BRCGS – FOOD SAFETY MANUAL

(Meeting the requirements of BRCGS- Food Safety - Issue -9)

COMPANY NAME
Address

This quality Manual, procedures and other related documents are prepared to the best of our judgment and for the guidance of the users. Please note that these are prepared keeping in view the general requirements of the standard .The user is advised to look at his processes, products, services ,customer requirements and other regulatory requirements while preparing his manuals and other documents. **The user is directed to visit the standard owner for purchase of the standards/technical documents and other updates for the compliances www.brcgs.com**

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PREFACE

1. This manual explains the food safety management related activities of ABC, located at ----------.

2. This manual is prepared in line with requirements of BRCGS- Food Safety Issue 9 , food safety management systems - requirements for any organization in the food chain.

3. This manual is prepared, and controlled by under signed, who is presently holding additional responsibility of FSTL (Food safety Team leader)

4. A food safety Team is appointed to co-ordinate planning, implementation and monitoring food safety related activities.

5. The issue and control of these manual and associated procedures will be by FSTL. It is mandatory for all departments/sections to follow the requirements strictly. No part of this manual shall be copied or issued without written permission of FSTL.

CEO

REVISION RECORDS

Date	Revision made on	Issue	Revision	Remarks
01/12/2022	Initial release	1.0	00	Initial release

Terms & definitions

TERM	DEFINITION
Acceptable Level	Level of a food safety hazard not to be exceeded in the end product provided by the organization
Audit	Systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled
Competence	ability to apply knowledge and skills to achieve intended results
Conformity	Fulfillment of a *requirement*
Contamination	Introduction or occurrence of a contaminant including a food safety hazard in a product or processing environment
Continual Improvement	Recurring activity to enhance *performance*
Control Measure	Action or activity that is essential to prevent a significant food safety hazard or reduce it to an acceptable level
Correction	Action to eliminate a detected *nonconformity*
Corrective Action	Action to eliminate the cause of a nonconformity and to prevent recurrence
Critical Control Point (CCP)	Step in the process at which control measure are applied to prevent or reduce a significant food safety hazard to an Acceptable level, and defined critical limit(s) and measurement enable the application of corrections
Critical Limit	measurable value which separates acceptability from unacceptability
Documented Information	Information required to be controlled and maintained by an organization and the medium on which it is contained
Effectiveness	Extent to which planned activities are realized and planned results achieved

End Product	Product that will undergo no further processing or transformation by the organization
Feed	Single or multiple product(s), whether processed, semi-processed or raw, which is (are) intended to be fed to food-producing animals
Flow Diagram	Schematic and systematic presentation of the sequence and interactions of steps in the process
Food	Substance (ingredient), whether processed, semi-processed or raw, which is intended for consumption, and includes drink, chewing gum and any substance which has been used in the manufacture, preparation or treatment of “food” but does not include cosmetics or tobacco or substances (ingredients) used only as drugs
Food Chain	Sequence of the stages in the production, processing, distribution, storage and handling of a food and its ingredients, from primary production to consumption
Food Safety	Assurance that food will not cause an adverse health effect for the consumer when it is prepared and/or consumed in accordance with its intended use
Food Safety Hazard	biological, chemical or physical agent in food with the potential to cause an adverse health effect
Interested Party (preferred term)**/Stakeholder**	Person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity
Lot	Defined quantity of a product produced and/or processed and/or packaged essentially under the same conditions
Management System	Set of interrelated or interacting elements of an organization to establish policies and objectives and processes to achieve those objectives
Measurement	Process to determine a value
Monitoring	Determining the status of a system, a process or an activity

Nonconformity	Non-fulfilment of a requirement
Objective	Result to be achieved
Organization	Person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives
Outsource	Make an arrangement where an external organization performs part of an organization's function or process
Performance	Measurable result
Policy	Intentions and direction of an organization as formally expressed by its top management
Prerequisite Programme /PRP	Basic conditions and activities that are necessary within the organization and throughout the food chain to maintain food safety
Process	Set of interrelated or interacting activities which transforms inputs to outputs
Product	Output that is a result of a process
Requirement	Need or expectation that is stated, generally implied or obligatory
Risk	Effect of uncertainty
Significant Food Safety Hazard	Food safety hazard identified through the hazard assessment, which needs to be controlled by control measures
Top Management	Person or group of people who directs and controls an organization at the highest level
Traceability	Ability to follow the history, application, movement and location of an object through specified stage(s) of production, processing and distribution
Update	Immediate and/or planned activity to ensure application of the most recent information

Validation	Food safety> obtaining evidence that a control measure (or combination of control measures) will be capable of effectively controlling the significant food safety hazard
Verification	Confirmation, through the provision of objective evidence, that specified requirements have been fulfilled

ABBREVATIONS

BIS	Bureau of Indian Standards
C & F	Clearing and Forwarding
CFT	Cross Functional Team
CP	Common Procedures
DOC	Document
GR	Goods Receipt
IS	Indian Standard
ISO	International Organization for Standardization
MA	Management Assistant
FSTL	Food Safety Team Leader
MRV	Material Receipt Voucher
NCR	Non Conformity Report
OP	Operating Procedures
PROD	Production
QC	Quality Control
QM	Quality Manual
QMS	Quality Management System
QP	Quality Policy
SH	Section Head
SI	Section In-charge
WI	Work Instruction
MRL	Maximum Residue Level

Purpose and Scope of FSMS (BRCGS- Food Safety)

PURPOSE

The purpose of this FSMS manual is:

1. To describe overall food safety system activities of ABC.
2. To achieve consistency and continual improvement in all the activities by installing a well-defined documented system.
3. To achieve conformance to legal, food safety and customer specific requirements.
4. To form the basis for audit / evaluation of system for carrying out further improvements.
5. To be used as a tool to help new incoming personnel to understand policy, procedures and methodology followed within the organization.

SCOPE

The scope of certification of food safety management system

Manufacture, Packing and supply of Vegetable Pickles. (Example One product)

The manual covers the activities carried out by the following sections and applicable the unit.

- Production covering blending, packing and despatch
- Quality Control covering incoming, in-process and final inspection
- Maintenance and PRP aspects
- Stores covering receipts, storage &issue of pickles and packing materials

The products covered are pickles packed in various pack sizes. Refer product specification for further details.

SENIOR MANAGEMNET COMMITMENT

1. Senior management commitment

1.1 Senior management commitment and continual improvement

a) Food Safety Policy

The company has a documented food safety policy which states the its intention to meet its obligation to produce safe, legal and authentic products to the specified quality, and its responsibility to its customers.
The policy includes commitment to continuously improve the site's food safety and quality culture.
The policy is signed by the MD and it is communicated to all staff.

The Food safety Policy of ABC is as follows:

b) Food safety and Quality Culture

Top management has defined and maintained a clear plan for the development and continual improvement of a food safety and quality culture (ABC/BRC/Ann-1) .

This plan includes aspects such as:

- activities involving all processes of the site that have an impact on product safety.
- clear and open communication on product safety

- training
- feedback from employees
- behavior required to improve product safety
- Performance measurement of activities related to the safety, authenticity, legality and quality of products
- An action plan to achieve it within the intended timescales

The plan shall be reviewed and updated at least annually, at a minimum.

c) Food safety objectives

Top management ensures that clear food safety objectives are documented and maintain and to improve the safety, authenticity, legality and quality of products manufactured. (ABC/BRC/Ann-2)

- Objectives are clearly communicated to all staff
- Status of achievement of the objectives are monitored quarterly basis.

d) Management review

Documented procedure for management review meeting is maintained and it is conducted at least once in six months to evaluate the performance of food safety management system.

The agenda of MRM includes review of :

- previous management review action plans and timeframes
- the results of internal, second-party and/or third-party audits
- any objectives that have not been met, to understand the underlying reasons. This information

shall be used when setting future objectives and to facilitate continual improvement

- any customer complaints and the results of any customer feedback
- any incidents (including both recalls and withdrawals), corrective actions, out-of-specification results and non-conforming materials
- the effectiveness of the systems for HACCP, food defense and authenticity, and the food safety and quality culture plan
- resource requirements.

The decisions and actions agreed in the MRM will be effectively communicated to appropriate staff, and actions implemented within agreed timescales.

e) Monthly meetings

The site has monthly meeting programme which enables food safety, authenticity, legality and quality issues to be brought to the attention of senior management.

f) Whistle blowing system

Documented procedure for Whistle blowing is established to have a confidential reporting system to enable staff to report concerns relating to product safety, authenticity, legality and quality. The mechanism for reporting concerns including the details such as telephone number/ contact person are clearly communicated to the staff. The records of communication are maintained.

g) Resources

The company's senior management provides the human and financial resources required to produce safe, authentic, legal products to the specified quality and in compliance with the requirements of this Standard.

The company's senior management ensures that the site is kept informed of and reviews:

- scientific and technical developments
- industry codes of practice
- new risks to authenticity of raw materials

all relevant legislation in the country where the product will be sold.

h) Copy of Standard

The site maintains a genuine, original hard copy or electronic version of the current Standard available and be aware of any changes to the Standard or protocol that are published on the BRCGS website.

i) Logo usage

The BRCGS logo will be used only in accordance with the conditions of use specified in the Standard.
Wherever required by legislation/regulations, the site will maintain appropriate registrations with the relevant authorities.

1.2 Organizational structure, responsibilities and management authority

The company has documented the organization chart (Annexure 3) demonstrating the management structure of the company. The responsibilities/authorities for the management of activities which ensure food safety, authenticity, legality and quality are clearly allocated and understood by the managers as specified in the job description.
It also describes who deputizes in the absence of the responsible person.

The top management ensures that all staff are aware of their responsibilities and demonstrate that work is carried out in accordance with documented site policies, procedures, work instructions and existing practices for activities undertaken. All staff have access to relevant documentation.

Staff / workers are aware of the need to report any risks or any evidence of unsafe or out-of-specification product, equipment, packaging or raw materials, to a Plant manager to enable the resolution of issues requiring immediate action.

Reference

Food safety culture plan – ABC/BRC/Ann-01
Food Safety objectives - ABC/BRC/Ann-02
Organization chart - ABC/BRC/Ann-03

FOOD SAFETY PLAN - HACCP

2.1 **The HACCP food safety team (equivalent to Codex Alimentarius Step 1)**

The HACCP/ Food safety plan is developed, reviewed and managed by a multidisciplinary team that includes those responsible for Quality, Production, Engineering/ maintenance, Operations and other relevant functions as shown below:

Name	Designation	Role	Qualification
		Team Leader	
		Team Member	
		Team Member	
		Team Member	
		Team Member	
		Team Member	
		Team Member	

Team leader will have an in-depth knowledge of Codex HACCP principles (or equivalent) and be able to demonstrate competence, experience and training.

Team members shall have specific knowledge of HACCP and relevant knowledge of products, processes and associated hazards.

The scope of each HACCP or food safety plan, including the products and processes covered, is as given below:

Manufacture, Packing and supply of Vegetable Pickles.

2.2 Prerequisite programmes

The company has established and maintained an environmental and operational programme necessary to create an environment suitable to produce safe and legal food products (prerequisite programs).

Documented SOPs are established to effectively implement the system which include the following PRP aspects:

- cleaning and disinfection
- pest management
- maintenance programs for equipment and buildings
- personal hygiene requirements
- staff training
- supplier approval and purchasing
- transportation arrangements
- processes to prevent cross-contamination
- allergen management
- Other relevant procedures.

The prerequisite programs are implemented taking into account the production risk zoning.

The control measures and monitoring procedures for the prerequisite programs are clearly documented and established.

2.3 Describe the product

Description of the product describing the detailed information of the product such as

- composition
- origin of ingredients (raw materials, ingredients, packaging materials)
- Source
- physical or chemical or microbiological properties that impact food safety

- treatment and processing
- packaging system
- storage and distribution conditions
- maximum safe shelf life
- storage and usage conditions.

Preliminary steps to hazard analysis

All relevant information needed to conduct the hazard analysis are collected, maintained, documented and updated.

The company ensures that the HACCP or food safety plan is based on comprehensive information sources, which include:

- the latest scientific literature
- historical and known hazards associated with specific food products
- relevant codes of practice
- recognized guidelines
- food safety legislation relevant for the production and sale of products
- customer requirements
- a map of the premises and equipment layout
- a water distribution diagram for the site

- indication of any areas such as high-risk, high-care production areas as applicable.

2.4 Identify 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, are considered and are documented in product description to conduct the hazard analysis. Product can be used by all types of population.

2.5 Construct a flow diagram

Flow diagram is prepared by food safety team for the products or process categories covered by the food safety management system

Flow diagrams are prepared in detail include the following:

- plan of premises and equipment layout
- raw materials, including introduction of utilities and other contact materials
- sequence and interaction of all process steps
- outsourced processes and subcontracted work
- potential for process delay
- rework and recycling
- low-risk/high-risk/high-care area segregation
- finished products, intermediate/semi-processed products, by-products and waste.

Flow diagrams for products: **Refer** ABC/BRC/Ann-06

2.6 Verify the flow diagram

After preparation of the flow diagrams, the food safety team verifies its accuracy by checking it with on- site process steps and record for the same is maintained. This will be done annually or any change in the process by way of addition equipment, process change, new product.

2.7 Conduct hazard analysis

The HACCP food safety team conducts hazard analysis and record all the potential hazards that are reasonably expected to occur at each step-in relation to product, process and facilities. This includes hazards present in raw materials, those introduced during the process or surviving the process steps, and consideration of the following types of hazards:

- Microbiological
- Physical contamination
- Chemical and radiological contamination
- Fraud
- Food Defense
- Allergen

The HACCP food safety team conducts hazard analysis to identify the significant hazards (i.e. those hazards that are reasonably likely to occur at an unacceptable level), which need to be prevented, eliminated or reduced to acceptable levels.

This will be done based on the following:

- likely occurrence of hazard
- severity of the effects on consumer safety
- vulnerability of those exposed
- survival and multiplication of micro-organisms of specific concern to the product
- presence or production of toxins, chemicals or foreign bodies
- contamination of raw materials, intermediate/semi-processed product, or finished product.

Where elimination of the hazard is not practical, justification for acceptable levels of the hazard in the finished product will be determined and documented.

Where the control of a specific food safety hazard is achieved through ORP or control measures other than CCPs, the adequacy of the program to control the specific hazard is validated.

Ref: Hazard analysis work sheet – ABC/BRC/Ann- 07

2.8 Determine Critical Control Points

For each hazard that requires control, control points are reviewed by use of a decision tree. CCPs will be those control points which are required in order to prevent or eliminate a food safety hazard or reduce it to an acceptable level. If a hazard is identified at a step where control is necessary for safety but the control does not exist, the product or process shall be modified at that step, or at an earlier step, to provide a control measure.

Ref: CCP Decision tree – ABC/BRC/Ann- 08

2.9 Validation of critical limits for CCPs

For each CCP, the appropriate measurable critical limits are defined in order to identify clearly whether the process is in or out of control.

The HACCP food safety team validates each CCP, including critical limits. Documented evidence to establish that the control measures selected and critical limits identified are capable of consistently controlling the hazard to the specified acceptable level.

2.10 Monitoring system for each CCP

A monitoring procedure is established for each CCP to ensure compliance with critical limits.

Records associated with the monitoring of each CCP includes the date, time and result of measurement, and the same is authorized by the person responsible for the monitoring and verification.

2.11 Establish a corrective action plan

When monitored results indicate a trend towards loss of control, corrective action to be taken by nominated personnel with regard to any products that have been manufactured during the period when the process was out of control and corresponding records are maintained.

2.12 Validate the HACCP plan and establish verification procedures

HACCP or food safety plans is validated prior to any changes which may affect product safety, to ensure that the plan will effectively control the identified hazards before implementation.

Procedures of verification is established to ensure that the HACCP or food safety plan, including controls managed by prerequisite programs, continues to be effective.

verification activities include:

- internal audits
- review of records where acceptable limits have been exceeded
- review of complaints by enforcement authorities or customers
- review of incidents of product withdrawal or recall.

Results of verification is recorded and communicated to the Food safety team.

Review of HACCP/ Food safety Plan

The food safety team reviews the HACCP or food safety plan and prerequisite programs at least annually and prior to any changes which may affect food safety.

This include the following:

- change in raw materials or supplier of raw materials
- change in ingredients/recipe

- change in processing conditions, cleaning and disinfection procedures, process flow or equipment
- change in packaging, storage or distribution conditions
- change in consumer use
- emergence of a new risk (adulteration of an ingredient or other relevant, published information, such as the recall of a similar product)
- review following a significant product safety incident including recall
- new developments in scientific information associated with ingredients, process, packaging or product.

Any changes resulting from the review will be incorporated into the HACCP or food safety plan and/or prerequisite programs and the records are maintained.

2.13 HACCP documentation and record-keeping

All the documents and records related to the HACCP and food safety controls and PRP related are maintained.

Reference:

Specification of raw materials ABC/BRC/Ann- 04

Specification of Final product ABC/BRC/Ann- 05

Process flow diagram ABC/BRC/Ann- 06

Hazard analysis work sheet ABC/BRC/Ann- 07

CCP decision tree ABC/BRC/Ann- 08

HACCP Plan ABC/BRC/Ann- 09

FOOD SAFETY AND QUALITY MANAGEMNET SYSTEM

3. Food safety and quality management system

3.1 Food safety and quality manual

FSMS documents include Food Safety and quality manual, HACCP manual, SOPs and work instructions.

The company's processes and procedures to meet the requirements of this are documented to allow effective, consistent application, facilitate training, and support due diligence in the production of a safe product.

3.2 Document Control

Documented procedure for control of documents is established for operate an effective document control system to ensure that only the correct versions of documents, including recording forms, are available and in use.

3.3 Control of Records

Documented procedure for control of records is established for maintain genuine records to demonstrate the effective control of product safety, legality and quality.

Records are retained for a defined period with consideration given to:

- any legal or customer requirements
- the shelf life of the product.

At a minimum, records shall be retained for the shelf life of the product plus 12 months.

3.4 Internal audit

Documented procedure for performing of internal audits is established and the programme includes at least four different audit dates spread throughout the year. The frequency at which each activity is audited shall be established in relation to the risks associated with the activity and previous audit performance.

All activities that form a part of the site's food safety and quality systems, including those relevant

to food safety, authenticity, legality and quality, are covered at least once each year.

3.5 Supplier and raw material approval and performance monitoring

Documented procedure for effective supplier approval and monitoring system established to ensure that any potential risks from raw materials (including primary packaging) to the safety, authenticity, legality and quality of the final product are understood and managed.

A documented risk assessment of each raw material or group of raw materials, including primary packaging, to identify potential risks to product safety, authenticity, legality and quality

This shall take into account the potential for:

- allergens
- foreign-body risks
- microbiological contamination
- chemical contamination
- variety or species cross-contamination
- substitution or fraud
- any risks associated with raw materials which are subject to legislative control or customer requirements.

The criteria for selection and evaluation of the performance is documented in the procedure .

3.5.2 Raw material and packaging acceptance, monitoring and management procedure

Documented specifications are established for controls on the acceptance of raw materials (including primary packaging) to ensure that these do not compromise the safety, legality or quality of products and, where appropriate, any claims of authenticity.

The acceptance of raw materials and primary packaging on receipt based upon the risk assessment. Acceptance of raw materials (including primary packaging) and their release for use will be based on either one or a combination of:

- product sampling and testing
- visual inspection on receipt
- certificates of analysis
- certificates of conformance.

3.5.3 Management of suppliers of services

Documented procedure for effective supplier approval and monitoring system for servies providers is established to demonstrate that where services are are appropriate and any risks presented to food safety, authenticity, legality and quality have been evaluated to ensure effective controls are in place.

The services include:

- pest control
- contracted cleaning
- contracted servicing and maintenance of equipment
- transport and distribution
- laboratory testing
- waste management
- providers of product safety training

Formal agreements exist with the suppliers of services that clearly define service expectations and ensure that the potential food safety risks associated with the service.

Records are maintained.

3.5.4 Management of outsourced processes

As of now no outsourced processes are handled in the site.

3.6 Specifications

Specifications for all raw materials (including primary packaging), finished products are documented and any product or service which could affect the integrity of the finished product are maintained.

The specifications include defined limits for relevant attributes of the material which may affect the quality or safety of the final products (such as chemical, microbiological, physical or allergen standards).
Accurate, up-to-date specifications are available for all finished products.

Specification is reviewed frequently to ensure that data is current or at a minimum every 3 years, taking into account product changes, suppliers, regulations and other risks.

Reviews and changes shall be documented.

3.7 Corrective and preventive actions

Documented procedure is established to identified issues in the food safety and quality management system such as non-conforming products, internal audits, complaints, product recalls, product testing, second- and third-party audits etc to complete necessary corrective actions and prevent recurrence.

Root cause analysis is used to prevent recurrence of non-conformities, and to implement ongoing improvements when analysis of non-conformities for trends shows there has been a significant increase in a type of non-conformity.

3.8 Control of Non-conforming products

Documented procedure is established to identified issues in the food safety and quality management system such as non-conforming products including any out-of-specification product. Subsequent action to rework, reject and disposition of the non-conforming products will be done as specified the procedure.

3.9 Traceability

Documented traceability procedure designed to maintain traceability throughout the site's processes. This includes:

- how the traceability system works
- the labelling and records required.
- Follow the legal requirements as applicable.

Mock traceability test conducted across the range of product groups to ensure traceability can be determined from the supplier of raw material (including primary packaging) to the finished product and vice versa.

For food raw materials and finished products the test of the traceability system include a quantity check/mass balance.

The mock traceability test conducted at a frequency, at a minimum annually, and results are retained for inspection. Traceability should be achievable within 4 hours.

3.10 Compliant handling

All complaints are recorded and investigated, and the results of the investigation of the issue recorded where sufficient information is provided. Actions appropriate to the seriousness and frequency of the problems identified shall be carried out promptly and effectively by appropriately trained staff.

Complaint data are analyzed for significant trends. Root cause analysis in conducted on serious complaint and implement ongoing improvements to product safety, legality and quality, and to avoid recurrence.

3.11 Management of incidents, product withdrawal and product recall.

Emergency preparedness and incident management

Documented procedure for handling incidents and potential emergency situations that impact food safety, authenticity, legality or quality is established.

This shall include consideration of contingency plans to maintain product safety, authenticity, legality and quality. Incidents may include:

- disruption to key services such as water, energy, transport, , staff availability and communications
- events such as fire, flood or natural disaster
- malicious contamination or sabotage
- product contamination indicating a product may be unsafe or illegal
- failure of, or attacks against, digital cyber-security.

Where products which have been released from the site may be affected by an incident, consideration will be given to the need to withdraw or recall products.

Product recall

Documented procedure for product withdrawal and recall is established. This includes,

- recall team
- up-to-date list of key contacts
- communication plan including the provision of information to customers, consumers.
- details of external agencies providing advice and support (specialist laboratories, regulatory authority and legal expertise)
- plan to handle the logistics of product traceability
- a plan to conduct root cause analysis and to implement ongoing improvements, to avoid recurrence.

References

Procedure for control of documents ABC/BRC/PR/01

Procedure for control of Records ABC/BRC/PR/02

Procedure for internal audit ABC/BRC/PR/03

Procedure for control supplier selection/ evaluation ABC/BRC/PR/04

Procedure for corrective and preventive action ABC/BRC/PR/05

Procedure for control of NCP ABC/BRC/PR/06

Procedure for Traceability ABC/BRC/PR/07

Procedure for customer complaints handling ABC/BRC/PR/08

Procedure for Emergency preparedness ABC/BRC/PR/09

Procedure for Product recall ABC/BRC/PR/10

SITE STANDARDS

4.1 External Standards and site security

External areas of the site environment, which may have an adverse impact on the safety or quality of the finished product or raw materials, are maintained well to prevent contamination. Where measures have been put in place to protect the site, they are regularly reviewed to ensure they continue to be effective.

The external areas of the plant are maintained in good order. Any grassed or planted areas surrounding buildings shall be regularly tended and well maintained. External traffic routes under site control shall be suitably surfaced to avoid contamination of the product.

The building fabric is maintained to minimize potential for pest entry, ingress of water and other contaminants. External silos, pipework or other access points for the product and/or raw materials are sealed and secured. Where possible, a clean and unobstructed area will be provided along the external walls of the buildings used for production and/or storage.

Policies and systems are in place to ensure that access to the site by staff, contractors and visitors is controlled. A visitor recording system is in place.

Contractors and visitors, including drivers, are made aware of the procedures for access to the site.

Staff are trained in site security procedures.

4.2 Food defense

The company has a documented threat assessment to identify the potential risks to products from any deliberate attempt to inflict contamination or damage. This threat assessment includes both internal and

external threats.

The output from the threat assessment is documented as food defense plan. This plan will be kept under review to reflect changing circumstances and market intelligence. It will be formally reviewed at least annually and whenever:

- a new risk emerges (a new threat is publicized or identified)
- an incident occurs where product security or food defense is implicated.

Staff are trained in food defense procedures.

4.3 Layout and product flow and segregation

Site maintains a current map or plan of the site which defines:

- access points for personnel
- travel routes for personnel, raw materials and intermediate or finished products
- staff facilities
- routes for the removal of waste
- routes for movement of rework
- production and process flows
- storage areas.

The process flow from intake to dispatch are arranged to minimize the risk of contamination or damage to the product.

Premises allows sufficient working space and storage capacity to enable all operations to be carried out properly under safe and hygienic conditions.

Sorting or other activities involving the direct handling of the product takes place in areas that have, as a minimum, the same standards as production areas.

Temporary structures constructed during building work or refurbishment will be designed and located to avoid pest harborage and ensure the safety and quality of products

4.4 Building fabric , raw materials handling, preparation, processing, packing and storage areas

Walls, floors, ceilings and pipework are maintained in good condition and are facilitate cleaning.

All internal drain openings are suitably protected against the entry of pests and designed to minimize odour.

Where they constitute a risk to product, and based on the likelihood and risk of contamination, windows and roof glazing are protected against breakage.

Suitable and sufficient lighting is provided to ensure a safe working environment, correct operation of processes, effective inspection of the product and cleaning.

Suitable and sufficient ventilation shall be provided.

Plastic strip curtains are maintained in good condition, clean, fitted correctly and shall not pose a food safety risk.

4.5 Utilities- water, ice, air, Other gases

Water used in the processing of the products or equipment cleaning are potable or suitably treated to prevent contamination.

Based on risk assessment, the microbiological and chemical quality of water, steam, air, compressed air or other gases which come into direct contact with packaging are regularly monitored. These will present no risk to product safety or quality and shall comply with relevant legal regulations.

An up-to-date schematic diagram is available of the water distribution system on site, including water source, holding tanks, water treatment and water recycling.

The diagram will be used as a basis for water sampling and the management of water quality.

4.6 Equipment

Production, storage and warehousing equipment are designed for the intended purpose and ensures minimize the risk of contamination to the product. Lubrication points and application methods of any lubricant are be able to contaminate the product.

Equipment is constructed of suitable materials and be designed to ensure it can be effectively cleaned and maintained.

A documented, risk-based commissioning procedure will be in place to ensure that food safety and integrity is maintained during the installation of new equipment to site.

Newly installed equipment are properly specified before purchase. New equipment is tested and commissioned prior to use and a maintenance and cleaning program established.

Wooden equipment including desks, chairs, tables, etc. are properly sealed to enable effective cleaning. This equipment is kept clean, in good condition and free from splinters or other sources of physical contamination.

Equipment that is not used or is taken out of service are cleaned and stored in a manner that does not pose a risk to the product.

Equipment stored in internal production and storage areas are kept clean.

Food contact equipment that has been stored but is not in daily use are cleaned and, where necessary, disinfected prior to use.

Mobile equipment such as forklift trucks, pallet trucks, and ladders etc used in open product areas are controlled in such a way that they do not pose a risk to the product.

4.7 Maintenance

A documented preventive maintenance program (ABC/BRC/017) is operated, covering all items of production equipment and plant critical to product safety, legality and quality, to prevent contamination and reduce the risk of breakdown.

Maintenance logs are maintained for all off-line testing equipment.

In addition to any preventive maintenance program, where there is a risk of product contamination by foreign bodies arising from equipment failure or damage, the equipment will be inspected at predetermined intervals, inspection results documented, and appropriate action taken.

Maintenance work shall not place product safety, quality or legality at risk. Maintenance work is followed by a documented clearance procedure which records that contamination hazards have been removed and equipment cleared to resume production.

Tools and other maintenance equipment are cleared away after use and appropriately stored.

Temporary Repairs

Temporary repairs/modifications using tape, cardboard, etc. are only be permitted in emergencies and where product contamination is not at risk. Such modifications will be subject to a time limit and are recorded and scheduled for correction.

Engineering workshops is controlled to prevent transfer of engineering debris to production or storage areas.

Contractors involved in maintenance or repair are suitably monitored (work permit system) by a staff member who are responsible for their activities.

4.8 Staff facilities

Designated changing rooms (Male/Female) are provided for all personnel, whether staff, visitor or contractor.

Outdoor clothing and other personal items to be stored separately from production clothing within the changing facilities. Facilities are provided to separate clean and dirty production clothing.

Suitable and sufficient hand-washing facilities are provided at access to, and at other appropriate points within, production areas. Such hand-washing facilities provides, at a minimum:

- advisory signs for hand-washing
- a sufficient quantity of water
- water taps with hands-free operation
- liquid/foam soap
- Dryer/ single use towels

Toilets are adequately segregated and shall not open directly into production or packing areas. Designated smoking areas are provided in the facility which is away form the production area.

4.9 Chemical and physical product contamination control

Chemical Control Program

Procedure in place to manage the use, storage and handling of non-food chemicals to prevent chemical contamination. These shall include, at a minimum:

- an approved list of chemicals for purchase
- availability of MSDS and specifications

- confirmation of suitability for use in a food-processing environment
- avoidance of strongly scented products
- the labelling and/or identification of containers of chemicals at all times
- a designated storage area (separate from chemicals used as raw materials in products) with access restricted to authorized personnel
- use by trained personnel only
- procedures to manage any spills

procedures for the safe, legal disposal or return of obsolete or out-of-date chemicals and empty chemical containers.

Metal Control

A documented policy for the controlled use and storage of sharp metal implements including knives, cutting blades on equipment, needles and wires.

This includes a record of inspection for damage and the investigation of any lost items. Snap-off blade knives shall not be used.

Staples, paper clips and drawing pins are not be used in open product areas.

Where staples or other items are present as packaging materials or closures, appropriate precautions shall be taken to minimize the risk of product contamination.

Glass, brittle plastic, ceramics and similar materials

Documented glass and brittle plastic policy is implemented, which include controls over glass, brittle plastic and ceramic or similar products in the production and storage areas.

Glass or brittle plastics (other than the product) that pose a potential product contamination hazard is controlled and recorded on a register that includes:

- a list of items detailing location, number, type and condition
- recorded checks of condition of items, carried out at a specified frequency that is based on the level of risk to the product

- details on cleaning or replacing items to minimise the potential for product contamination.

Where non-production glass or brittle plastic breakage occurs, a responsible person is placed in charge of the clean-up operation and shall ensure that no other area is allowed to become contaminated due to the breakage. Any product that has become contaminated are segregated and disposed of.

All breakages are recorded in an incident report.

Products packed into glass or other brittle containers

Systems is in place to manage container breakages between the container-cleaning/ inspection point and container closure.

This includes, documented instructions which ensure:

- the removal and disposal of at-risk products in the vicinity of the breakage
- the effective cleaning of the line or equipment which may be contaminated by fragments of the container; cleaning shall not result in the further dispersal of fragments,
- the use of dedicated, clearly identifiable Colour coded cleaning equipment for removal of container breakages; such equipment shall be stored separately from other cleaning equipment.
- the use of dedicated, accessible, lidded waste containers for the collection of damaged containers and fragments
- a documented inspection of production equipment is undertaken following the cleaning of a breakage, to ensure cleaning has effectively removed any risk of further contamination

Records are maintained of all container breakages on the line.

Wood

Wooden equipment including desks, chairs, tables, etc. are properly sealed to enable effective cleaning. This equipment is kept clean, in good condition and free from splinters or other sources of physical contamination.

Wood used for food contact purposes are fit for purpose and are used, only in accordance with legislation and approved for food use.

Physical contaminants

Procedures in place to prevent physical contamination of raw materials by raw material packaging during debagging and de-boxing.

Portable handheld equipment's such as pens, pencils , mobile phones, tablets and similar portable items used in open product areas, are controlled by the site to minimize the risk of physical contamination.

4.10 Foreign-body detection and removal equipment

A documented assessment being carried out to identify the potential use of equipment to detect or remove foreign-body contamination (metal detection).

The sensitivity of the detection and/or removal method are specified as part of the site's documented system. The location of the equipment or any other factors influencing the sensitivity of the equipment are validated and justified.

4.11 Housekeeping and hygiene

Documented cleaning procedure(ABC/BRC/018) is in place and maintained for buildings, equipment and vehicles. Cleaning schedules and procedures includes the following information:

- responsibility for cleaning
- item/area to be cleaned
- frequency of cleaning
- method of cleaning
- cleaning materials to be used
- cleaning record and responsibility for verification.

The frequency and methods of cleaning are based on risk.

Cleaning chemicals used are fit for purpose, suitably labelled, and used in accordance with manufacturers' instructions. They are stored in a secured, designated location, in closed containers. Chemicals that are strongly scented or could give rise to taint and odour contamination are not used.

Materials and equipment used for cleaning toilets are differentiated from those used elsewhere, and physically segregated where necessary.

Environment Monitoring Program

Documented environment monitoring program (ABC/BRC/019) based on risk, is in place to ensure that the cleaning operations are effective in minimizing the risk of contamination by microorganisms that would be detrimental to the products.

The program considers the likelihood of the microorganisms' survival on packaging materials and their use.

EMP include:

- sampling protocol
- identification of sample locations
- frequency of tests
- target organisms (e.g. pathogens, spoilage organisms and/or indicator organisms)
- test methods
- recording and evaluation of results.

4.12 Waste and waste disposal

Documented procedure is established to manage the waste collection and disposal of waste.

Licensed waste collators are engaged for removal of waste

Process waste is managed to minimize release to the environment.

Suitable and sufficient refuse and waste containers are provided, which are emptied at appropriate frequencies and maintained in an adequately clean condition.

Waste containers are categorized based on the intended means of disposal (such as recycling), and sorted, segregated and collected in appropriate designated waste.

Substandard trademarked materials are rendered unusable through a destructive process. All materials disposed of are recorded.

In case the substandard trademarked materials are transferred to a third party for destruction or disposal, that third party will be a specialist in appropriate waste disposal and provides records of material destruction.

4.14 Pest management

Documented pest control procedure is established to control pest in the facility.

The site assesses the suitability of its pest management program to address variation in pest activity through different seasons, and consider any additional preventive activity required.

The site has a contract the services of a competent pest management organization for the regular inspection and treatment of the site in order to deter and eradicate infestation. The frequency of inspections are determined by risk assessment and documented.

The services of a pest management contractor are employed, the service contract will be clearly defined and reflect the activities of the site.

Equipment such as bait stations, traps or electric fly-killing devices are appropriately located and operational.

Effective precautions are in place to prevent pests entering the premises. The building is suitably proofed against the entry of all pests via doors, windows, ducts and cable entry points.

This includes measures to prevent birds from entering buildings or roosting above loading or unloading areas.

In the event of infestation, immediate action will be taken to eliminate the hazard. Action shall be taken to identify, evaluate the potential for contamination or damage, and authorize the release of any product potentially affected.

In the event of an infestation, and at appropriate intervals, the site requests a catch analysis from flying-insect control devices to help identify problem areas.
In the event of increase in activity, the site uses risk assessment to determine the activity required to eliminate the hazard.

Records of pest management inspections, pest proofing and hygiene recommendations and actions taken shall be maintained.

4.15 Storage facilities

Procedures is maintained to ensure product safety and quality during storage on the basis of risk assessment, accordingly adequate storage requirements are implemented. Wherever necessary storing of materials off the floor and away from walls.

Site facilitates correct stock rotation (FIFO/FEFO) of raw materials, intermediate products and finished products in storage and ensures that materials are used in the correct order in relation to their manufacturing date and within the prescribed shelf life.

4.16 Dispatch and transport

Documented procedure for Dispatch and transport established which include:

- any restrictions on the use of combined loads (e.g. where materials from other companies are in the same transport)

requirements for the security of products during transit, particularly when vehicles are parked and unattended away from a designated storage depot.

All products and materials are identified and either protected during distribution by appropriate external packaging or transported under conditions to protect the product from contamination. This includes the risk of taint or odor and of malicious intervention.

All pallets are checked. Damaged, contaminated or unacceptable pallets are discarded. Wooden pallets that come into direct contact with finished products or raw materials are not be allowed to contaminate the product.

All company-owned or leased vehicles used for deliveries included in the documented cleaning schedules and kept clean and in a condition that minimizes the risk of product contamination.

All delivery vehicles and shipping containers are subject to a documented hygiene and odor checking procedure before loading.

Where the company employs third-party contractors, and there will be a contract or agreed terms and conditions which will include general carriers, the packaging to be adequate to protect the product against damage, contamination hazards, taint and odor

Vehicle drivers must comply with the site rules relevant to this Standard.
Access to the site for third-party transport personnel are controlled and, where possible, facilities provided to negate the need to enter storage or production areas.

References

Procedure for Food defense ABC/BRC/PR/11

Food defense threat assessment &plan ABC/BRC/PR/12

Layout diagram ABC/BRC/PR/13

Procedure for Maintenance ABC/BRC/PR/14

Procedure for Environmental Monitoring Program ABC/BRC/PR/15

PRODUCT CONTROL

5 Product control

5.1 Product design/development

Not applicable

5.2 Product labelling

All products are labelled to meet legal requirements for the designated country of use and shall include information to allow the safe handling, display, storage, preparation and use of the product within the food supply chain or by the customer.

Documented procedure in place defining the controls with respect to the labelling requirements of the product and it takes care of the following aspects:

- Allergen labelling
- Artwork approval and sign off

The labelling information is reviewed whenever there is a change in the labeling requirements

Based on changes in:

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

Where the label information is the responsibility of a customer or a nominated third party, the company shall provide information to enable the label to be accurately created.
whenever a change occurs which may affect the label information.

5.3 Management of allergens

The company has established a system for the management of allergenic materials which minimises the risk of allergen contamination (cross-contact) of products and meets legal requirements for labelling in the country of sale.

Documented procedure has been established to out an assessment of raw materials to establish the presence and likelihood of contamination (cross-contact) by allergens.

Procedures ensures the effective management of allergenic materials to prevent cross-contamination (cross-contact) of products not containing the allergen.
These includes:

- physical segregation while allergen-containing materials are being stored, processed or packed
- the use of separate or additional protective overclothing when handling allergenic materials
- use of identified, dedicated equipment and utensils for processing
- scheduling of production to reduce changes between products containing an allergen and products not containing the allergen
- systems to restrict the movement of airborne dust containing allergenic material
- waste handling and spillage controls
- restrictions on food brought onto site by staff, visitors and contractors.

Cleaning procedures to remove or reduce to acceptable levels any potential cross-contamination (cross-contact) by allergens. The cleaning methods are validated to ensure that they are effective and the

effectiveness of the procedure routinely verified. Cleaning equipment used to clean allergenic materials shall either be:

- identifiable and specific for allergen use
- single use

effectively cleaned after use.

5.4 Product authenticity, claims and chain of custody

The company has processes in place to access information on historical and developing threats to the supply chain which may present a risk of substitution of raw materials (i.e. fraudulent raw materials). Such information may, for example, come from:

- trade associations
- government sources
- private resource centers.

A documented vulnerability assessment shall be carried out on all raw materials or groups of raw materials to assess the potential risk of substitution. This shall take into account:

- historical evidence of substitution
- economic factors which may make substitution more attractive
- ease of access to raw materials through the supply chain
- sophistication of routine and upstream testing to identify substitution
- nature of the raw material.

The output from this assessment is documented vulnerability assessment plan.(ABC/BRC/011) This plan is kept under review to reflect changing economic circumstances and market intelligence which may alter the potential risks. It shall be formally reviewed annually.

Where raw materials are identified as being at particular risk of substitution, the vulnerability assessment plan shall include appropriate assurance and/or testing processes to mitigate the identified risk(s).

5.5 Product packaging

While procuring packaging materials , specifications are clearly communicated to the suppler with respect to the requirements.
Certificates of conformity or COA , migration certificates are collected for primary packaging to confirm it complies with applicable food safety legislation and is suitable for its intended use.

Procedure to manage obsolete packaging (including labels) are established. This includes:

- mechanisms to prevent accidental use of obsolete packaging
- control and disposal of obsolete packaging.

5.6 Product inspection, on-site product testing and laboratory analysis

In process and final product inspection/ testing for quality checks are carried out to demonstrate that the finished product is within the tolerances laid down in the agreed product specification and conforms to any critical technical/legal requirements.

The frequency of checks and sampling are in accordance with industry-accepted practice or customer requirements and based on risk analysis.

The procedure for quality control defines how samples used for checking in-process quality are disposed of.

Hazard and risk analysis principles are used to determine the need for in-line product testing equipment to ensure product safety, quality and legality.

The accuracy of in-line equipment is specified (with permitted tolerances), having due regard to the product parameter being controlled.

The company has established, documented and implemented procedures for the operation, routine monitoring and testing of all equipment used in product inspection, testing and measurement. This includes:

- frequency and sensitivity of checks
- authorization of trained personnel to carry out specified tasks
- documentation of test results.

Routine off-line quality checks are carried out at appropriate stages in production to demonstrate that the product is within the tolerances laid down in the agreed product specification.

In-line testing equipment critical to product quality or safety is incorporated to the system to identify non-conforming product for removal or divert it out of the product flow.

The test methods used by the site in both on-line and off-line testing are validated to ensure their sensitivity, reproducibility and range, in addition to any other relevant criteria.

Where standardized tests are used, the site ensures prescribed methodologies are followed.

Where testing shows out-of-specification results, a documented procedure for investigating these results are established and followed to determine whether the cause is non- conforming product or a testing failure.

The site has established and implemented a procedures in the event of a failure in the equipment.

Where the company undertakes or subcontracts an analysis critical to product safety or legality, the laboratory or subcontractors will have gained recognized laboratory accreditation or operate in accordance with the requirements and principles of ISO 17025 for the test undertaken.

Procedures in place to ensure reliability of laboratory results, other than those critical to safety and legality specified which includes:

- use of recognized test methods, where available
- documented testing procedures
- ensuring staff are suitably qualified and/or trained and competent to carry out the analysis required
- use of a. proficiency testing where applicable

use of appropriately calibrated and maintained equipment.

5.7 Product release

Procedure in place to ensure that products require positive release, are cleared based on the established release parameters which is duly authored by competent person.

5.8 Pet food and animal feed

Not applicable

References

Procedure for Allergen control ABC/BRC/PR/16

Allergen control risk assessment &plan ABC/BRC/PR/17

Procedure for Food Fraud ABC/BRC/PR/18

Food Fraud Vulnerability assessment ABC/BRC/PR/19

Procedure for Product release ABC/BRC/PR/20

PROCESS CONTROL

6.1 Control of operations

Documented process specifications and work instructions/procedures that ensure the production of consistently safe and legal product with the desired quality characteristics, in full compliance with the HACCP or food safety plan.

Documented process specifications and work instructions/procedures are available for the key processes in the production of products to ensure product safety, legality and quality.

The process specifications and work instructions/procedures include:

- recipes – including identification of any allergens
- mixing instructions, speed, time
- equipment process settings
- labelling instructions
- coding and shelf-life marking
- storage conditions (e.g. storage temperatures)
- any additional critical control points identified in the HACCP or food safety plan.

Process specifications are in accordance with the agreed finished product specification.

The company reviews the process specifications and work instructions/procedures prior to any changes which may affect food safety, legality and quality.

Process monitoring, such as temperature, time, and chemical properties, are implemented, adequately controlled and recorded to ensure that product is produced within the required process specification.

In the event of equipment failure or deviation of the process from specification, action will be taken to establish the safety status and quality of the product to determine the action to be taken.

6.2 Labelling and pack control

Procedure in place for the allocation of packaging materials to packing lines and control in the packing area which ensures that only the packaging for immediate use is available to the packing machines.

Documented checks of the production line being carried out before commencing production and following changes of product. These shall ensure that lines have been suitably cleared and are ready for production. Documented checks are carried out at product changes to ensure that all products and printed packaging and labels from the previous production have been removed from the line before changing to the next production.

Procedure in place to ensure that all products are packed into the correct packaging and correctly labelled. These include checks:

- date coding
- batch coding
- quantity indication

- pricing information
- bar coding
- country of origin
- allergen information.

6.3 Quantity – weight, volume and number control

The has established a quantity control system which conforms to legal requirements in the country where the product is sold and any additional industry sector codes or specified customer requirements.
The final products are checked for quantity/ weight as per appropriate legislation governing quantity verification, and records of checks are retained.

6.4 Calibration and control of measuring and monitoring devices

Documented procedure for calibration of measuring and monitoring equipments established to identify and control in-line and off-line measuring equipment used to monitor the product safety, quality and legality.
This includes:

- a documented list of equipment and its location
- an identification code and calibration due date
- prevention from adjustment by unauthorized staff
- protection from damage, deterioration and misuse.

All identified measuring equipment are checked and adjusted at a predetermined frequency, based on risk analysis. This will be carried out by trained staff to a defined method to ensure

accuracy within defined parameters. All results are documented.

Where possible, calibration shall be traceable to a recognized national or international standard. Where a traceable calibration is not possible, the site demonstrates the basis by which standardization is carried out.

Corrective action and reporting procedures is established and documented in the event of the monitoring and testing procedure identifying any failure of product inspection, testing or measuring equipment. Any such failures will be subject to an assessment of potential risk; subsequent action may include a combination of isolation, quarantine and re- inspection of products produced since the last acceptance test of the equipment.

The site conducts a root cause analysis into the equipment failure and implement the appropriate corrective action.

PERSONNEL

7. Personnel

7.1 Training: raw material-handling, preparation, processing, packing and storage areas

Documented procedure for training is established covering all personnel, including temporary personnel and contractors, who are appropriately trained prior to commencing work and adequately supervised throughout the working period.

Induction training includes the company hygiene rules.

Where personnel are engaged in activities relating to product safety, quality and legality, relevant training and competency assessment are in place. This includes:

- calibration
- product inspection, testing and measuring
- printed packaging controls
- operatives at manufacturing process control points
- laboratory testing
- product defence.

All personnel, including engineers, agency-supplied staff, temporary staff and contractors, receive general allergen awareness training.

The procedure defines and document how new or changed procedures, working methods and practices related to product safety or quality are communicated to relevant personnel.

The company periodically review and document the competencies of all staff and provide relevant training as appropriate. This may be in the form of training, refresher training, coaching, mentoring or on-the-job experience.

Records of training are available. These includes:

- the name of the trainee and confirmation of attendance
- the date and duration of the training
- the title or course contents, as appropriate
- the training provider (external or internal provider).

Where training is undertaken by agencies outside the company, records of the training are maintained.

It is ensured that documented training needs of relevant personnel are identified. These l includes:

- identifying the necessary competencies for specific roles
- providing training or other action to ensure staff have the necessary competencies
- reviewing the effectiveness of training and trainers
- the delivery of training in the appropriate language of trainees.

7.2 Personal Hygiene

Documented procedure for personal hygiene is in place for personal hygiene at sites producing materials for direct contact with products. This include the following instructions:

- wrist bands, wrist-worn devices or watches shall not be worn
- jewelry including piercings shall not be worn on exposed parts of the body, with the exception of a plain wedding ring, wedding wristband or medical alert jewelry
- fingernails shall be kept short and clean and free from nail varnish
- false fingernails and nail art shall not be worn
- excessive perfume or aftershave shall not be worn.

Requirements at sites producing materials not for contact with food are based on risk assessment.

Compliance with the site’s requirements are checked routinely.

Hand-washing must be performed on entry to the production areas and at a frequency that is appropriate to minimize the risk of product contamination.

Personal items and belongings, including personal mobile phones, are not be taken into production areas without the permission of the management.

The site uses risk assessment to determine the procedures and written instructions necessary to control the use and storage of personal medicines in production and storage areas, to minimize the risk of product contamination.

Where visitors cannot comply with site hygiene rules, suitable control procedures will be in place.

All cuts and grazes on exposed skin to be covered by an appropriately coloured plaster that is different from the product colour. These shall be site-issued and monitored when people are involved in work with materials intended to come into direct contact with food or other hygiene-sensitive products. Where appropriate, in addition to the plaster, a finger stall or glove shall be worn.

7.3 Medical screening

Medical examination of the personal who are intended for direct contact with food are done annually and records are maintained. Procedure for the notification by personnel, including temporary personnel, of any relevant infections, diseases or conditions with which they may have been in contact or be suffering from.

Employees, contractors and visitors suffering from any of the above shall be excluded from work involving the handling of direct food contact product packaging for as long as the symptoms persist.

Visitors and contractors are required to fill in a health questionnaire or otherwise confirm that they are not suffering from any symptoms which may put product safety at risk, prior to being allowed into production, packing or storage areas.

7.4 Protective clothing

Hair coverings and/or beard snoods, are worn in production areas for direct contact with products.

Hazard and risk principles are applied to determine the need for any other protective clothing, including garments and footwear in areas handling raw materials, and in preparation, production and storage areas.

Where protective clothing is required, clean protective clothing shall be provided.

Protective clothing shall have no external pockets on the upper body garments or sewn- on buttons.

Protective clothing are kept clean and laundered. Laundering are carried out by one of the following methods:

- professional laundry service
- in-house
- controlled laundering facilities

Clean and dirty clothing shall be segregated and controlled to prevent cross-contamination. Disposable protective clothing, if used, shall be subject to adequate control to avoid product contamination.

8 Production risk zones – high risk, high care and ambient high care

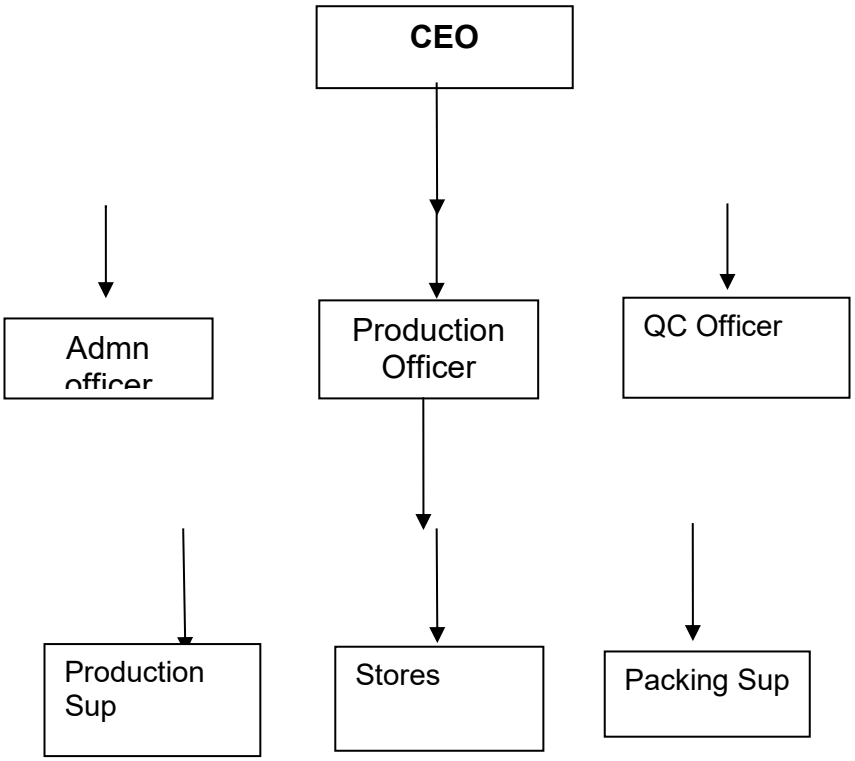
Not applicable

9 Requirements for traded products

Not applicable

Annexures

Organization Chart - Annexure 3



Responsibilities & Authorities Annexure 03A

CEO

RESPONSIBILITIES

Organize personnel for the various functions, assign duties and responsibilities to them and supervises their performances.

Maintain relation with all external regulatory and government departments and controls records of regulatory and legal requirements

Plan and executive company growth

Decision making role involves high level decision about policy and strategy.

Communicates with Management and Employees

PRODUCTION MANAGER

RESPONSIBILITIES

Planning appropriate strategies and actions plans for production in co-ordination with the CEO

Planning production plan and production schedule

*Coordinating activities with other operational and functional employees working in different departments for streamlining production

* Monitoring continuously the availability of all the requisite resources for production and supply of quality-finished product.

*Ensuring inspection and test functions at appropriate stages

*Controlling that non-conforming product are either packed or dispatched from the factory.

*Laying down Quality Plans for inspection as per the customer requirements

*Controlling storage and identification of all materials, where preservation and protection from damage.

QUALITY CONTROL Officer

RESPONSIBILITIES

*Assisting Production Department in ascertaining the quality at various stages of production and give feedback for improvement.

*Carrying out sample testing and maintained relevant records.

*Identifying and sourcing of appropriate inspection equipment of required accuracy.

*Ensuring calibration of all instruments and maintain calibration records.

*Authorized to approve Quality of products

*Authorized to release finished goods.

Administrator

RESPONSIBILITIES

* Reporting to CEO all legal, financial control, company accounts and security functions.

*Maintaining relation with all external regulatory and government departments and controls records of regulatory and legal requirements.

* Maintain all employee related records
* Conduct Medical examination report of food handlers annually.
* Organize training for staff and keep records.
* Day to day administration of the plant
* Wage salary administration

Store Keeper

RESPONSIBILITIES

* Maintain stock of Raw materials / ingredients
* Receiving inspection of items
* Storage of items
* Maintain FIFO/ FEFO

Food safety Objectives

Annexure 02

Top Management Level

Sl.No	Objectives	Measurable target
1	Compliance to all applicable statutory/ regulatory requirements	100%
2	Providing resources on time	100%
3	Product recall/ withdrawal	Nil

Quality Assurance

Sl.No	Objectives	Measurable target
1	Conducting testing of products as per quality plan	100%
2	To ensure that all products are released with the acceptance criteria limits.	100%
3	Customer complaints related to food safety shall not exceed 3 per year	3 per year

Production

Sl.No	Objectives	Measurable target
1	To reduce the re-processing/ re-packing of the products	2 drums/1000
3	To monitor and minimize the Pest infestation in the plant.	No incidence of pest

Food safety Team

Sl.No	Objectives	Measurable target

1	To complete all verification activities within 5 days of the scheduled date.	100%
2	No breaches of hygiene practices (not wearing scalp covering, jewelry violations etc) are allowed in the high risk production department per month	100%

Raw materials used are:
Fresh fruits and Vegetables, dry ingredients like red chilly, turmeric, coriander etc, vegetable oil and salt.

Sl. No	Name of the Product	Ingredients
01	Mango Pickle (in oil)	Brined Mango slices, water, Chilly powder Gingerly oil, mustard powder, salt, acetic acid, Turmeric powder, Fenugreek powder, Asafetida, Sodium benzoate, water
02	Tender Mango pickle(in Oil)	Brined mango, Water, Chilly powder, Gingili oil, Mustard paste, Salt, Acetic acid, Asafetida, Turmeric powder, Sodium benzoate,
03	Garlic Pickle (in oil)	Water, Brined and fried Garlic, Gingili oil, Chilly powder, Salt, Mustard powder, Sugar, Ginger paste, Garlic paste, Tamarind, Green chilly, Acetic acid, Pepper powder, Turmeric powder ,Fenugreek powder, Mustard, Curry leaves, Asafetida ,Sodium benzoate,
04	Ginger Pickle (in oil)	Water, Brined and fried Ginger, Gingili oil, Chilly powder, Salt, Green chilly, Onion, Tamarind, Acetic acid, Fried Coconut ,Mustard powder, Turmeric powder, Fenugreek powder, Cardamom, Mustard, Curry

		Leaves, Asafetida, Sodium benzoate, Sugar,
5	Mixed Vegetable Pickle (in oil)	Water, Brined Carrot, Garlic, Papaya, Mango, Tomato, Chilly powder Garlic paste, Brinjal, Gingili oil, Ginger, Ginger paste, Green chilly, Pineapple, Mustard powder, Tamarind, Sugar, Salt, Acetic Acid, Curry leaves, Fenugreek powder, Turmeric powder, Asafetida, Pepper powder, Sodium benzoate, Cumin, Fennel,
07	Bitter guard (Pickle in oil)	Water, Brined and fried Bitter gourd, ,Onion, Gingili oil, Chilly powder ,Garlic, Ginger, Tamarind, Green Chilly ,Mustard powder, Acetic acid, Sugar, Fenugreek powder, Turmeric powder, Curry leaves, Asafetida, Mustard ,Sodium benzoate, Spices.
08	Gooseberry pickle(in oil)	Brined Gooseberry, Water, Gingili oil ,Chilly powder, Ginger, Salt, Garlic, Mustard powder, Acetic acid, Green chilly, Fenugreek powder, Turmeric powder, Asafetida, Mustard, Sodium benzoate,
09	Green chilly pickle (in oil)	Brined green chilly, Bhaji chilly, Water, Gingili oil, Garlic, Salt, Ginger, Mustard powder, Tamarind, Acetic acid, Fenugreek

		powder, Turmeric powder, Mustard, Curry leaves, Asafetida, sodium Benzoate.
10	Kadumango pickle (in oil)	Brined mango slices, Gingili oil, Green chilly, Garlic, Turmeric powder, Acetic Acid, Fenugreek, Asafetida, Mustard, Curry leaves,

11	Hot & sweet lime Pickle (in oil)	Brined lime, Water, sugar, Dates, Gingili oil, Garlic, Ginger, Chilly powder, Green chilly, Grapes, Acetic acid, fenugreek, turmeric, cardamom, Mustard, curry leaves, Asafetida, Sodium Benzoate.
12	Pineapple pickle (in Oil)	Water, Pineapple, Gingili oil, Chilly powder, Green chilly, Onion, Garlic, Tamarind, sugar, Acetic acid, Mustard powder, Ginger , Turmeric powder, Fenugreek powder, Cardamom, Mustard, Sodium Benzoate
13	Dates Pickle (in oil)	Dates, Water, Chilly powder, Gingili oil, Salt, Ginger, Garlic, Mustard powder, Green chilly, Acetic acid, Turmeric powder, Curry leaves, Mustard, Cumin, Fennel, Cardamom, Sodium Benzoate.
14	Tomato Pickle (in oil)	Tomato, Water, Gingili oil, Chilly powder, Garlic, ginger, salt,

		sugar, Mustard powder, fenugreek powder, Curry leaves, Asafetida, Mustard, Turmeric powder, Sodium Benzoate, Pepper powder, cumin, Fennel
15	White lime pickle (in oil)	Lime, Bhaji chilly, Garlic, Green chilly, Gingili oil, Ginger, fenugreek powder, Acetic Acid, Mustard, Sodium Benzoate, Asafetida.

Annexure 05

Final Product Specifications

1. **Pickles**

Pickles are salted fruit and vegetable product containing spices and acidulants like citric acid or glacial acetic acid (a class II preservative) categorizing the product as acidified medium acid food. Pickles are added with minimum 8 percentage of vegetable oil, which act as additional preservation medium.

Product Characteristics

Salt content - Minimum 9%
PH - Less than 3.7
Acidity - Min. 1.5%
Acidulants - Acetic acid
Heat treatment - Not applicable
Aw - Not applicable

Microbiological Characteristics

Salmonella - Absent
TPC - 10000 CFU
E.Coli - Absent
Yeast & Molds- 100 CFU- Max

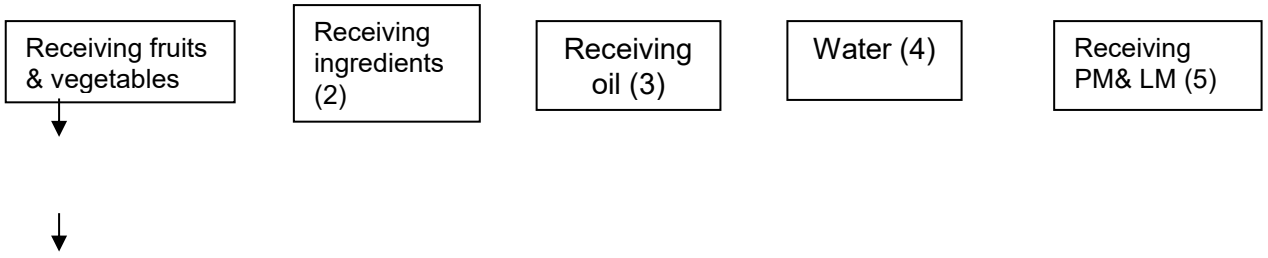
Packing &Storage conditions

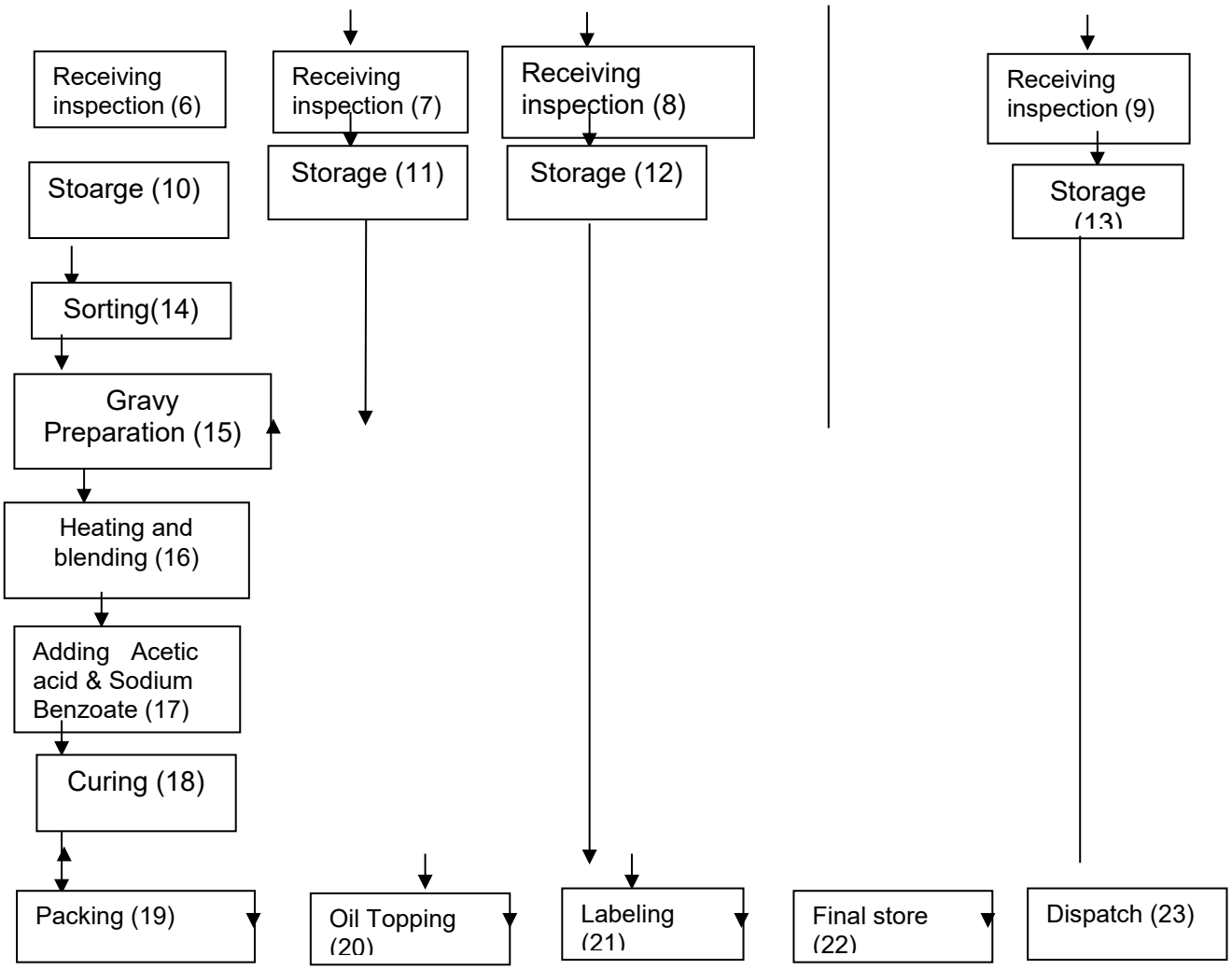
Pickles are packed in pre-washed glass bottles and laminated flexible pouches further packed in corrugated boxes. The product can be stored at ambient temperature as the storage is not critical the label is not provided with any storage instructions.

Shelf Life:

Eighteen months shelf life is declared on the label. The products consumed after the shelf life may have sensory deficits but any health hazard.

FlowChart-1(Pickles) Process flow Diagram **Annexure -06**





HAZARD ANALYSIS WORK SHEET **Annexure 07**

Process step	Hazard Type	Source or cause of hazard	Assessment				
			Likelihood	Severity	Risk	Control measure	Significant Hazard
1. & 6 Receiving fruits & vegetables	B—Y	Fruits & vegetables may be contaminated with pathogenic bacteria, yeast& mold	2	2	4	* Inspection of fruits and vegetables(visual inspection) * COA obtained from supplier .	N
	C—Y	toxic chemicals,					
	P—Y	extraneous maters like stone, metal materials pieces, glass etc					
2. & 7Receiving Ingredients	B—N	nil	2	2	4	* Receiving inspection as per quality plan. COA from supplier obtained for packed items	N
	C—N	nil					
	P—Y	Presence of foreign objects					
3. & 8 Receiving oil	B—N	Nil	1	3	3	* Physical analysis for foreign matter and sediments. *COA obtained from supplier .	N
	C—Y	Chemical degradation and adulteration					
	P—Y	Foreign particles					
4.Water	B--Y	Presence of pathogenic Microorganisms	1	2	2	* Water drawn from the source is analyses once in a year for bacteriological chemical quality. * It is stored in a tank with covered	N
	C--Y	Dissolved heavy metals & organic chemicals					
	P--Y	Presence pf foreign particles					
5. & 9 Receiving PM & LM	B-Y	Presence of Micro organisms	1	2	2	* Bottles are accepted only from approved suppliers. * Physical verification at the time of receipt	N
	C-N	Nil					
	P--Y	Presence of dust & other foreign particles.					

Process	Hazar	Source or cause	Assessment

step	d Type	of hazard	Likeli hood	Severity	Risk	Control measure	
10.Storage of Semi processed pickles	B--Y	Presence of Microorganisms/ fungal growth	2	3	6	* Periodic verification for salinity . Add salt as required. .	N
	C--N	Nil					
	P--N						
11 - 13 .Storage of items	B--N	Nil	-	-	-	* Items pass the receiving inspection and are stored . These items are either packed or bottled .	N
	C--N	Nil					
	P--N	Nil.					
14. Sorting	B—N	Nil	2	2	4	* Ensure personnel hygiene * Usage of hygienic and SS grade trays for verification.	N
	C—N	Nil					
	P—Y	Presence of foreign particles					
15. Gravy preparation	B—Y	Nil	2	2	4	* Ensure personnel hygiene * water tested for portability	N
	C—N	Dissolved heavy metals & organic chemicals					
	P—N	Presence of foreign particles					
16.Heating & Blending	B-Y	Presence of Micro organisms	3	4	12	* Monitoring temperature * Adding spices as per recipe. * Ensure personnel hygiene.	Y
	C-N	Nil					
	P--Y	Extraneous contaminants from operators					
17. Adding Acetic acid/ Salt & Sodium Benzoate	B-Y	Insufficient mixing leads to microbial growth	3	4	12	* Ensure personnel hygiene. * Adding ingredients as per permitted limit.	Y
	C- N						
	P-N	Foreign particles					

Process	Hazard	Source or cause	Assessment

step	Type	of hazard	Likelihood	Severity	Risk	Control measure	Significant hazard
18. Curing	B—Y	Micro organisms	2	2	4	*Ensure the Operation procedure for temperature checking.	N
	C—N	nil					
	P—N	Nil					
19.Packing	B—N	Nil	2	1	2	*. Ensure personnel hygiene	N
	C—N	Nil					
	P—Y	Extraneous contaminants from operators					
20.oil topping	B—Y	Insufficient oil on the top could result in the microbial penetration.	3	4	12	* Filled bottles are cleaned and topped with sufficient oil. * Verified & analyzed by QC Dept.	Y
	C—N	Nil					
	P—N	Nil					
21, 22,23 .Labelling, Storage& Dispatch	B—N	Nil	1	1	1	After labeling the unit packs are stored at designated area.	N
	C—N	Nil					
	P—N	Nil					

CCP Determination- Decision tree Annexure 8

Step Number & Process step	Significant Hazard	Q1*	Q2*	Q3*	Q4*	CCP
16.Heating & Blending	Presence of Microorganisms	Y	N	Y	N	CCP-1
17. Adding Acetic acid/ Salt & Sodium Benzoate	Presence of Microorganisms	Y	N	Y	N	CCP-2
20.oil topping	Insufficient oil on the top could result in the microbial penetration	Y	N	Y	N	CCP-3

*Q1- Are control measures in Place?

*Q2- Is this step intended to eliminate the hazard or reduce to an acceptable level?

*Q3- Can contamination occur at this stage?

*Q4- Can a later step eliminate the hazard or reduce it to an acceptable level?

HACCP Plan **Annexure 09**

HACCP Plan CCP-01

Step	Critical limit	Monitoring				Corrective Action	Verification Procedure	Record
		Who	What	How	When			
16.Heating & Blending CCP-01	60 ^{0}C Max.	QC Person	Temperature	Temperature Probe	Every batch	Heating upto the required temperature	Check the temperature log	Production report

HACCP Plan (CCP 2 & 3)

Step	Critical limit	Monitoring				Corrective Action	Verification Procedure	Record
		Who	What	How	When			
17. Salt Acetic acid Sodium Benzoate 20.oil topping	*Salt-Minimum 9- 12% *Acetic acid-1.2-2% * 250ppm Oil-0.5cm unit (Bottle) Drained weight-60%	QC person	Acidity and Percentage of salt concentration SB level and oil level Drained weight	Testing Oil level by visual inspection	Every batch Oil level-After filling every unit	Operator adjust the quantity of salt , Acetic acid & oil	Checking the process and limits for acceptance limit	Production report