
Owned by: Technical Manager

Authorised by: General Manager



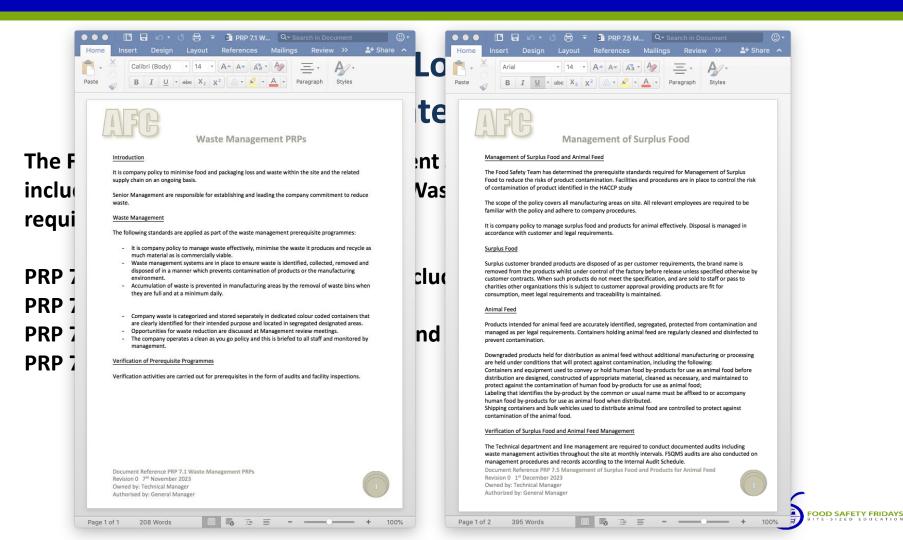






ł		Food Loss & Waste Analysis						
	Step	Food Loss/Waste	Current processes in place to manage FLW	Current Mass Balance Losses Weight (Kg)	Current Mass Balance Losses Weight %	Priority	Proposed Action	Timesca
	Purchasing/Supply/Incoming Deliveries	Damages	Goods-In Inspection	50	0.5	Low	No Action Currently	5 Year
	Purchasing/Supply/Incoming Deliveries	Loss of stock from Short Shelf Life Raw Materials/Ingredients	Purchasing Contracts	500	5	Medium	Increase minimum life to Site	1 Yea
	Raw Material Storage	Damages/Rejections	Storage Procedures	200	2	Medium	Staff Briefing & Training	1 Yea
	Raw Material Storage	Loss of stock from Short Shelf Life	Storage Procedures	1,000	10	High	Staff Briefing & Training	6 Mont
	Raw Material Use Mixing	Loss during mixing operations	Mixing Procedures	200	2	Medium	Save and recover for animal feed	1 Yea
	Raw Material Use Mixing	Non-Conforming Product	Mixing Procedures	100	1	Low	No Action Currently	1 Yea
	Processing Intermediate Product	Product Change Overs	Processing Procedures	1,000	10	High	Save and recover for animal feed	6 Mont
	Processing Intermediate Product	Water Purges	Processing Procedures	1,000	10	High	Save and recover for animal feed	6 Mon
	Processing Intermediate Product	Non-Conforming Product	Processing Procedures	200	2	Medium	Staff Briefing & Training	1 Yea
	Filling Finished Product	Product Change Overs	Filling Procedures	1,000	10	High	Save and recover for animal feed	6 Mon
	Filling Finished Product	Water Purges	Filling Procedures	500	5	Medium	Save and recover for animal feed	1 Ye
	Filling Finished Product	Non-Conforming Product	Filling Procedures	1,000	10	High	Save for Charitable Donations when Food Safe but out of Spec.	6 Mor
	Packing	Damages	Packing Procedures	1,000	10	High	Pallet Corners/Layer Pads	6 Mor
	Packing	Non-Conforming Product	Packing Procedures	200	2	Low	Staff Briefing & Training	1 Ye
	Storage	Damages	Storage Procedures	500	5	Medium	Pallet Corners/Layer Pads	1 Ye
	Storage	Loss of stock from Short Shelf Life	Storage Procedures	1,000	10	High	Staff Briefing & Training	6 Mor
	Distribution	Damages	Distribution Procedures	1,000	10	High	Pallet Corners/Layer Pads	6 Mon
	Distribution	Rejections	Distribution Procedures	1,000	10	High	Staff Briefing & Training	6 Mor
	Retail	Short Shelf Life	Standard minimum life into retailer	1,000	10	High	Review the established shelf life to establish whether the shelf life of products could be increased whilst still being safe for consumption.	1 Ye





# 2.5.17 Communication Requirements (All Food Chain Categories)

In addition to clause 8.4.2 of ISO 22000:2018, the organization shall inform the certification body within 3 working days of the commencement of the events or situations below and implement suitable measures as part of their emergency preparedness and response process:

a) Serious events that impact the FSMS, legality and/or the integrity of the certification including situations that pose a threat to food safety, or certification integrity as a result of a Force majeure, natural or man-made disasters (e.g., war, strike, terrorism, crime, flood, earthquake, malicious computer hacking, etc.);



## 2.5.17 Communication Requirements

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FSMS 7.4 Communication [Compatibility Mode]





#### Food Safety & Quality Management System

#### 7.4 Communication

The company has established and documented clear levels of communication for suppliers, contractors, customers, food authorities and staff within the Food Safety & Quality Management System. Detailed communication arrangements and communication responsibilities for all levels of management are contained in the Food Safety & Quality Manual. The scope of the communication procedures applies to all members of staff, both full time and temporary.

The Management Representative is the Technical Manager, who retains responsibility and authority for external communication and liaison regarding the Food Safety & Quality Management System. This responsibility for communication extends to ensuring there is sufficient information relating to product food safety and quality throughout the food chain. This communication includes documented agreements, contracts, specifications, product information, food safety leaflets, allergen advice and

The Technical Manger is responsible for managing all customer, statutory and regulatory documents applicable to the business including:

- Food Safety Legislation
- Food Regulations
- EEC Directives
- National/International Standards - Customer Codes of Practice

The company has a system in place through the Industry Federation to ensure that it is kept informed of all relevant legislation, food safety issues, legislative scientific and technical developments and Industry Codes of Practice applicable in the country of production and, where known, the country where the product will be sold.

#### Suppliers and Contractor Communication

Several streams of communication occur with suppliers and contractors, including marketing, sales, development and technical. All new arrangements, products and suppliers are subject to the supplier approval procedure and must be officially approved by the Technical Manager who will ensure that this is effectively communicated and documented.

All supplies and purchases are to agreed specifications. Authority to purchase outside of these conditions can be only obtained from the Technical Manager following a risk assessment.

Document Reference FSMS 7.4 Communication Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





#### Food Safety & Quality Management System

#### **Customer Communication**

Several streams of communication occur with customers, including marketing, sales, development and technical. The Sales Director agrees new contracts in principle with current and potential customers. All new arrangements and products are subject to the approval procedure and must be officially approved by the Technical Manager who will ensure that this is effectively communicated and documented.

All products are supplied to mutually agreed customer specifications which include product information related to food safety and quality, to enable the handling, display, storage, preparation, distribution and use of the product within the food chain or by the consumer.

This information includes relevant food safety information:

- allergen contents and warnings
- intended use
- nutritional contents
- storage requirements
- chemical, physical and microbiological parameters
- any food safety hazards that need to be controlled in the food chain or by consumers

The company measures customer satisfaction by monitoring agreed performance criteria for customer service and customer complaint levels, reviewing sales trends and pro-actively communicating with the customer to seek feedback on performance levels.

The customer service department handles day to day enquiries and orders from customers. Customers requiring more technical information are passed on to the Technical Manager.

The New Product Development team are required to demonstrate pro-activity with each customer. A measure of this pro-activity is the ability to achieve a targeted level of new product launches per annum depending on the customer requirements and targets.

Customer and/or consumer feedback, including complaints are initially directed to the Customer Services Manager, The handling of customer complaints is categorized into non-critical and critical. Non-Critical Quality complaints from customers are directed to the Customer Services Manager who coordinates the customer response with the Quality Manager.

Critical or Serious complaints such as a claim of alleged injury or poisoning are notified to the Technical Manager who will instigate an immediate investigation which may involve crisis and product recall. Product Recall and Crisis Management (including Emergencies/Incidents) Procedures are managed by the Crisis Management Team which includes the Technical Manager. Operations Manager and the

Document Reference FSMS 7.4 Communication Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager



#### Food Safety & Quality Management System

In the event of a product recall or emergency/accident the team consider contingency plans for supply

#### Food Authority Communication

The Technical Manager retains responsibility and authority for external communication and liaison with statutory and regulatory authorities and any other external organisation that may have an impact on the Food Safety & Quality Management System. Any food safety related requirements are documented by the Technical Manager.

Where relevant, information obtained through external communication is included as input for management review and for updating the Food Safety & Quality Management System.

#### Communication with the Certification Body in Crisis Situations

Communication with the Certification Body is carried out by the Technical Manager within 3 working days of the commencement of the following serious events or situations: Events that impact the FSMS, legality and/or the integrity of the certification including situations that

pose a threat to food safety, or certification integrity as a result of a Force majeure, natural or manmade disasters (Refer to FSMS 8.4 Emergency preparedness and response)

Situations where the integrity of the certification is at risk and/or where the FSSC 22000 Foundation can be brought into disrepute including food safety events (e.g., public recalls, withdrawals, calamities, food safety outbreaks, etc.) or actions imposed by regulatory authorities as a result of a food safety issue(s) where additional monitoring or forced shutdown of production is required. Legal proceedings, prosecutions, malpractice, and negligence, Fraudulent activities and corruption, (Also refer to FSMS 8.9.5 Withdrawal/recall).

#### Internal Communication

The Top Management Team is responsible for ensuring that appropriate communication processes are established, implemented and maintained regarding the effectiveness of the Food Safety & Quality Management System.

#### Communication processes include:

- Team briefings
- Staff reviews
- Daily Management meetings
- Shift Handover meetings
- Newsletters
- Notice boards

Document Reference FSMS 7.4 Communication Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager

















# 2.5.17 Communication Requirements (All Food Chain Categories)

In addition to clause 8.4.2 of ISO 22000:2018, the organization shall inform the certification body within 3 working days of the commencement of the events or situations below and implement suitable measures as part of their emergency preparedness and response process:

b) Serious situations where the integrity of the certification is at risk and/or where the Foundation can be brought into disrepute. These include, but are not limited to:

Public food safety events (e.g., public recalls, withdrawals, calamities, food safety outbreaks, etc.)

Actions imposed by regulatory authorities as a result of a food safety issue(s) where additional monitoring or forced shutdown of production is required Legal proceedings, prosecutions, malpractice, and negligence Fraudulent activities and corruption.

## 2.5.17 Communication Requirements (All Food Chain Categories)

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FSMS 8.9.5 Withdrawal:recall [Compatibility Mode]

Q~ Certification







Food Safety & Quality Management System

#### 8.9.5 Withdrawal/recall

This procedure details the action that should be taken if for any reason a defective product reaches a customer. The action taken would depend upon the nature of the defect. A customer is defined as anyone who receives any product that is sold by the company.

Should non-conforming product be delivered to a customer causing a potential product recall then this is reported immediately to Technical Manager. The Technical Manager assesses the situation and may choose to contact the customer for a concession or if the non-conformity relates to a food safety hazard outside of acceptable limits instigate the Initial Procedure of a Product Recall.

The handling of customer complaints is categorized into non-critical and critical. Non-Critical Quality complaints from customers are directed to the Customer Services Manager who co-ordinates the customer response with the Quality Manager.

Critical or Serious complaints such as a claim of alleged injury or poisoning are notified to the Technical Manager who will instigate an immediate investigation which may involve crisis and product recall

Critical complaint is defined as an unsafe product with an aspect of the product that will result in injury or illness to the customer. This includes metal or glass in the product, contamination with dangerous chemicals, the presence of food poisoning bacteria or their toxins.

Non-Critical complaint - A Quality Defect is defined as any attribute that is not to the specification of the customer and includes such things as poor packaging, labelling or date coding, or any product that will spoil before the Best Before date on the pack.

Information may come from many sources including, an individual consumer, an enforcement agency or retailer. The most important first action is to ensure as much information is gathered as accurately as possible.

#### Receipt of External Information

Wherever the initial communication comes from, the following questions must be asked by the recipient to ascertain:

- Product name, including pack size.
- Batch number, production date, despatch date and Best Before or Use-By date.
- Name of person reporting fault position, organisation, telephone number, address,

Document Reference FSMS 8.9.5 Withdrawal/recall Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





Food Safety & Quality Management System

- Nature of fault.
- Where found.
- Details of any action taken by complainant.

The information must be passed immediately to the Customer Services Manager who assesses if the complaint is Critical or Non-Critical. Critical Complaints are immediately referred to the Technical Manager or in his nominated deputy who will complete a Product Incident Log. An accumulation of an unusual number of Non-Critical Complaints within a short time period will also be referred to the Technical Manager.

#### Initial Procedure

- The Technical Manager will discuss the matter immediately with the General Manager. No decisions are to be taken by anyone until the Technical Manager and the General Manager have been informed (or nominated deputies if they are absent).
- The problem will be defined, including verification of the product defect and the extent of
- If a potential recall is likely, the Technical Manager and the General Manager will assemble the product recall team and classify the nature of the recall.
- A product recall can only be approved by the General Manager and in his absence his nominated
- The Product Recall Team will comprise of the: -

General Manager Operations Manager

Sales Director Financial Director

Technical Manager Production Manager Distribution Manager

Nominated Deputies due to absence

Document Reference FSMS 8.9.5 Withdrawal/recall Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager





Food Safety & Quality Management System

#### Action Plan and Investigation

The Team will have immediate call on any Senior or Departmental Manager in its attempt to define the problem and control the situation. The problem should be investigated immediately by carrying out a full identification and traceability exercise for the suspect product including checks of:

- Compliance with Standard Instruction and Process.
- Compliance with Raw Material and Packaging Specifications.
- Department records of the product during, before and after the time of the production date, in particular Microbiological, Quality Audit, Chemical testing, Production, Cleaning, with references to final product standards, chill temperatures, product temperatures, process and time
- Checks of Cleaning procedures and condition of equipment and fabric.
- Condition of product in stores, depots and cold stores (within our control) and transport should
- Samples of the defective product should be carried out to determine the cause of defect. Analysis should be carried out at the in-house Laboratory until the Technical Manager has

All investigation results should be fully reported and circulation restricted to the Product Recall Team.

At this stage, the Product Recall consider the need to call in external expertise to provide advice and support as necessary including specialist laboratories, regulatory authority. central technical support or legal expertise (Relevant contacts are listed in the reference section).

An initial brief on the situation should be prepared which will contain all the relevant information including product defect and all suspect products. This should be made available to members of the

The information should be updated continually and issued with sequential numbers, date and time. From this data, a brief for the media, customer, company management and work-force should be prepared and agreed by the team.

Document Reference FSMS 8.9.5 Withdrawal/recall Revision 0 7th November 2023 Owned by: Technical Manager Authorised by: General Manager







### 2.5.17 Communication Requirements

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FSMS 8.4 Emergency preparedness and response [Compatibility Mode]





#### Food Safety & Quality Management System

#### 8.4 Emergency preparedness and response

The company has established, documented and implemented a Business Continuity Planning and Crisis Management Procedure for the site, which is maintained in order to deal with emergencies which do not normally occur and are not covered by other Food Safety & Quality Management System procedures.

#### Crisis Situations and First Point of Contact

The following Crisis Team members have been trained in Crisis Management and are the nominated first point of contact for the crisis situations described:

Fire or Site evacuation Safety Manager Flooding Maintenance Manager Utility Supply failure Maintenance Manager Storm Damage Maintenance Manager IT systems failure Operations Manager Water Supply Contamination Technical Manager Breaches of security General Manager Bomb Threat or Similar General Manager Extortion or Sabotage General Manager Hazardous Chemicals Technical Manager

In all cases if the first point of contact cannot be contacted another member of the Crisis Management Team must be contacted.

In real crisis situation, a member of the Crisis Management Team must be contacted. The person contacted will urgently contact and assemble the other members of the Crisis Management Team. The Crisis Team will act quickly to assess the situation and formulate an action plan which is communicated to the site management. All relevant aspects of product safety, health and safety, financial effects and company image must be considered prior to recommencing production. All crisis and action resulting from crisis situations must be recorded.

If a call alleging or threatening extortion is received the person dealing with it should attempt to transfer the call to a member of the Crisis Management Team if at all possible. See appendix 1 Instructions to Personnel

The Crisis Team member contacted above will urgently contact the other members of the Crisis Management Team and the police through the local police station.

Product Quality and Safety - Issues relating to product quality and safety are covered by the Product Recall Procedure (including recalls in the case of food fraud).

Document Reference FSMS 8.4 Emergency preparedness and response Revision 0 7th November 2023 Owned by: General Manager

Authorised by: Managing Director



#### Food Safety & Quality Management System

#### Crisis Management Team

The Crisis Management Team are responsible for managing crisis incidents to ensure the health and safety of staff and public and to limit negative financial effects and negative public image. They are in place to deal with real emergencies and all day to day issues are dealt with by the site management

Members of the Crisis Management Team are trained in the use of communication systems including telecommunications, fax and e-mail.

A directory of contact details for key personnel is held in reception and the Crisis Management Team for use in crisis situations. Customers will be contacted if appropriate according to specific customer

The Crisis Management Team will include the following:

Sales and Marketing Manager General Manager Technical Manager Operations Manager Manufacturing Manager Health and Safety Manager Maintenance Manager

All members must delegate a deputy to cover sickness, holidays and other absences.

Crisis Management Team					
Crisis	Name	Crisis Coordinator	Contact Details		
Fire or Site evacuation		Safety Manager			
Flooding		Maintenance Manager			
Utility Supply Failure		Maintenance Manager			
Storm Damage		Maintenance Manager			
IT Systems Failure		Operations Manager			

Document Reference FSMS 8.4 Emergency preparedness and response Revision 0 7th November 2023

Owned by: General Manager Authorised by: Managing Director



	Technical	
Water Supply Contamination	Manager	
Breaches of security	General Manage	er
Distribution Failure	Distribution	
	Manager	
Bomb Threat or similar	General Manage	er
Bioterrorism	Managing	
	Director	
Extortion or Sabotage	General Manage	er
Hazardous Chemicals	Technical	
	Manager	

An initial brief on the situation should be prepared which will contain all the relevant information. This should be made available to members of the team.

The information should be updated continually and issued with sequential numbers, date and time. From this data a brief for the media, customer, company management and work-force should be prepared and agreed by the team.

Any out of hours contact with customers should only be made by authorised personnel.

a. General Manager and Technical Manager will contact external organisations by telephone and follow up with confirmation e-mails:

Customers General Manager Local Authority Technical Manager Media General Manager Health and Safety Manager Insurers

b. An Incident Room will be set up and all calls will be routed to it. All calls in and out will be logged. The reception personnel are briefed to transfer all calls to the Incident Room.

c. Communications with the Media This will be carried out only by the General Manager or his deputy.

Document Reference FSMS 8.4 Emergency preparedness and response Revision 0 7th November 2023 Owned by: General Manager Authorised by: Managing Director







# 2.5.15 Requirements for Organizations with Multi-Site Certification (Food Chain Categories E, F & G)

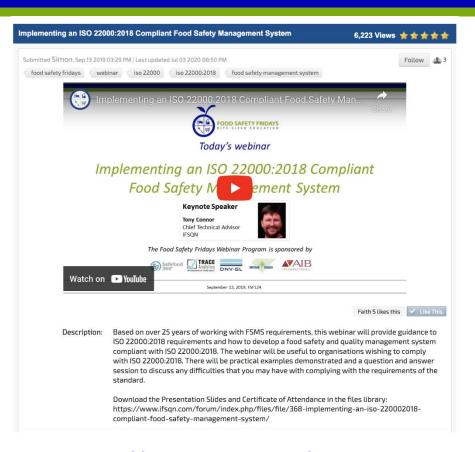
2.5.15.1 – Central function
Requirements for the management of the central function to ensure that sufficient resources are available, and that roles, responsibilities and requirements are clearly defined
2.5.15.2 - Internal Audit Requirements
An internal audit procedure and program shall be established by the central function covering the management system, central function, and all sites.





# Implementing an FSSC 22000 Version 6 Food Safety Management System End

Tony Connor Chief Technical Advisor, IFSQN



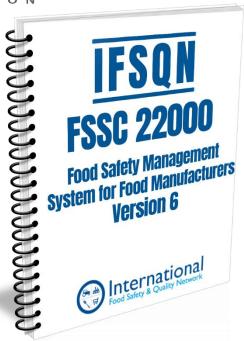


# Food Safety Friday September 2019

https://www.ifsqn.com/food\_safety\_videos.html/\_/ifsqn-videos/food-safetyfridays/implementing-an-iso-220002018-compliant-food-safety-management-system



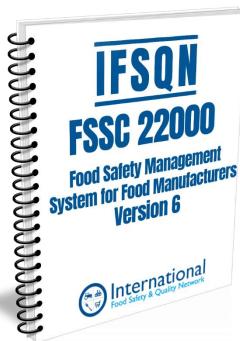
FSSC 22000 Food Safety Management
System for Food Manufacturers - Version 6
Implementation Package



Website link <u>www.ifsqn.com</u>



- ✓ Food Safety Management System Procedures & Records
- ✓ Prerequisite Programmes Manual
- ✓ HACCP Documentation & Tools including the FSSC 22000 HACCP Calculator
- ✓ Laboratory Quality Manual
- ✓ A set of PowerPoint Training Presentations covering ISO 22000, GMPs, Prerequisites, HACCP and Internal Audits





- ✓ ISO 22000/22002-1/FSSC 22000 Additional Requirements Gap Analysis Checklists
- ✓ New FSSC 22000 Implementation Workbook to guide you through the implementation of your FSSC 22000 compliant Food Safety Management System
- ✓ Start Up Guide
- ✓ Free online support via e-mail





# Implementing an FSSC 22000 Version 6 Food Safety Management System Any Questions

Tony Connor Chief Technical Advisor, IFSQN