Manual of Food Safety Management System, FSS Act, 2006

SCOPE OF THIS DOCUMENT

Section 16(2)(c), of the FSS Act, 2006 provides for the mechanism for accreditation of certification bodies for Food Safety Management Systems and Section 44 of FSS Act provides for recognition of organization or agency for food safety audit and checking compliance with Food Safety Management System required under the Act or the rules and regulations made thereunder.

This document defines the authority's definition on requirements of FSMS to be implemented by Food Business Operators in the country.

The present document aims to assist all players in the food chain to better understand FSMS implementation.

International Scenario on Food Safety

The International Standard ISO 22003 defines **food safety management system (FSMS)** as the set of interrelated or interacting elements to establish policy and objectives and to achieve those objectives, used to direct and control an organization with regard to food safety.

The Key elements of any FSMS are:

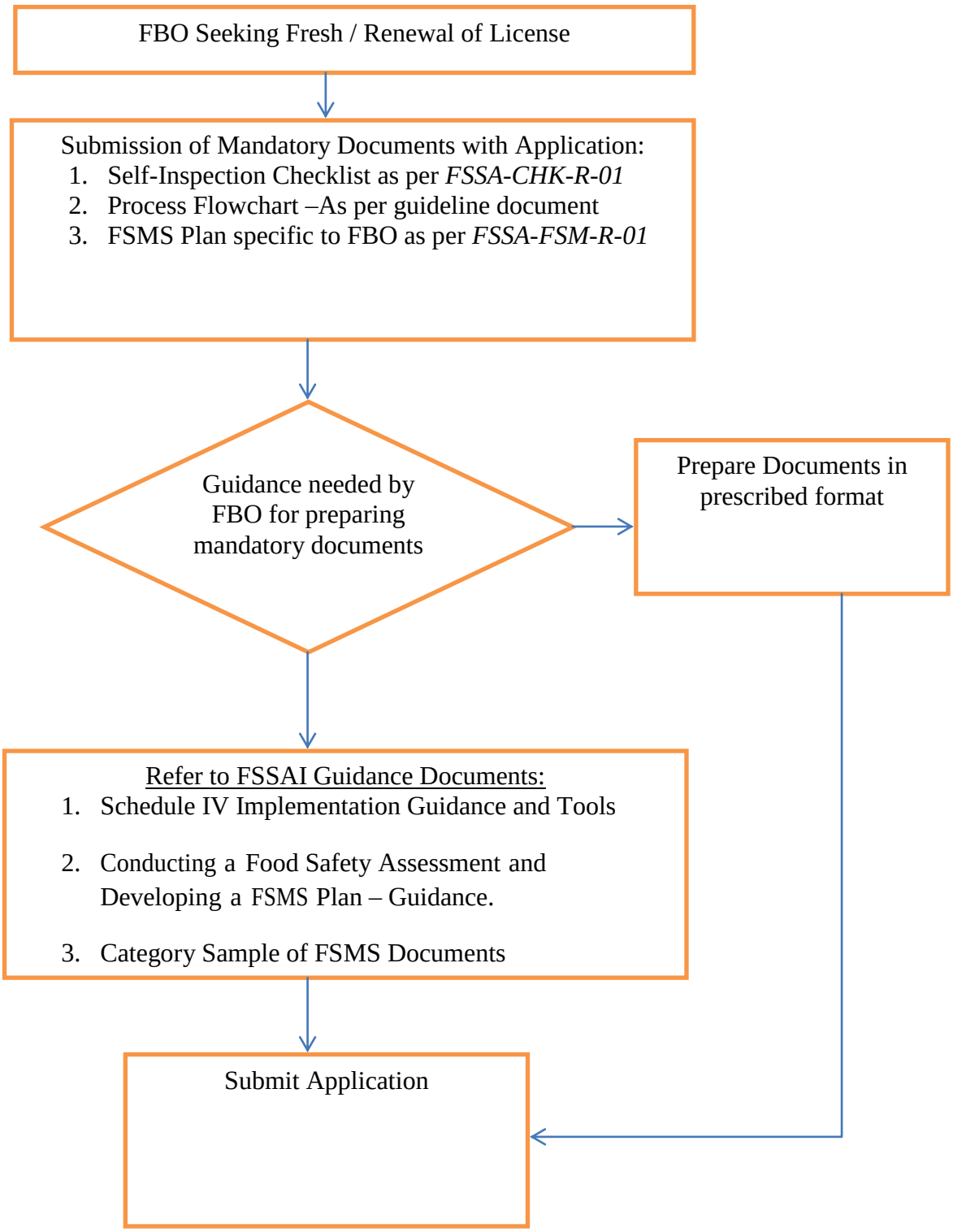
- ✓ Good Practices/ PRPs
- ✓ Hazard Analysis /HACCP
- ✓ Management Element / System
- ✓ Statutory and regulatory requirements
- ✓ Communication

Internationally and even in India, there are many Food Safety Certifications which meets these requirements. These are HACCP, ISO 22000, FSSC 22000 and many more. These are voluntary certifications to strengthen the food safety system.

However, under current Indian regulation defined by the FSS Act 2006, Food Safety Management System (FSMS) means the adoption Good Manufacturing Practices, Good Hygienic Practices, Hazard Analysis and Critical Control Point and such other practices as may be specified by regulation, for the food business.

For the purpose of this document and all assessments conducted thereunder, the definition of FSMS shall be read as the above and the requirements for this are taken as that defined under **Schedule IV & Critical Control Points.**

FSMS Documentation by FBO



DEFINITIONS

"Act" means the Food Safety and Standards Act, 2006 (Act 34 of 2006)

"Rules" means the Food Safety and Standards Rules, 2011.

"Adulterant" means any material which is or could be employed for making the food unsafe or sub-standard or misbranded or containing extraneous matter.

"Consumer" means persons and families purchasing and receiving food in order to meet their personal needs.

"Contaminant" means any substance, whether or not added to food, but which is present in such food as a result of the production (including operations carried out in crop husbandry, animal husbandry or veterinary medicine), manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food or as a result of environmental contamination and does not include insect fragments, rodent hairs and other extraneous matter;

"Food" means any substance, whether processed, partially processed or unprocessed, which is intended for human consumption and includes primary food to the extent defined in clause (zk) genetically modified or engineered food or food containing such ingredients, infant food, packaged drinking water, alcoholic drink, chewing gum, and any substance, including water used into the food during its manufacture, preparation or treatment but does not include any animal feed, live animals unless they are prepared or processed for placing on the market for human consumption, plants, prior to harvesting, drugs and medicinal products, cosmetics, narcotic or psychotropic substances :

"Food Authority" means the Food Safety and Standards Authority of India established under section 4;

"Food business" means any undertaking, whether for profit or not and whether public or private, carrying out any of the activities related to any stage of manufacture, processing, packaging, storage, transportation, distribution of food, import and includes food services, catering services, sale of food or food ingredients;

"Food business operator" in relation to food business means a person by whom the business is carried on or owned and is responsible for ensuring the compliance of this Act, rules and regulations made thereunder

"Hazard" means a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect;

"Food safety" means assurance that food is acceptable for human consumption according to its intended use;

"Food safety audit" means a systematic and functionally independent examination of food safety measures adopted by manufacturing units to determine whether such measures and related results meet with objectives of food safety and the claims made in that behalf;

"Food Safety Management System (FSMS)" means the adoption Good Manufacturing Practices, Good Hygienic Practices, Hazard Analysis and Critical Control Point and such other practices as may be specified by regulation, for the food business;

"Food Business Operator" in relation to food business means a person by whom the business is carried on or owned and is responsible for ensuring the compliance of the Act, rules and regulations made thereunder

Structure of the FSMS Program

FSMS Program will cover following documents

1. The FSMS Plan (samples are provided as guidance) and
2. Flow chart of for the Process
3. A self-inspection checklist, which is to be submitted as an annexure to the plan.

FSMS guideline document is attached which has detailed the checklist/flowchart and FSMS plan for various categories. The categories which are not covered can use general checklist which is given in guideline document.

These documents will need to be submitted by the FBO as part of application for new license or renewal of license.

Also the FSSAI approved audit agency may inspect the FBOs on basis of this scope.

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How prepare the documents

Use guideline documents for preparation of the FSMS program. The guideline document is to be used only for reference purpose - to understand how to make the flow chart and FSMS plan.
Schedule 4 checklists are given category-wise that should be used for self checking purpose.
The categories which are not covered can use general checklist.
For compliance of Schedule 4 & FSMS Plan, the reference documents are attached with the program to facilitate the FBOs in development of individual FSMS Program.

Reference Documents

In order to support the implementation and give clarity to FBOs, the FSMS implementation reference document has been provided which can be used. These documents are for guidance; and some changes may be required depending on type of food business.

These documents has covered following

- Implementing Schedule IV Requirements – Guidance.
- Conducting a Food Safety Assessment and Developing a FSMS Plan – Guidance.

Document and validation:

The Mandatory documents shall be validated by respective Food Safety Officer/Designated officer or he may assign suitable agency/person who is competent to carry out this job.

Record

1. Food Safety Management System (FSMS) Plan Form
2. Self Inspection checklist (Schedule IV)
3. Flow chart

Conclusion

The Food Safety Management System is a continual process and every FBO should aim for improvement and take higher Food Safety objectives for consumer safety.

FAQs

What if FBO already have HACCP/ISO 22000 or other FSMS certification, should they need FSMS Program documentation?

Answer : YES, If the FBO is already certified for advance FSMS systems then also as per FSSAI requirement, he/she needs to comply with Schedule 4 requirements. Thus each FBO needs to submit the FSMS program as per regulation. If FBO is already certified for such system, then it will be very easy for him/her.
For above FBOs, the inspection would be easy since they are already certified.

We are petty manufacturer why such sophisticated system is required for us?

Answer: Food safety is not depend on type or size of business. Under regulation FBO is defined very well. The FSMS program though looks complicated; depending on type of business the actual documentation may be very little.

Viz: For some FBOs the FSMS program may be completed in 4 pages or for some critical FBOS it may run in 20 pages. Basically it covers schedule 4 requirements and FSMS Plan

I do not have any qualified person, how I can implement the FSMS program my own?

Answer: Under regulation, each manufacturing FBOs should have technical qualified person. The program which is given is very simple and all supporting documents are provided. Any technical qualified person will able to implement this requirement depending on type of business within 1 day to 7 days. But implementation of the program will ensure commitment and involvement of top management.

If I do this FSMS Program then should I need to go for HACCP/ISO 22000 or other certificates?

Answer: Under FSS Act, the FSMS system is mandatory. If any FBO over and above wants to go for higher certification, we do not have any restriction. The FSMS system as per FSSAI covers basic things like GMP/GHP/Schedule 4 and Critical control point identification and monitoring only.

Sample FSMS Documents

Table of Contents

SELF- INSPECTION REPORT FORM
(FSMS-CHK-R-01)

Date of Inspection:	
Date of Previous Inspection:	
Name of Food safety Officer:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of license (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ Proprietorship/other.

Date of Self -Inspection**:**

* If Status is marked not in order, please provide target completion date

No	Area	Observation
1.	**LOCATION AND LAYOUT OF FOOD ESTABLISHMENT**	
	a) The factory is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
	b) The nature of ceiling roof is of permanent nature (Iron sheet/Asbestos sheet/ R.C.C).	
	c) The floor of building is cemented, tiled or laid in stone/ pakka floor.	
	d) The production area walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
	e) The premises of the factory is adequately lighted and ventilated, properly white washed or painted.	
	f) Provision for disposal of refuse and effluents is available.	
	g) The food production/ food service area provided with adequate drainage facility.	
	h) In case cooking is done on open fire, proper outlets for smoke/ steam etc, like chimney, exhaust fan etc are installed and the fans installed at a suitable height.	
	i) Doors are provided with automatic door closer.	
	j) Doors, Windows and other openings are fitted with net or screen to prevent insects etc.	
	k) Antiseptic/ disinfectant foot bath is provided at the entrance.	
	l) Sufficient number of latrine and urinals for worker are provided and located outside the processing hall.	

	m) All the machinery is installed in such a manner which may allow continuous flow of production and do not occupy more than 50% of the total production and permits hygienic production and easy movement.	
2.	**EQUIPMENT AND FIXTURES**	
	a) Equipments kept clean, washed, dried and free from moulds and fungi.	
	b) No such Container/ Vessel/ Equipments in use likely to cause metallic contamination.	
	c) The table tops used for food preparation are made of close joint and impervious material.	
	d) The equipments are made of stainless steel /galvanised iron/ non corrosive materials.	
	e) Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
3.	**STORAGE SYSTEMS**	
	a) Appropriate arrangement for storage of food & food ingredients provided and adequately segregated and labelled.	
	b) Systems to adequately maintain time- temperature control at the time of storage.	
	c) Raw material, food additives and ingredients, wherever applicable are conforming to regulations laid down under the act.	
	d) Containers used for storage are made of non toxic material.	
	e) Cold Storage facility, wherever necessary/ provided.	
4.	**PERSONAL HYGIENE**	
	a) Suitable aprons, head cover, disposable gloves & footwear are provided.	

	b) Adequate facilities for toilets, hand wash and footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided.	
	c) No person suffering from any infection or contagious disease.	
	d) Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
	e) The staff working in such factory are inoculated against the enteric group of disease and vaccinated.	
	f) No employee of such factory who is suffering from a hand or face injury, skin infection or clinically recognizable infectious disease.	
5.	**WATER SUPPLY**	
	a) Adequate supply of potable water.	
	b) Appropriate facilities for safe & clean storage of water.	
	c) The water is examined chemically and bacteriologic ally by a NABL Accredited laboratory.	
	d) Ice and steam wherever in use during processing is made from potable water.	
	a) Identifying marks have been applied to the pipelines for easy identification of potable and non-potable water.	
6.	**PEST CONTROL SYSTEM**	
	a) Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
	b) Adequate control measures are in place to prevent insect and rodents from the processing area.	
7.	**CONVEYANCE AND TRANSPORTATION**	

	a) Conveyance & transportation of food being done in an appropriate state of cleanliness, particularly if the same vehicle has been used to carry non-food items.	
	b) The conveyance and transportation are provided with temperature control system.	
	8. CLEANING AND MAINTENANCE	
	a) Cleaning and sanitation programme is drawn up, observed and the record of the same is properly maintained.	
	b) Food preparation areas are cleaned at regular intervals, with water, and detergent and with the use of a disinfectant.	
8.	**OPERATIONAL FEATURES**	
	a) The source and standards of raw material used are of optimum quality and as per Regulation and standards laid down under the Act.	
	b) Test report from own or NABL accredited/ FSSAI notified labs regarding microbiological contaminants in food items are available.	
	c) Arrangements for monitoring Temperature & Relative Humidity	
9.	**DOCUMENTATION AND RECORDS**	
	a) Records of daily production, raw material utilized and sales are available.	
	b) A periodic audit of the whole system according to the Standard Operating Procedure conducted regarding Good Manufacturing Practices/Good Hygienic Practices (GMP/	
	c) Appropriate records of food processing/ preparation, food quality, laboratory test results, pest control etc. for a period of 1 year or the shelf -life of the product; whichever	
	d) Records of sale and purchase that the food product sold to registered/licensed vendor and raw material purchased from registered/ licensed supplier.	
	e) Recall plan.	
11.	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	

	a) All packaged food products carrying label and requisite information as per Regulations are made.	
12.	**TRAINING**	
	a) Food production personnel and production floor managers/ supervisors underwent appropriate food hygiene training.	

Sample Flowchart:

Please prepare in accordance with process steps followed in your Operation

Sample FSMS Plan

Please prepare based on Hazard Analysis (Guidance available in Section 2 and 3 of Reference Document)

FSMS Plan Format:

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
1.							
2.							
3.							

SELF- INSPECTION REPORT FORM

Milk and Milk Products

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order		X not in order

* If Status is marked not in order, please provide target completion date

Sr. No.	Particular/ Point of inspection	Observation
1	**LOCATION AND LAYOUT OF FOOD ESTABLISHMENT**	
a.	The factory is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
b.	The nature of ceiling roof is of permanent nature (Iron sheet/ Asbestos sheet/ R.C.C).	
c.	The floor of building is cemented, tiled or laid in stone/ pakka floor.	
d.	The production area walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
e.	The premises of the factory is adequately lighted and ventilated, properly white washed or painted.	
f.	Provision for disposal of refuse and effluents is available.	
g.	The food production/ food service area provided with adequate drainage facility.	
h.	In case cooking is done on open fire, proper outlets for smoke/ steam etc, like chimney, exhaust fan etc are installed and the fans installed at a suitable height.	
i.	Doors are provided with air curtain/strip curtain & automatic door closer.	
j.	Doors, Windows and other openings are fitted with net or screen to prevent insects etc.	
k.	Windows are fitted with insect proof screen/mesh & are maintained cleaned.	
l.	Antiseptic/ disinfectant foot bath is provided at the entrance (not applicable if internal & external shoes are separate).	
m.	Sufficient number of latrine and urinals for worker are provided and located outside the processing hall.	
n.	All the machinery is installed in such a manner which may allow continuous flow of production and permits hygienic production and easy cleaning & maintenance.	
2.	**EQUIPMENT AND FIXTURES**	
a	Equipments kept clean, washed, dried and free from moulds and fungi.	
b	No such Container/ Vessel/ Equipments in use likely to cause metallic contamination.	
c	The table tops used for food preparation are made of close joint and impervious material.	

d	The equipments are made of stainless steel /galvanised iron/ non corrosive materials as permitted by the product characteristics.	
e	Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
3.	**WATER SUPPLY**	
a	Adequate supply of potable water is available.	
b	Appropriate facilities for safe & clean storage of water.	
c	The water is examined chemically and bacteriologic ally by a FSSAI approved NABL Accredited laboratory.	
d	Ice and steam wherever in use during processing is made from potable water.	
e	Identifying marks have been applied to the pipelines for easy identification of potable and non-potable water.	
f	Waste disposal is done efficiently & there is no waste accumulation.	
g	Lighting fixtures are protected in all departments/areas	
4.	**PERSONAL HYGIENE**	
a	Suitable aprons, head cover, disposable gloves & footwear are provided.	
b	Adequate facilities for toilets, hand wash and if required footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided.	
c	Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
d	The food handlers are inoculated against the enteric group of disease and vaccinated.	
e	No employee permitted in process who is suffering from a hand or face injury, skin infection or clinically recognizable infectious or contagious disease.	
f	Do's & don'ts for the workers is placed in prominent place in local language	
g	Smoking & spitting is not permitted in the food process/handling areas.	
5.	**FOOD OPERATIONS & CONTROL**	

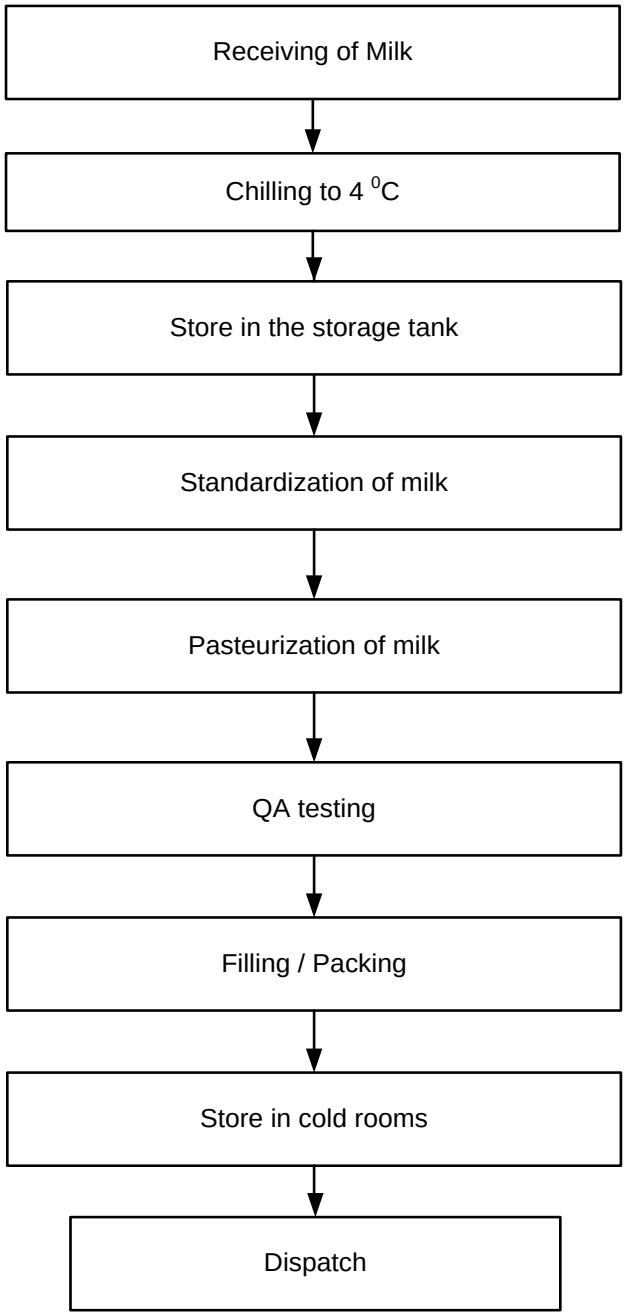
a	Raw milk is stored & handled in clean place to prevent any kind of contamination	
b	Raw milk is cooled at temperature of 4 ^{0}C or lower and maintained at that temperature until further processed.	
c	Facilities for hygienic handling and protection of raw materials and of non – packed or non-wrapped dairy products during loading and unloading, transport and storing including Bulk Milk Cooling facilities are provided.	
d	Proper facilities for cleaning and disinfecting of tank used for transporting dairy product and raw milk provided.	
e	Appropriate arrangement for storage of food & food ingredients provided and adequately segregated, labeled & stock rotation system followed.	
f	Raised platform with sides and top sufficiently protected to prevent contamination while unloading the raw milk is provided.	
g	Systems to adequately maintain time- temperature control at the time of storage as per the product requirements.	
h	The source and standards of raw material, food additives, ingredients & packaging material wherever applicable are conforming to regulations laid down under the act.	
i	The cans/ containers used for storage and transportation of milk and milk products are not made up of mild steel metal and plastic material.	
j	Separate cold storage facility available for milk & milk products (e.g. Packed milk, Butter, Ice Cream, Ghee, Dahi, Paneer, Milk Powder, Cheese or any other product).	
k	Dairy equipments are equipped with temperature indicator. All specific process controls/temperatures are maintained & recorded	
l	The raw milk receiving section is away from the milk processing area to prevent contamination.	
m	Separate area is provided for packaging of various milk products under satisfactory hygienic conditions	
n	Conveyance & transportation of food being done in an appropriate state of Cleanliness & dedicated vehicle has been used to carry milk.	
o	Valid weight & measure certificates for weighing scales and weights from a Designated Authority are available	
p	Pallets are made of non-absorbent material provided on the floor for keeping milk products	
q	The milk products are properly stacked on pallets at least one feet away from wall.	
r	Details of vehicles used for transportation of Milk & Milk Products are maintained in stipulated format.	
6.	**AUDIT/ DOCUMENTATION AND RECORDS**	

a	Adequate documented system SOPs is in place for core processes like procurement, storage, processing, packing, etc.	
b	Records of daily production, raw material utilized and sales are available.	
c	A periodic audit of the whole system according to the Standard Operating Procedure conducted regarding Good Manufacturing Practices/Good Hygienic Practices (GMP/ GHP) system.	
d	Appropriate records of food processing/ preparation, food quality, laboratory test results, pest control etc. for a period of 1 year or the shelf-life of the product; whichever is more.	
e	Records of sale and purchase that the food product sold to registered/ licensed vendor and raw material purchased from registered/ licensed supplier.	
f	A documented recall plan is available & traceability is implemented to assure effectiveness of recall plan.	
7.	**FOOD TESTING FACILITY**	
a	Raw milk testing facility/Parameters available at raw milk reception. Is in-house laboratory is available for testing of milk & milk products.	
b	Test report from own or NABL accredited/ FSSAI notified labs regarding microbiological contaminants in food items are available.	
8.	**CLEANING AND MAINTENANCE**	
a	Cleaning and sanitation programme is documented, implemented and the record of the same is properly maintained.	
b	Food preparation areas are cleaned at regular intervals, with water, and detergent and with the use of a disinfectant.	
c	The milk receiving area is equipped with brush/rotary / straight through can washer.	
d	Approved waste water disposal system is hygienically operated.	
9.	**PEST CONTROL SYSTEM**	
a	Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
b	Adequate control measures are in place to prevent insect and rodents from the processing area.	
10.	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	
a.	All packaged food products carrying label and requisite information as per Regulations are made.	

11.	**TRAINING**	
a.	Food production personnel and production floor managers, supervisors, food handlers undergone appropriate food hygiene training & records maintained.	
b.	Training programs are reviewed & scheduled to meet the hygiene compliance by food handlers.	

Sample Flowchart for Pasteurised Milk

Processing of Milk



Sample FSMS Plan for Liquid pasteurized Milk

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Receiving – Materials shipped by bulk tanker, e.g. fluid milk and milk products	Contamination with vegetative pathogens	Truck unloading area should be constructed to protect the milk (at a minimum overhead protection and concrete, or equivalent surface under the truck that is properly drained). Maintain the truck unloading area and equipment clean. Protect the milk that is being unloaded by closing in the unloading area or using filters over the vent /personnel access port area. Using equipment meeting sanitary design guidelines.	Company Specifications	Check Incoming MBRT value	Reject lots not complying with specifications or revalidate process requirements	QA/QC	Incoming Milk Quality Check Record
Raw Milk Storage	Growth of vegetative pathogens	Maintain the temperature sufficiently low to minimize the growth of pathogens. Clean the storage vessels and associated lines and valves at frequencies that do not allow for bacterial growth of pathogens in the product at the product temperature used.	Store below 4C	Storage temperatures	Reject lots not complying with specifications or revalidate process requirements	QA/QC	Temperature logs
Blending & Addition of Ingredients	Contamination with vegetative pathogens Cleaning & Sanitizing Solution	Verify that blending equipment and associated lines and valves are constructed in such a way that they can be cleaned. Maintain the addition / blending environment clean and relatively free of dust or soil that could contaminate product during addition / blending. Equipment used for addition / blending is constructed to minimize product or ingredient exposure. Maintain proper separation or physical break between circuits containing cleaning	Company Specifications Company Specifications for cleaning and sanitation schedules SOP for	Maintenance and Cleaning & Sanitation logs Cleaning and Sanitation (CIP) verification	Reject lots not complying with specifications or revalidate process requirements	QA/QC	Maintenance logs Cleaning and Sanitation Logs

	Residues Extraneous Materials	solution and vessels and lines used to contain product Opening of ingredients is conducted in a manner that will minimize the opportunity for bits of packaging, cutting tools, etc. from entering the product. Verification that, at some point in the process ingredient or the milk product to which the ingredient is added, will pass through a filter, screen	blending				
Pasteurization	Survival of vegetative pathogens	Minimum pasteurization times and temperatures required for the elimination of pathogens normally present in unpasteurized milk should be established	Company Specifications	Monitor Temperatures at pasteurization Microbial analysis	Reject lots not complying with specifications or revalidate process requirements	QA/QC	Temperature logs Microbial test results
Packaging	Contamination with vegetative pathogens	Packaging Environment to be controlled Packaging material quality	Company Specifications	Hygiene verification Packaging material quality checks	Reject lots not complying with specifications or revalidate process requirements	QA/QC	Plant Hygiene checklist Incoming Material test records

SELF- INSPECTION REPORTFORM

Edible Oil Processing

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel.No.: Fax No.:	
Category of licence (Central/State)	
License No.:	
E-mail Address:	
Name of the Manager/Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Privatelimited/ Publicsector undertaking/Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

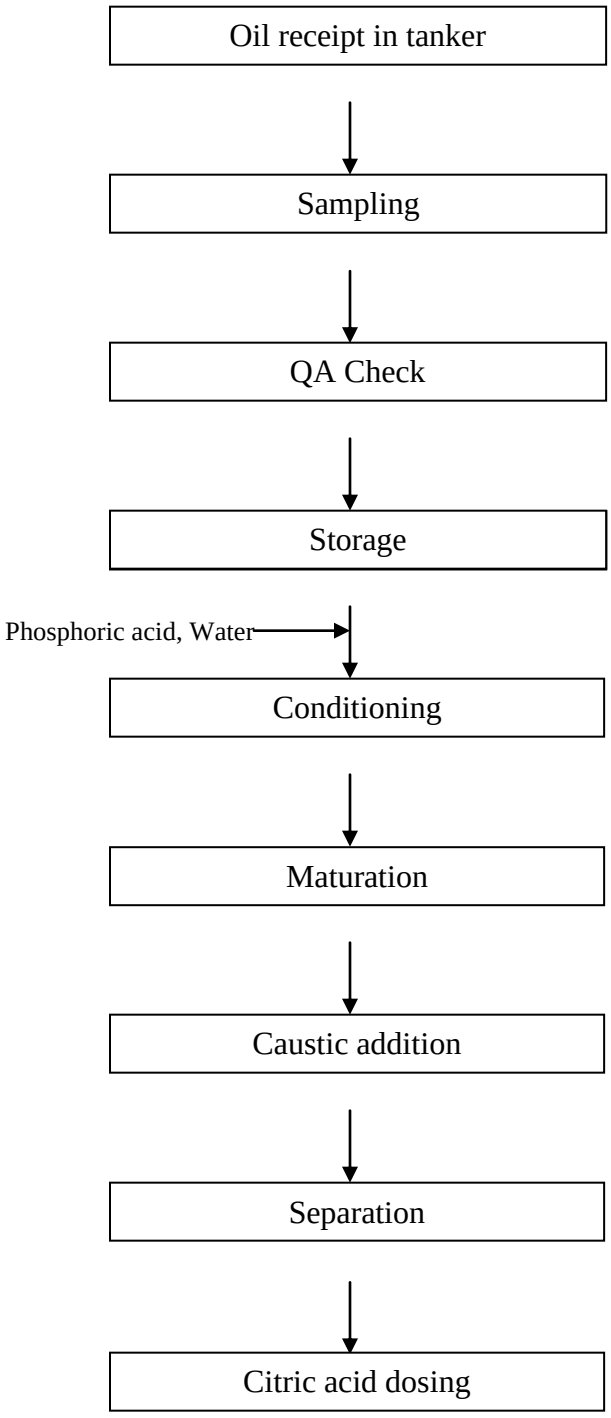
√	In order		X	notin order

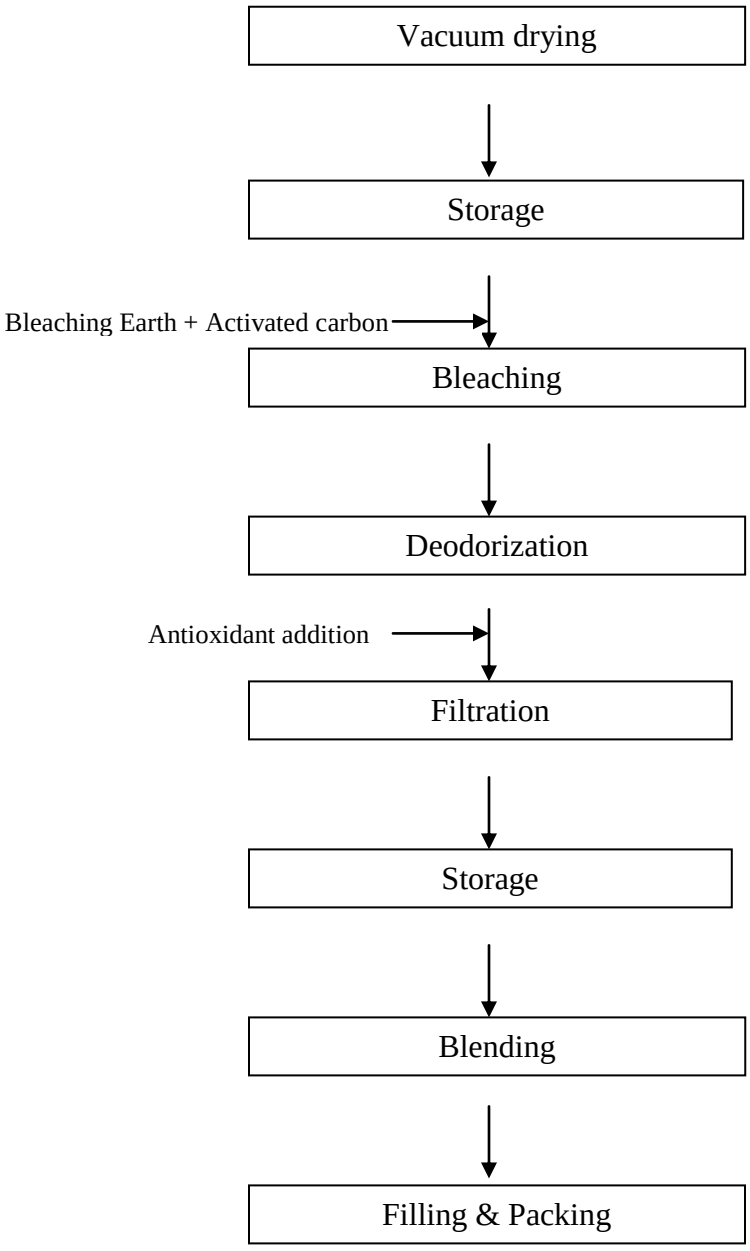
* If Status is marked not in order, please provide target completion date

No	Particulars/Point of Observation	Observation
1	**LOCATION AND LAYOUT OF FOOD ESTABLISHMENT**	
	a) The factory is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
	b) The nature of ceiling roof is of permanent nature (Iron sheet/Asbestos sheet/ R.C.C).	
	c) The floor of building is cemented, tiled or laid in stone/ pakka floor.	
	d) The production walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
	e) The premises of the factory is adequately lighted and ventilated, properly white washed or painted.	
	f) Provision for disposal of refuse and effluents is available.	
	g) The food production/ food service area provided with adequate drainage facility.	
	h) Doors are provided with automatic door closer.	
	i) Doors, Windows and other openings are fitted with net or screen to prevent insects etc.	
	j) Antiseptic/ disinfectant foot bath is provided at the entrance.	
	k) Sufficient number of latrine and urinals for worker are provided and located outside the processing hall.	
	l) All the machinery is installed in such a manner which may allow continuous flow of production and do not occupy more than 50% of the total production area.	
2	**EQUIPMENT AND FIXTURES**	
	a) Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
	b) The equipments are made of stainless steel /galvanised iron/ non corrosive materials.	
	c) Temperature and pressure/vacuum of processing vessels are maintained as per requirements	
3	**PROCESSING PLANT**	
	a) Only approved processes are being employed in the factory.	
	b) De-odourization is done at a temperature more than 180 deg.C.	
	c) For hydrogenation/ interesterification units, post neutralization is being done.	
4	**PACKING AND STORING**	
	a) Appropriate arrangement for storage of Packing materials is available, and the place is clean, free from pest/rodent infestation	
	b) Containers used for packing are made of food-grade or prime quality	

	materials.	
	c) Tin containers are rust free.	
	d) Cold Storage facility, wherever necessary/ is provided	
	e) Packing sections are covered and protected from insects and flies	
	f) Packing sections are tiled, clean and tidy.	
	g) Batch numbering devises are running to satisfaction.	
	h) Label declarations on the packs are as per norms.	
5	**PERSONAL HYGIENE**	
	a) Aprons, head cover, disposable gloves & footwear are provided.	
	b) Adequate facilities for toilets, hand wash and footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided.	
6	**WATER SUPPLY**	
	a) Adequate supply of potable water.	
	b) Appropriate facilities for safe & clean storage of water.	
	c) Ice and steam wherever in use during processing is made from potable water.	
	d) Identifying marks are applied to the pipelines for easy identification of potable and non-potable water.	
7	**PEST CONTROL SYSTEM**	
	a) Adequate control measures are in place to prevent insect and rodents from the processing area.	
8	**FOOD TESTING FACILITY**	
	a) A well equipped laboratory for testing of vegetable oils/fats is available.	
	b) All the necessary chemicals and supporting facilities are available.	
	c) The laboratory employs qualified chemists.	
	d) Quality parameters of raw oils and finished products are being tested as per standards.	
	e) Records on quality control are maintained satisfactorily.	

Sample Flowchart for Edible Oil Processing




Vacuum drying
Storage
Bleaching Earth + Activated carbon
Bleaching
Deodorization
Antioxidant addition
Filtration
Storage
Blending
Filling & Packing

Sample FSMS Plan for Edible Oil Processing

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Caustic addition	Incomplete saponification /excess soap formation due to contamination with high/low caustic	Appropriate dosing setting for caustic addition	%FFA as specified	Monitor the FFA every 2 hours On line check with phenolphthalein	Immediate action: Change the caustic dosing to an appropriate value such that FFA in within control Corrective action: Take back oil from tank and reprocess oil	Plant Quality chemist & shift operator	Plant Quality Lab sample analysis report
Citric acid Addition	Metallic contamination /soap carry over due to improper dosage of citric acid	Correct dosing of citric acid to be monitored on DCS	%FFA as specified	Monitor the FFA every 2 hours	Immediate action: Change the citric acid dosing Corrective action: Take back oil from tank and reprocess oil	Plant Quality chemist	Plant Quality Lab sample analysis report
Addition of bleaching earth and activated carbon	Physical hazard: impurities, foreign particles from bleaching earth, activated carbon	Bleaching Earth / Activated Carbon testing in lab Self inspection report from Supplier Food grade certificate from supplier	Specifications of company	Testing of each and every lot of Bleaching Earth / Activated Carbon, Self inspection report from supplier, Food grade certificate from supplier.	Immediate action: Reject and send back to the supplier. Corrective action: Inform the supplier not to send the rejected material, change the supplier.	Plant Quality chemist	Plant Quality Lab sample analysis report, Supplier documents
Deodorisation	Odoriferous compounds present in oil / High FFA content in Oil Polymerisation, cooked flavour in refined oil	Maintaining vacuum	Vacuum as specified	Vacuum in to be maintained below specified limit	Immediate action: Stop Deodoriser feeding & reprocess the hold up material by circulation in Deodoriser at correct vacuum. Corrective action: Any oil which has been processed with low vacuum in Deodoriser, has to be reprocessed via Deodoriser.	Refinery Personnel and Operator	DCS report generated by the system on daily basis/ Operator log book
Filtration	Physical hazard: particles in oil	Change filter when particle found in oil	Absence of fine particles in oil	Check oil sample in lab. Monitor pressure difference on filter.	Immediate action: Stop the line and change the filter bag. Corrective action: 1) Change the filter bag immediately 2) Reject and Salvage the FG produced		Lab report, Operator daily book, Filter cleaning schedule, Work permit

SELF- INSPECTION REPORT FORM

Confectionery Products

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order	X	not in order

* If Status is marked not in order, please provide target completion date

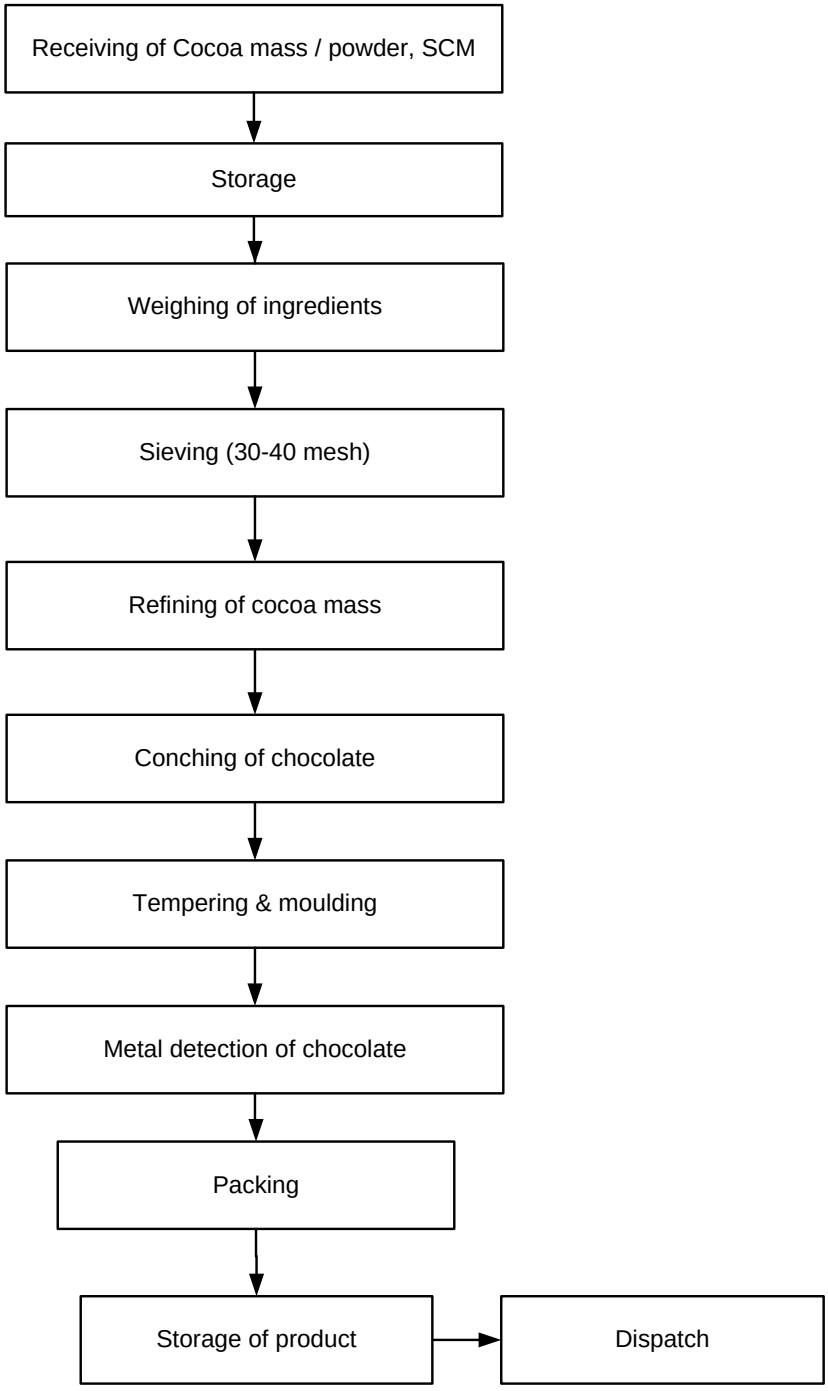
Sr No	Area	Status
1	**LOCATION AND LAYOUT OF THE ESTABLISHMENT**	
A	The Food service establishment is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
B	The Food preparation area walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
C	The premises of the food outlet is adequately lighted and ventilated, properly white washed or painted.	
D	Food preparation/ cooking/frying area is equipped with chimney with appropriate suction capacity depending upon kitchen size to avoid smoke	
E	The preparation/ processing/ cooking should be adequate to eliminate and reduce hazards to an acceptable level which might have been introduced at the raw food level.	
2	**EQUIPMENT AND FIXTURES**	
A	Work surfaces, and equipments are thoroughly cleaned before the preparing of food starts and after it has been used	
B	The equipments are made of stainless steel /galvanised iron/ non corrosive materials.	
C	Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
D	All electrical wires, boards and panels are adequately secured and in a clean state	
E	Any glass fixture including tubelights is appropriately secured with an unbreakable high temperature resistant material	
3	**STORAGE SYSTEMS**	
A	Appropriate arrangement for storage of food & food ingredients provided and adequately segregated and labeled	
B	Containers used for storage are made of non toxic material.	
C	Storage temperature and humidity is maintained as appropriate	
D	Stock Rotation is followed	
4	**PERSONAL HYGIENE**	
a	Food handlers must wear suitable clean clothes and where	

	necessary, shall wear head cover, apron, mask mouth and use gloves etc	
B	Avoidance of unhygienic practices such as chewing tobacco, touching face, mouth, ear or other body parts, Spitting, sneezing, coughing by food handler.	
c	Adequate facilities for toilets, hand wash and footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided	
D	Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
E	All food handlers are inoculated against the enteric group of micro-organisms	
6	**WATER SUPPLY**	
a	Adequate supply of potable water.	
B	Appropriate facilities for safe & clean storage of water.	
c	The water is examined chemically and bacteriologic ally by a NABL Accredited laboratory at a defined frequency and whenever the potential for contamination or an epidemic is identified.	
D	Ice and steam wherever in use during processing is made from potable water.	
7	**PEST CONTROL SYSTEM**	
a	Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
b	Adequate control measures are in place to prevent insect and rodents from entry into the processing area.	
c	The area has proper mesh and fly catchers at appropriate locations to prevent pest entry.	
8	**CONVEYANCE AND TRANSPORTATION AND HANDLING OF FOOD**	
a	The vehicle/transportation used to carry cooked/prepared/processed food is clean and not used to carry anything else.	
b	The conveyance and transportation are provided with temperature control system.	
9	**CLEANING AND MAINTENANCE**	
a	Cleaning and sanitation program is drawn up, observed and the record of the same is properly maintained. The schedule include: • Area needs to be cleaned • Frequency of cleaning • Method of cleaning	

10	**OPERATIONAL FEATURES**	
A	The source and standards of raw material used are of optimum quality and as per Regulation and standards laid down under the Act.	
B	Test report from own or NABL accredited/ FSSAI notified labs regarding microbiological contaminants in food items are available.	
11	**AUDIT/ DOCUMENTATION AND RECORDS**	
a	Records of daily production, raw material utilized and sales are available.	
B	Appropriate records of food processing/ preparation, food quality, laboratory test results, pest control etc. for a period of 1 year or the shelf-life of the product; whichever is more.	
12	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	
a	All packaged food products carrying label and requisite information as per Regulations are made.	
13	**TRAINING**	
a	Food handlers and production floor managers/ supervisors underwent appropriate food hygiene training.	

Sample Flowchart for Chocolate Manufacturing

Manufacturing of Chocolate



Sample FSMS Plan for Biscuit manufacturing

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Raw material and packaging material incoming	Physical (dirt, stone particles woodchips in flour/sugar) Chemical (toxins, mycotoxins from wheatflour, pesticides from raw materials) Microbiological (high microbiological load of raw materials, presence of pathogenic bacteria)	Supplier guarantee specifications established by quality assurance department of plant Relative humidity of the store to be maintained FIFO system should be established	As per FSSA 2006 and company internal specifications	Supplier guarantee certificate is visually confirmed Monitor temperature and humidity of storage	Reject materials if not accompanied by supplier guarantee.	Store manager	Supplier Guarantee Store Temperature logs
Tempering	Microbiological (presence of pathogenic bacteria after heat treatment because of an inadequate heating process)	Temperature and tempering period should be controlled during process	Temperatures should reach specified levels	Temperature and tempering time should be checked	f adequate temperature is not provided, re-repeat the heating process or discard product	Production	Time – temperature records Microbiological analyses results
Metal detector	Physical (presence of metal particles in final product)	Control is done by metal detectors	Final product should be free of metal contaminants	Presence of metal particles should be checked	Rejection of the product having metal contamination	QA/QC	Periodically calibration results and certificates of metal detectors

SELF- INSPECTION REPORT FORM

Bakery Products

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order	X	not in order

* If Status is marked not in order, please provide target completion date

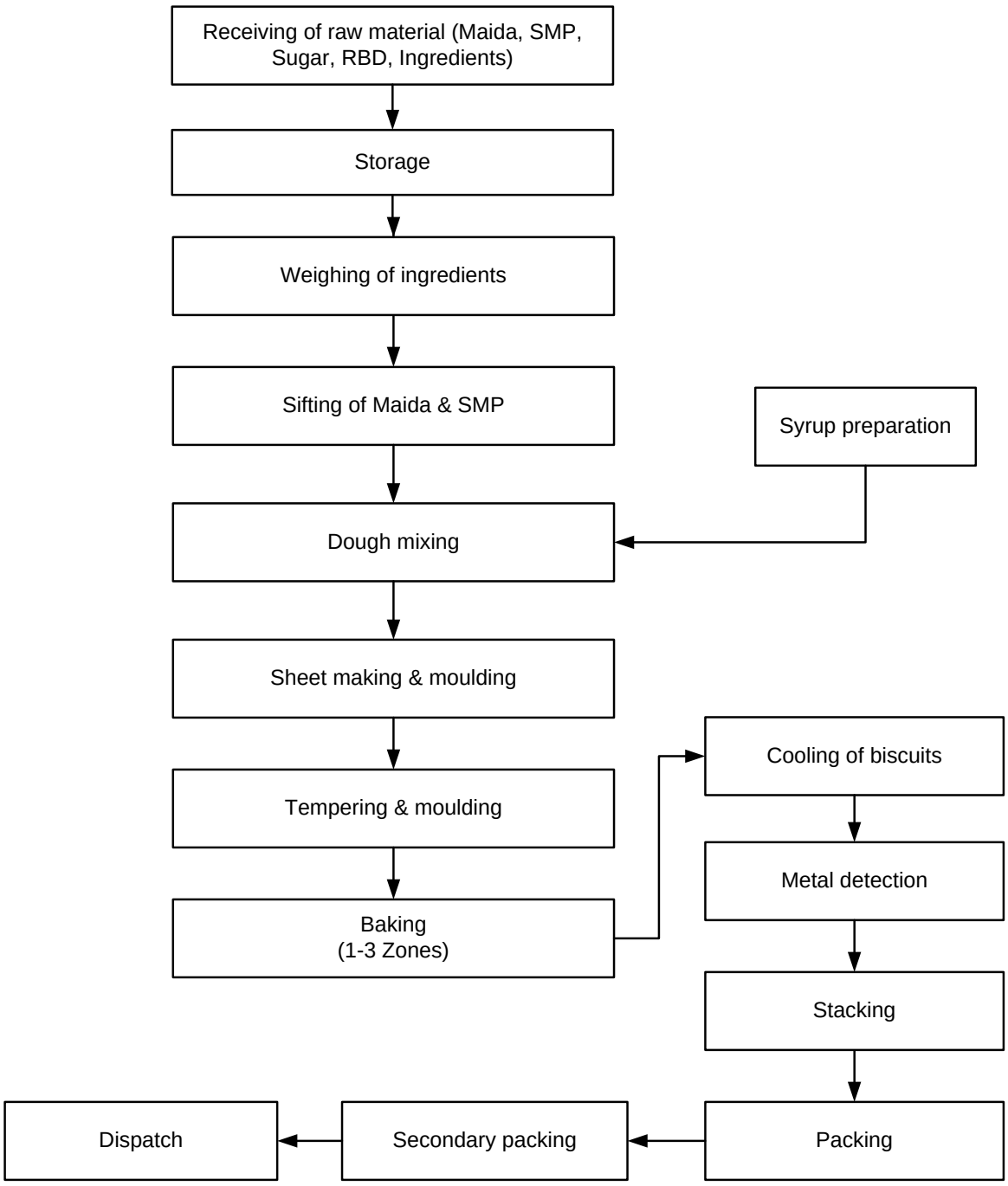
Sr No	Area	Status
1	**LOCATION AND LAYOUT OF THE ESTABLISHMENT**	
A	The Food service establishment is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
B	The Food preparation area walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
C	The premises of the food outlet is adequately lighted and ventilated, properly white washed or painted.	
D	Food preparation/ cooking/frying area is equipped with chimney with appropriate suction capacity depending upon kitchen size to avoid smoke	
E	The preparation/ processing/ cooking should be adequate to eliminate and reduce hazards to an acceptable level which might have been introduced at the raw food level.	
2	**EQUIPMENT AND FIXTURES**	
A	Work surfaces, and equipments are thoroughly cleaned before the preparing of food starts and after it has been used	
B	The equipments are made of stainless steel /galvanised iron/ non corrosive materials.	
C	Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
D	All electrical wires, boards and panels are adequately secured and in a clean state	
E	Any glass fixture including tubelights is appropriately secured with an unbreakable high temperature resistant material	
3	**STORAGE SYSTEMS**	
A	Appropriate arrangement for storage of food & food ingredients provided and adequately segregated and labeled	
B	Containers used for storage are made of non toxic material.	
C	Storage temperature and humidity is maintained as appropriate	
D	Stock Rotation is followed	
4	**PERSONAL HYGIENE**	
a	Food handlers must wear suitable clean clothes and where	

	necessary, shall wear head cover, apron, mask mouth and use gloves etc	
B	Avoidance of unhygienic practices such as chewing tobacco, touching face, mouth, ear or other body parts, Spitting, sneezing, coughing by food handler.	
c	Adequate facilities for toilets, hand wash and footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided	
D	Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
E	All food handlers are inoculated against the enteric group of micro-organisms	
6	**WATER SUPPLY**	
a	Adequate supply of potable water.	
B	Appropriate facilities for safe & clean storage of water.	
c	The water is examined chemically and bacteriologic ally by a NABL Accredited laboratory at a defined frequency and whenever the potential for contamination or an epidemic is identified.	
D	Ice and steam wherever in use during processing is made from potable water.	
7	**PEST CONTROL SYSTEM**	
a	Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
b	Adequate control measures are in place to prevent insect and rodents from entry into the processing area.	
c	The area has proper mesh and fly catchers at appropriate locations to prevent pest entry.	
8	**CONVEYANCE AND TRANSPORTATION AND HANDLING OF FOOD**	
a	The vehicle/transportation used to carry cooked/prepared/processed food is clean and not used to carry anything else.	
b	The conveyance and transportation are provided with temperature control system.	
9	**CLEANING AND MAINTENANCE**	
a	Cleaning and sanitation program is drawn up, observed and the record of the same is properly maintained. The schedule include: • Area needs to be cleaned • Frequency of cleaning • Method of cleaning	

10	**OPERATIONAL FEATURES**	
A	The source and standards of raw material used are of optimum quality and as per Regulation and standards laid down under the Act.	
B	Test report from own or NABL accredited/ FSSAI notified labs regarding microbiological contaminants in food items are available.	
11	**AUDIT/ DOCUMENTATION AND RECORDS**	
a	Records of daily production, raw material utilized and sales are available.	
B	Appropriate records of food processing/ preparation, food quality, laboratory test results, pest control etc. for a period of 1 year or the shelf-life of the product; whichever is more.	
12	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	
a	All packaged food products carrying label and requisite information as per Regulations are made.	
13	**TRAINING**	
a	Food handlers and production floor managers/ supervisors underwent appropriate food hygiene training.	

Sample Flowchart for Biscuit Manufacturing

Manufacturing of Biscuits



Sample FSMS Plan for Biscuit manufacturing

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Raw material and packaging material incoming	Physical (dirt, stone particles woodchips in flour/sugar) Chemical (toxins, mycotoxins from wheatflour, pesticides from raw materials) Microbiological (high microbiological load of raw materials, presence of pathogenic bacteria)	Supplier guarantee specifications established by quality assurance department of plant Relative humidity of the store to be maintained FIFO system should be established	As per FSSA 2006 and company internal specifications	Supplier guarantee certificate is visually confirmed Monitor temperature and humidity of storage	Reject materials if not accompanied by supplier guarantee.	Store manager	Supplier Guarantee Store Temperature logs
Baking	Microbiological (presence of pathogenic bacteria after heat treatment because of an inadequate heating process)	Temperature and baking period should be controlled during process	Product Core Temperatures should reach specified levels	Temperature and time should be checked	f adequate temperature is not provided, re-repeat the heating process or discard product	Production	Time – temperature records Microbiological analyses results
Metal detector	Physical (presence of metal particles in final product)	Control is done by metal detectors	Final product should be free of metal contaminants	Presence of metal particles should be checked	Rejection of the product having metal contamination	QA/QC	Periodically calibration results and certificates of metal detectors

SELF- INSPECTION REPORT FORM

Meat and Meat Products

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order	X	not in order

* If Status is marked not in order, please provide target completion date

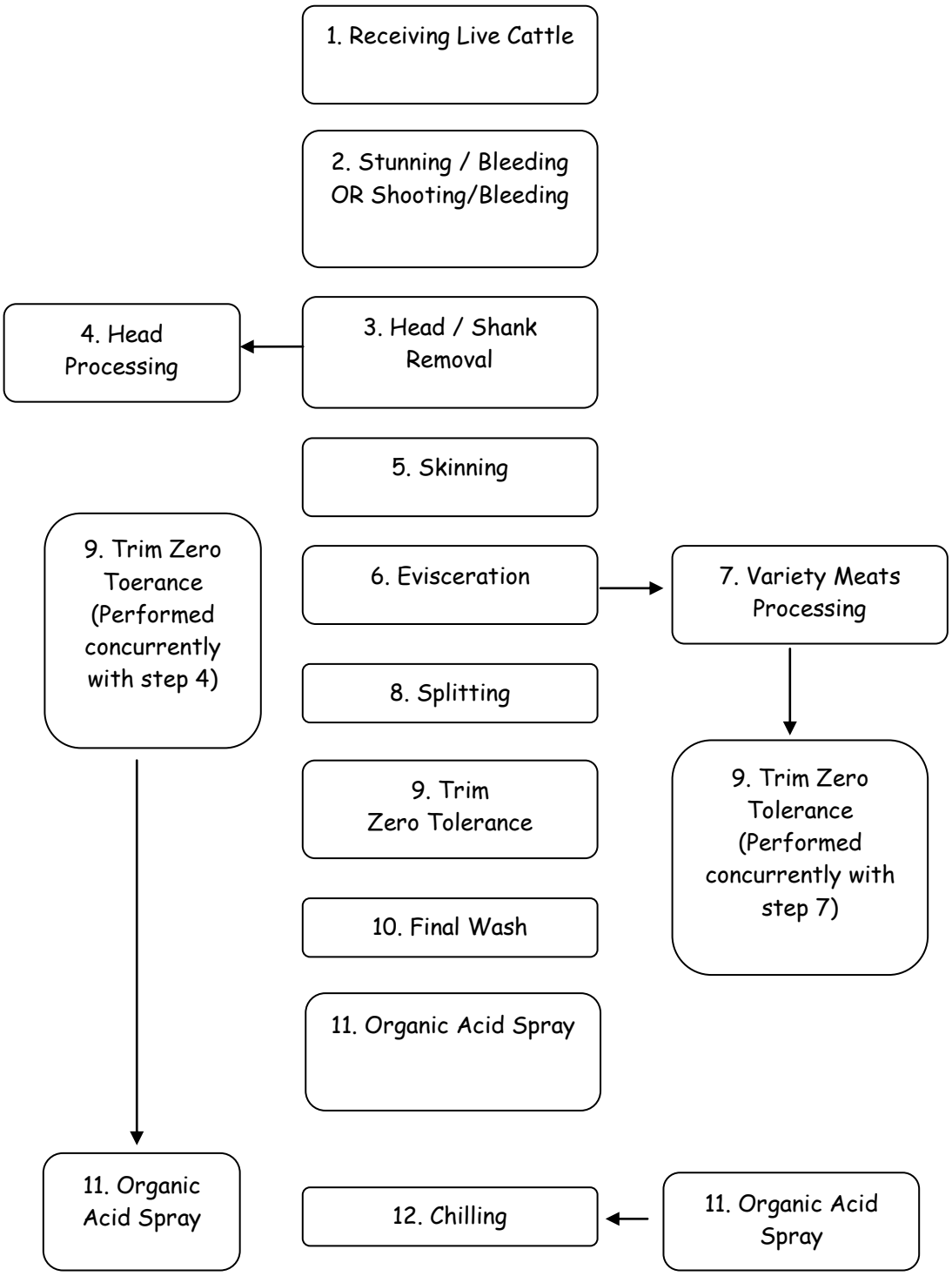
1. LOCATION AND LAYOUT OF FOOD ESTABLISHMENT	Status
a) The factory is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
b) The nature of ceiling roof is of permanent nature (Iron sheet/Asbestos sheet/ R.C.C).	
c) The floor of building is cemented, tiled or laid in stone/ pakka floor.	
d) The production area walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
e) The premises of the factory is adequately lighted and ventilated, properly white washed or painted.	
f) Provision for disposal of refuse and effluents is available.	
g) The food production/ food service area provided with adequate drainage facility.	
h) In case cooking is done on open fire, proper outlets for smoke/ steam etc, like chimney, exhaust fan etc are installed and the fans installed at a suitable height.	
i) Doors are provided with automatic door closer.	
j) Doors, Windows and other openings are fitted with net or screen to prevent insects etc.	
k) Antiseptic/ disinfectant foot bath is provided at the entrance.	
l) Sufficient number of latrine and urinals for worker are provided and located outside the processing hall.	
m) All the machinery is installed in such a manner which may allow continuous flow of production and do not occupy more than 50% of the total production and permits hygienic production and easy movement.	
2. EQUIPMENT AND FIXTURES	
a) Equipments kept clean, washed, dried and free from molds and fungi.	
b) No such Container/ Vessel/ Equipments in use likely to cause metallic contamination.	

c) The table tops used for food preparation are made of close joint and impervious material.	
d) The equipments are made of stainless steel /galvanised iron/ non corrosive materials.	
e) Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
3. STORAGE SYSTEMS	
a) Appropriate arrangement for storage of food & food ingredients provided and adequately segregated and labelled.	
b) Systems to adequately maintain time- temperature control at the time of storage.	
c) Raw material, food additives and ingredients, wherever applicable are conforming to regulations laid down under the act.	
d) Containers used for storage are made of non toxic material.	
e) Cold Storage facility, wherever necessary/ provided.	
4. PERSONAL HYGIENE	
a) Suitable aprons, head cover, disposable gloves & footwear are provided.	
b) Adequate facilities for toilets, hand wash and footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided.	
c) No person suffering from any infection or contagious disease.	
d) Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
e) The staff working in such factory are inoculated against the enteric group of disease and vaccinated.	
f) No employee of such factory who is suffering from a hand or face injury, skin infection or clinically recognizable infectious disease.	
5. WATER SUPPLY	
a) Adequate supply of potable water.	
b) Appropriate facilities for safe & clean storage of water.	
c) The water is examined chemically and bacteriologic ally by a NABL Accredited laboratory.	
d) Ice and steam wherever in use during processing is made from potable water.	
a) Identifying marks have been applied to the pipelines for easy identification of potable and non-potable water.	

6. PEST CONTROL SYSTEM	
a) Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
b) Adequate control measures are in place to prevent insect and rodents from the processing area.	
7. CONVEYANCE AND TRANSPORTATION	
a) Conveyance & transportation of food being done in an appropriate state of cleanliness, particularly if the same vehicle has been used to carry non-food items.	
b) The conveyance and transportation are provided with temperature control system	
8. CLEANING AND MAINTENANCE	
a) Cleaning and sanitation programme is drawn up, observed and the record of the same is properly maintained.	
b) Food preparation areas are cleaned at regular intervals, with water, and detergent and with the use of a disinfectant.	
9. OPERATIONAL FEATURES	
a) The source and standards of raw material used are of optimum quality and as per Regulation and standards laid down under the Act.	
b) Test report from own or NABL accredited/ FSSAI notified labs regarding microbiological contaminants in food items are available	
c) Arrangements for monitoring Temperature & Relative Humidity	
10. AUDIT/ DOCUMENTATION AND RECORDS	
a) Records of daily production, raw material utilized and sales are available.	
b) A periodic audit of the whole system according to the Standard Operating Procedure conducted regarding Good Manufacturing Practices/Good	
c) Appropriate records of food processing/ preparation, food quality, laboratory test results, pest control etc. for a period of 1 year or the shelf-	
d) Records of sale and purchase that the food product sold to registered/ licensed vendor and raw material purchased from registered/ licensed supplier.	
e) Recall plan.	
11. PRODUCT INFORMATION AND CONSUMER AWARENESS	
a) All packaged food products carrying label and requisite information as per Regulations are made.	
12. TRAINING	

a) Food production personnel and production floor managers/ supervisors underwent appropriate food hygiene training.	
13. ADDITIONAL REQUIREMENTS FOR MEAT AND MEAT PRODUCTS	
1) Condition of animal house, holding pens, quarantine pens (Hygienic/ unhygienic) and their adequate distance from the processing plant.	
2) Incinerator or burial pits for disposal of condemned carcasses wastes exists.	
3) The raw meat department, filling department and cooked meat department	
4) Meat (Source of Supply)	
a) No. of animals to be slaughtered per day	
b) Method of Slaughter (Halal /Jhatka etc.)	
c) Adequate facilities/ equipments are available for slaughter according to	
d) Adequate facilities for ante /post mortem examination	
e) No. of VETs, their name and VCI registration number etc.	
f) Record keeping (arrival and raw meat examination) arrangements are adequate	
5) Integration with Slaughter House; if any.	
6) Arrangement for meat inspection - a qualified Vet or services of technically qualified person are provided	
7) Are the equipments at a sufficient height to check for any leftover of meat	
8) Clean and sufficient drums or receptacles, provided for storing the glands, waste, tissues, bones blood clots etc. are available separately in each department (Slaughter hall, deboning, cooking and filling departments etc.)	
9) Trolleys/ suitable arrangements provided for quick transportation /removal of the above material	
10) The storage receptacle/trolleys are properly marked for slaughter , clean and unclean etc. to avoid cross contamination and easy identification	
11) Separate cold storage provided for raw and cooked meat.	
12) Condition of cold storage i) (clean/unclean) ii) meat properly stored or not	
13) The additives, curing agents etc., are properly labelled and packed to avoid access and contamination by rodents and insects.	

Sample Flowchart for Meat Production



Sample FSMS Plan for Slaughtering Units

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Carcass Trimming	fecal material, ingesta, present	Carcass washing w	Zero visible material	perform a visual inspection of each carcass	Re-process to remove deviation. No product that is injurious to health or otherwise adulterated as a result of the deviation will be permitted to enter commerce.	Vet In-charge	Slaughter Log Corrective Action Log
Hot Water / Organic Acid Spray	Microbial contamination from evisceration	Each carcass half or quarter is sprayed thoroughly with an organic acid solution prepared according to the Organic Acid Spray SOP or 150F hot water	Temperature of water Concentration of Organic Acid	visually confirm that each carcass, carcass half is thoroughly sprayed with hot water or an organic acid solution	Re-process to remove deviation. No product that is injurious to health or otherwise adulterated as a result of the deviation will be permitted to enter commerce.	Vet In-charge	Slaughter Log Organic Acid Spray SOP Log Corrective Action Log
Chilling	Microbiological Growth	7C for 12 hours	Chiller temperature	Carcass temperatures	Re-process to remove deviation. No product that is injurious to health or otherwise adulterated as a result of the deviation will be permitted to enter commerce	Vet In-charge	Chiller Temp lpogs
Transport	Physical and Microbiological	Transport is in clean, covered trucks and use of potable ice where necessary	Time and temperature of transport	Check cleanliness of Trucks Check ice quality Monitor duration of transporting	Re-process to remove deviation. No product that is injurious to health or otherwise adulterated as a result of the deviation will be permitted	Vet In-charge	Despatch Log Ice Quality Checks GMP checklist for Transporter

SELF- INSPECTION REPORT FORM

Fish and Fish Products

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order	X	not in order

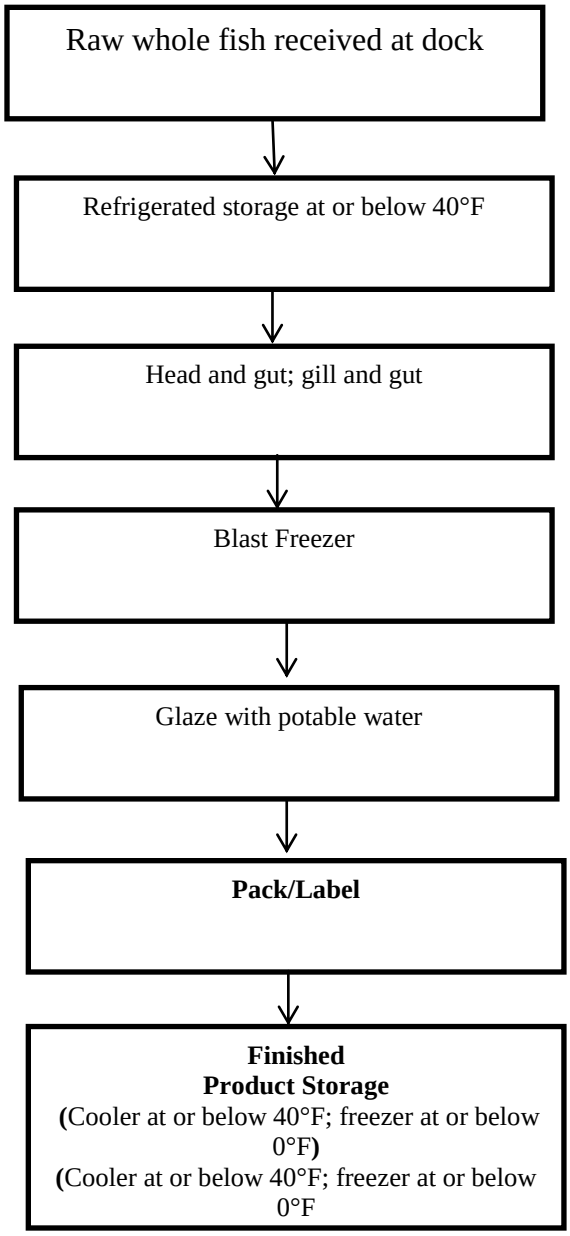
* If Status is marked not in order, please provide target completion date

1. LOCATION AND LAYOUT OF FOOD ESTABLISHMENT	Status
a) The factory is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
b) The nature of ceiling roof is of permanent nature (Iron sheet/Asbestos sheet/ R.C.C).	
c) The floor of building is cemented, tiled or laid in stone/ pakka floor.	
d) The production area walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
e) The premises of the factory is adequately lighted and ventilated, properly white washed or painted.	
f) Provision for disposal of refuse and effluents is available.	
g) The food production/ food service area provided with adequate drainage facility.	
i) Doors are provided with automatic door closer.	
j) Doors, Windows and other openings are fitted with net or screen to prevent insects etc.	
k) Antiseptic/ disinfectant foot bath is provided at the entrance.	
l) Sufficient number of latrine and urinals for worker are provided and located outside the processing hall.	
m) All the machinery is installed in such a manner which may allow continuous flow of production and do not occupy more than 50% of the total production and permits hygienic production and easy movement.	
2. EQUIPMENT AND FIXTURES	
a) Equipments kept clean, washed, dried and free from molds and fungi.	
b) No such Container/ Vessel/ Equipments in use likely to cause metallic contamination.	
c) The table tops used for food preparation are made of close joint and impervious material.	
d) The equipments are made of stainless steel /galvanised iron/ non corrosive materials.	

e) Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
3. STORAGE SYSTEMS	
a) Appropriate arrangement for storage of fish and any ingredients provided and adequately segregated and labeled.	
b) Systems to adequately maintain time- temperature control at the time of storage.	
c) Raw material, food additives and ingredients, wherever applicable are conforming to regulations laid down under the act.	
d) Containers used for storage are made of nontoxic material.	
e) Cold Storage facility is well maintained.	
4. PERSONAL HYGIENE	
a) Suitable aprons, head cover, disposable gloves & footwear are provided.	
b) Adequate facilities for toilets, hand wash and footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided.	
c) No person suffering from any infection or contagious disease.	
d) Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
e) The staff working in such factory are inoculated against the enteric group of disease and vaccinated.	
f) No employee of such factory who is suffering from a hand or face injury, skin infection or clinically recognizable infectious disease.	
5. WATER SUPPLY	
a) Adequate supply of potable water.	
b) Appropriate facilities for safe & clean storage of water.	
c) The water is examined chemically and bacteriologic ally by a NABL Accredited laboratory.	
d) Ice and steam wherever in use during processing is made from potable water.	
a) Identifying marks have been applied to the pipelines for easy identification of potable and non-potable water.	
6. PEST CONTROL SYSTEM	
a) Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	

b) Adequate control measures are in place to prevent insect and rodents from the processing area.		
7. CONVEYANCE AND TRANSPORTATION		
a) Conveyance & transportation of fish is done in an appropriate state of cleanliness, particularly if the same vehicle has been used to carry non-food items.		
b) The conveyance and transportation are provided with temperature control system.		
8. CLEANING AND MAINTENANCE		
a) Cleaning and sanitation programme is drawn up, observed and the record of the same is properly maintained.		
b) Fish processing areas are cleaned at regular intervals, with water, and detergent and with the use of a disinfectant.		
9. OPERATIONAL FEATURES		
a) The source and standards of raw material used are of optimum quality and as per Regulation and standards laid down under the Act.		
b) Test report from own or NABL accredited/ FSSAI notified labs regarding microbiological contaminants in fish are available.		
c) Arrangements for monitoring Temperature & Relative Humidity		
10. AUDIT/ DOCUMENTATION AND RECORDS		
a) Records of daily production, raw material utilized and sales are available.		
b) A periodic audit of the whole system according to the Standard Operating Procedure conducted regarding Good Manufacturing Practices/Good		
c) Appropriate records of food processing/ preparation, food quality, laboratory test results, pest control etc. for a period of 1 year or the shelf-		
d) Records of sale and purchase that the fish is sold to registered/ licensed vendor and raw material purchased from registered/ licensed supplier.		
e) Recall plan.		
11. PRODUCT INFORMATION AND CONSUMER AWARENESS		
a) All packaged food products carrying label and requisite information as per Regulations are made.		
12. TRAINING		
a) Fish processing personnel and production floor managers/ supervisors underwent appropriate food hygiene training.		

Sample Flowchart for Fish Processing



Sample FSMS Plan for Fish Processing Units

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Receiving	Fish are harvested from waters where pathogens contaminants occur Fish are harvested from waters where pathogens contaminants occur	Source Approval Source Approval	As per FSSR	Microbiological Testing of batch Source approval after chemical analysis	Reject batch Reject batch	QA / QC	Fish Receipt Log Chemical Residue Test Reports
Storage	Growth of Pathogens	Temperature Control	Company Specifications Fresh: < 4 C Frozen: < -18 C	Monitor cold store and product temperature	Reject Batch Review Maintenance Program for Cold Stores	QA / QC	Temperature Logs

SELF- INSPECTION REPORT FORM

Egg and Egg Products

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order		X	not in order

* If Status is marked not in order, please provide target completion date

Sr. No.	Particular/ Point of inspection	Observation
1	**LOCATION AND LAYOUT OF FOOD ESTABLISHMENT**	
o.	The factory is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
p.	The nature of ceiling roof is of permanent nature (Iron sheet/ Asbestos sheet/ R.C.C).	
q.	The floor of building is cemented, tiled or laid in stone/ pakka floor.	
r.	The production area walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
s.	The premises of the factory is adequately lighted and ventilated, properly white washed or painted.	
t.	Provision for disposal of refuse and effluents is available.	
u.	The food production/ food service area provided with adequate drainage facility.	
v.	In case cooking is done on open fire, proper outlets for smoke/ steam etc, like chimney, exhaust fan etc are installed and the fans installed at a suitable height.	
w.	Doors are provided with air curtain/strip curtain & automatic door closer.	
x.	Doors, Windows and other openings are fitted with net or screen to prevent insects etc.	
y.	Windows are fitted with insect proof screen/mesh & are maintained cleaned.	
z.	Antiseptic/ disinfectant foot bath is provided at the entrance (not applicable if internal & external shoes are separate).	
aa.	Sufficient number of latrine and urinals for worker are provided and located outside the processing hall.	
bb.	All the machinery is installed in such a manner which may allow continuous flow of production and permits hygienic production and easy cleaning & maintenance.	
2.	**EQUIPMENT AND FIXTURES**	
f	Equipment's kept clean, washed, dried and free from molds and fungi.	

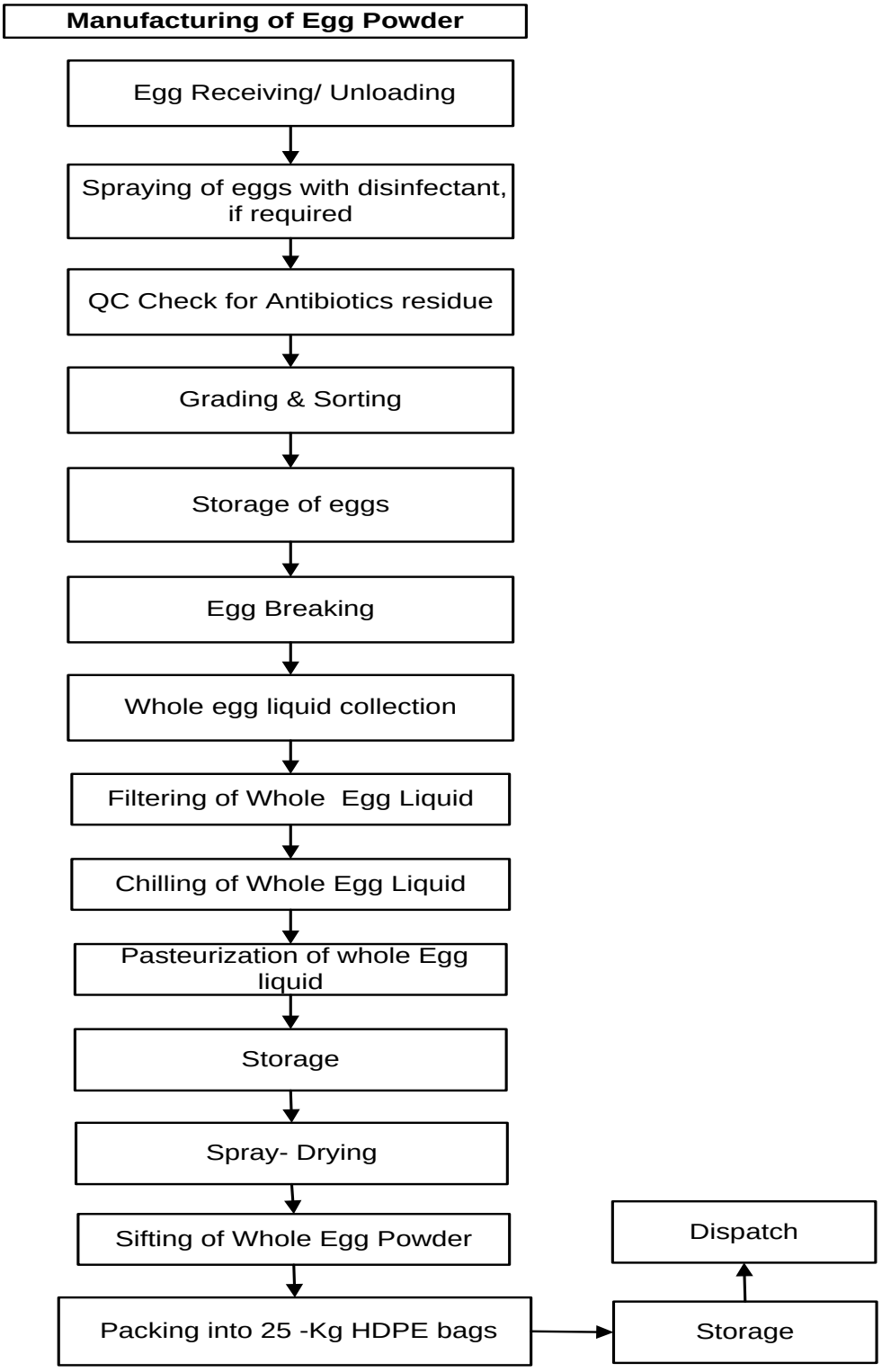
g	No such Container/ Vessel/ Equipment's in use likely to cause metallic contamination.	
h	The table tops used for food preparation are made of close joint and impervious material.	
i	The equipments are made of stainless steel /galvanized iron/ non corrosive materials as permitted by the product characteristics.	
j	Appropriate facilities for the cleaning and disinfecting of equipment's and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
3.	**WATER SUPPLY**	
h	Adequate supply of potable water is available.	
i	Appropriate facilities for safe & clean storage of water.	
j	The water is examined chemically and bacteriologic ally by a FSSAI approved NABL Accredited laboratory.	
k	Ice and steam wherever in use during processing is made from potable water.	
l	Identifying marks have been applied to the pipelines for easy identification of potable and non-potable water.	
m	Waste disposal is done efficiently & there is no waste accumulation.	
n	Lighting fixtures are protected in all departments/areas	
4.	**PERSONAL HYGIENE**	
h	Suitable aprons, head cover, disposable gloves & footwear are provided.	
i	Adequate facilities for toilets, hand wash and if required footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided.	
j	Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
k	The food handlers are inoculated against the enteric group of disease and vaccinated.	
l	No employee permitted in process who is suffering from a hand or face injury, skin infection or clinically recognizable infectious or contagious disease.	
m	Do's & don'ts for the workers is placed in prominent place in local language	

n	Smoking & spitting is not permitted in the food process/handling areas.	
5.	**FOOD OPERATIONS & CONTROL**	
s	Raw Egg is stored & handled in clean place to prevent any kind of contamination	
t	Raw Egg is cooled at temperature of 4 ^{0}C or lower and maintained at that temperature until further processed.	
u	Facilities for hygienic handling and protection of raw materials and of non – packed or non-wrapped products during loading and unloading, transport and storing including cooling facilities are provided.	
v	Proper facilities for cleaning and disinfecting of tanks used	
w	Appropriate arrangement for storage of food & food ingredients provided and adequately segregated, labeled & stock rotation system followed.	
x	Raised platform with sides and top sufficiently protected to prevent contamination.	
y	Systems to adequately maintain time- temperature control at the time of storage as per the product requirements.	
z	The source and standards of raw material, food additives, ingredients & packaging material wherever applicable are conforming to regulations laid down under the act.	
aa	The cans/ containers used for storage and transportation of egg and egg products are not made up of mild steel metal and plastic material.	
bb	Separate cold storage facility available for egg & egg products.	
cc	Equipment are equipped with temperature indicator. All specific process controls/temperatures are maintained & recorded	
dd	The receiving section is away from the processing area to prevent contamination.	
ee	Separate area is provided for packaging of various products under satisfactory hygienic conditions	
ff	Conveyance & transportation of food being done in an appropriate state of Cleanliness.	
gg	Valid weight & measure certificates for weighing scales and weights from a Designated Authority are available	
hh	Pallets are made of non-absorbent material provided on the floor for keeping egg products	
ii	The products are properly stacked on pallets at least one feet away from wall.	

jj	Details of vehicles used for transportation of products are maintained in stipulated format.	
6.	**AUDIT/ DOCUMENTATION AND RECORDS**	
g	Adequate documented system SOPs is in place for core processes like procurement, storage, processing, packing, etc.	
h	Records of daily production, raw material utilized and sales are available.	
i	A periodic audit of the whole system according to the Standard Operating Procedure conducted regarding Good Manufacturing Practices/Good Hygienic Practices (GMP/ GHP) system.	
j	Appropriate records of food processing/ preparation, food quality, laboratory test results, pest control etc. for a period of 1 year or the shelf-life of the product; whichever is more.	
k	Records of sale and purchase that the food product sold to registered/ licensed vendor and raw material purchased from registered/ licensed supplier.	
l	A documented recall plan is available & traceability is implemented to assure effectiveness of recall plan.	
7.	**FOOD TESTING FACILITY**	
c	Raw egg testing facility/Parameters available at reception. Is in-house laboratory is available for testing of egg & egg products.	
d	Test report from own or NABL accredited/ FSSAI notified labs regarding microbiological contaminants in food items are available.	
8.	**CLEANING AND MAINTENANCE**	
e	Cleaning and sanitation program is documented, implemented and the record of the same is properly maintained.	
f	Food preparation areas are cleaned at regular intervals, with water, and detergent and with the use of a disinfectant.	
g	The egg receiving area is equipped with cleaning facilities	
h	Approved waste water disposal system is hygienically operated.	
9.	**PEST CONTROL SYSTEM**	
c	Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
d	Adequate control measures are in place to prevent insect and rodents from the processing area.	

10.	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	
b.	All packaged food products carrying label and requisite information as per Regulations are made.	
11.	**TRAINING**	
c.	Food production personnel and production floor managers, supervisors, food handlers undergone appropriate food hygiene training & records maintained.	
d.	Training programs are reviewed & scheduled to meet the hygiene compliance by food handlers.	

Sample Flowchart for Egg Powder Production



Sample FSMS Plan for Egg Powder Production

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Filtration and transfer	Presence of shells in the product or other foreign particles : product free from foreign bodies and shells	• Use of grills in the reception tanks • Using filters (or anything equivalent), • preferably self-cleaning • Filters with a mesh size of max 1mm (diameter) • Use of magnet • Procedure for control glass and hard plastics, particularly : glass minimization, • check-list, immediate action in case of broken glass or hard plastic • Place filter for liquid egg products at the end, just as the product is filled into packaging. • This position ensures any contamination from pump seals is captured. • It will need to be checked daily for damage prior to cleaning.	Presence and integrity of the filter (preliminary qualified)	Visual check of filter. After each cleaning or before each day of production	**Immediate actions :** Change of the filter Treatment of the non-conformity : Stop the batch and new filtration **Corrective actions** Re-qualification of the filtration (material, maintenance…)	QA/QC	Filter maintenance records
Heat treatment and cooling	To avoid contamination by the treatment system (heating, recovery and cooling sections) To avoid the recontamination by non treated product decrease the microbial levels and eliminate possible pathogenic bacteria	• Regular checking of surface integrity (plates, gaskets…) • Use of only food approved chemicals for equipment which could be in contact with liquid eggs or egg products : lubricant, cooling fluids, oil • The use of previously established and validated heating regimes taking into account the nature and properties of the treated product • Calibration of the equipment for heat treatment (temperature and pressure for instance) • Recycling of inadequately treated product • Thermal insulation of the holding tubes, to limit the heat loss	Company Specifications for Time/temperature chart of the heat treatment	Recording Thermometer Flowmeter	Recycling of product Adjustment of hot water Temperature Insulation, treating again or removing the non-conforming egg products	QA/QC	Temperature logs

		• Continuous control of temperature and flow rate					
Drying of egg products	Microbial contamination	• The use of previously established and validated processes taking into account the nature and properties of the treated product • The drying equipment must be cleaned and disinfected (tubes and towers) • Regular inspection program of tower and other parts (cracked parts and cool parts) Inlet air filtration • Regular cleaning program for filters • Avoid humidity during powder transfer	Company specifications for Humidity of the powder	Each batch or more	Adjust the outlet air temperatures and/or egg product flow Have defined procedures for treating non-conforming products Repair the drying equipment if defective	QA/QC	Dryer Logsheet
Packaging	Contamination with vegetative pathogens	Packaging Environment to be controlled Packaging material quality	Company Specifications	Hygiene verification Packaging material quality checks	Reject lots not complying with specifications or revalidate process requirements	QA/QC	Plant Hygiene checklist Incoming Material test records

SELF- INSPECTION REPORT FORM

Ready To Eat Savouries

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order	X	not in order

* If Status is marked not in order, please provide target completion date

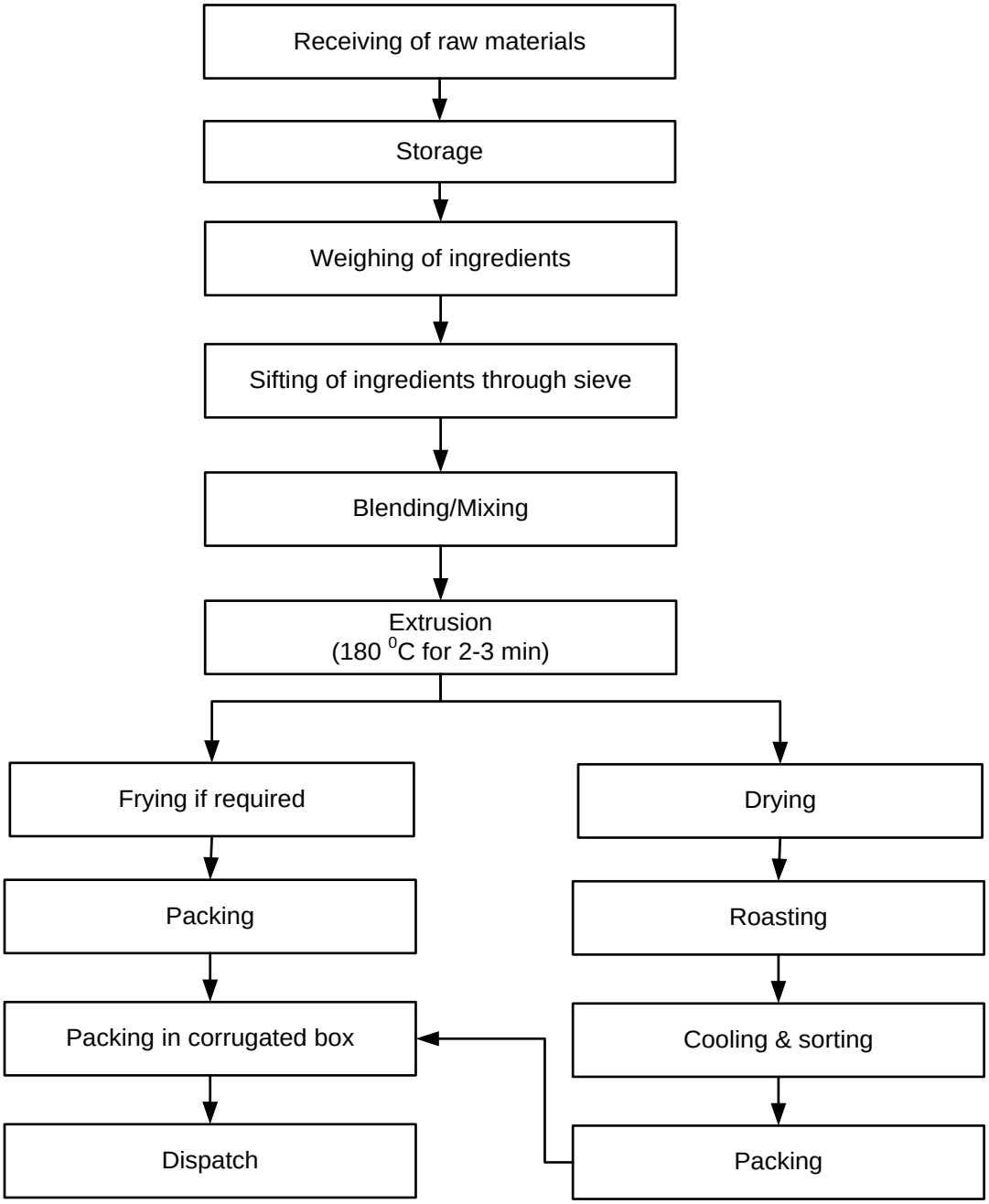
Sr No	Area	Status
1	**LOCATION AND LAYOUT OF THE ESTABLISHMENT**	
A	The Food service establishment is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
B	The Food preparation area walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
C	The premises of the food outlet is adequately lighted and ventilated, properly white washed or painted.	
D	Food preparation/ cooking/frying area is equipped with chimney with appropriate suction capacity depending upon kitchen size to avoid smoke	
E	The preparation/ processing/ cooking should be adequate to eliminate and reduce hazards to an acceptable level which might have been introduced at the raw food level.	
2	**EQUIPMENT AND FIXTURES**	
A	Work surfaces, chopping boards and equipments are thoroughly cleaned before the preparing of food starts and after it has been used	
B	Separate chopping boards and knives for raw fruit/ vegetables/meat/poultry and ready-to-eat food are used	
C	The equipments are made of stainless steel /galvanised iron/ non corrosive materials.	
D	Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
E	All electrical wires, boards and panels are adequately secured and in a clean state	
F	Any glass fixture including tubelights is appropriately secured with an unbreakable high temperature resistant material	
3	**STORAGE SYSTEMS**	
A	Appropriate arrangement for storage of food & food ingredients provided and adequately segregated and labeled	
B	Containers used for storage are made of non toxic material.	
C	Storage temperature and humidity is maintained as appropriate	
D	Stock Rotation is followed	

4	**PERSONAL HYGIENE**	
a	Food handlers must wear suitable clean clothes and where necessary, shall wear head cover, apron, musk mouth and use gloves etc	
B	Avoidance of unhygienic practices such as chewing tobacco, touching face, mouth, ear or other body parts, Spitting, sneezing, coughing by food handler.	
c	Adequate facilities for toilets, hand wash and footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided	
D	Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
E	All food handlers are inoculated against the enteric group of micro-organisms	
6	**WATER SUPPLY**	
a	Adequate supply of potable water.	
B	Appropriate facilities for safe & clean storage of water.	
c	The water is examined chemically and bacteriologic ally by a NABL Accredited laboratory at a defined frequency and whenever the potential for contamination or an epidemic is identified.	
D	Ice and steam wherever in use during processing is made from potable water.	
7	**PEST CONTROL SYSTEM**	
a	Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
b	Adequate control measures are in place to prevent insect and rodents from entry into the processing area.	
c	The area has proper mesh and fly catchers at appropriate locations to prevent pest entry.	
8	**CONVEYANCE AND TRANSPORTATION AND HANDLING OF FOOD**	
a	The vehicle/transportation used to carry cooked/prepared/processed food is clean and not used to carry anything else.	
b	The conveyance and transportation are provided with temperature control system.	
9	**CLEANING AND MAINTENANCE**	
a	Cleaning and sanitation programme is drawn up, observed and the record of the same is properly maintained. The schedule include:	

	• Area needs to be cleaned • Frequency of cleaning • Method of cleaning	
10	**OPERATIONAL FEATURES**	
A	The source and standards of raw material used are of optimum quality and as per Regulation and standards laid down under the Act.	
	Meat, poultry, fish and other non-veg products are only sourced from licenced / authorized vendors.	
B	Test report from own or NABL accredited/ FSSAI notified labs regarding microbiological contaminants in food items are available.	
11	**AUDIT/ DOCUMENTATION AND RECORDS**	
a	Records of daily production, raw material utilized and sales are available.	
B	Appropriate records of food processing/ preparation, food quality, laboratory test results, pest control etc. for a period of 1 year or the shelf-life of the product; whichever is more.	
12	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	
a	All packaged food products carrying label and requisite information as per Regulations are made.	
13	**TRAINING**	
a	Food handlers and production floor managers/ supervisors underwent appropriate food hygiene training.	

Sample Flowchart for Extruded Snacks

Manufacturing of Extruded Products



Sample FSMS Plan for Extruded Snacks

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Raw material and packaging material incoming	Physical (dirt, stone particles woodchips in vegetables) Chemical (toxins, mycotoxins from wheatflour, pesticides from raw materials) Microbiological (high microbiological load of raw materials, presence of pathogenic bacteria)	Supplier guarantee specifications established by quality assurance department of plant Relative humidity of the store to be maintained FIFO system should be established	As per FSSA 2006 and company internal specifications	Supplier guarantee certificate is visually confirmed Monitor temperature and humidity of storage	Reject materials if not accompanied by supplier guarantee.	Store manager	Supplier Guarantee Store Temperature logs
Washing vegetables	Physical (non-removal of dirts because of an inadequate washing programme) Chemical (contamination from low quality water, presence of chlorine after an inadequate rinsing) Microbiological (contamination of microorganisms, especially pathogens from low microbiological quality water)	Washing and sanitation as per established SOPs Residue chlorine amount of vegetables should be under the upper limits given in specifications	50-125 ppm active chlorine is adequate for elimi-nating the microbial risks of vegetables. For very dirty raw materials 1-5 ppm active chlorine should be added to the final rinsing water	Check the amount od chlorine used for washing process Verify washing is as per SOP	Re-wash the vegetables in case of an inadequate washing If the residue chlorine is high, re-rinsing should be performed If chemical and microbiological attributes of water are not being matched with the standards, water should be treated before using in the manufacturing line	QA	Chlorine certificates and specifications Washing effectiveness test results
Heating (Boiling , pasteurization, frying, cooking)	Microbiological (presence of pathogenic bacteria after heat treatment because of an inadequate heating process)	Temperature and boiling period should be controlled during process	Product Core Temperatures should reach specified levels	Temperature and time should be checked	f adequate temperature is not provided, re-repeat the heating process or discard product	Production	Time – temperature records Microbiological analyses results

Metal detector	Physical (presence of metal particles in final product)	Control is done by metal detectors	Final product should be free of metal contaminants	Presence of metal particles should be checked	Rejection of the product having metal contamination	QA/QC	Periodically calibration results and certificates of metal detectors

SELF- INSPECTION REPORT FORM
Catering and Food Service Establishements

Food Service Establishments - *Includes premises where public is admitted for consumption of any food or drink or any place where cooked food is sold or prepared for sale (Eating houses, Restaurant and hotels, snack bars, canteens, food service at religious places, Tiffin services, Dabbavalas)*

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order	X	not in order

* If Status is marked not in order, please provide target completion date

Sr No	Area	Status
1	**LOCATION AND LAYOUT OF THE ESTABLISHMENT**	
a	The Food service establishment is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
b	The Food preparation area walls are smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors are curved.	
c	The premises of the food outlet is adequately lighted and ventilated, properly white washed or painted.	
d	Food preparation/ cooking/frying area is equipped with chimney with appropriate suction capacity depending upon kitchen size to avoid smoke	
e	The preparation/ processing/ cooking should be adequate to eliminate and reduce hazards to an acceptable level which might have been introduced at the raw food level.	
2	**EQUIPMENT AND FIXTURES**	
a	Work surfaces, chopping boards and equipments are thoroughly cleaned before the preparing of food starts and after it has been used	
b	Separate chopping boards and knives for raw fruit/ vegetables/meat/poultry and ready-to-eat food are used	
c	The equipments are made of stainless steel /galvanised iron/ non corrosive materials.	
d	Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
e	All electrical wires, boards and panels are adequately secured and in a clean state	
f	Any glass fixture including tubelights is appropriately secured with an unbreakable high temperature resistant material	
3	**STORAGE SYSTEMS**	
a	Appropriate arrangement for storage of food & food ingredients provided and adequately segregated and labeled	
b	Containers used for storage are made of non toxic material.	
c	Veg. foods are stored above non-veg. foods and cooked foods above uncooked foods on separate racks in the refrigerator.	
d	Storage temperature is maintained at -18C for frozen foods and at or	

	below 5C for high risk foods.	
e	Stock Rotation is followed	
f	Raw food /meat/poultry and ready-to-eat foods are kept separate at all times to avoid cross contamination.	
g	Special attention is given while storing high risk foods such as cut fruitsand salads, fruit juices, confectionary, meat, poultry, fish, water based sauces and chutneys, gravy foods.	
4	**PERSONAL HYGIENE**	
a	Food handlers must wear suitable clean clothes and where necessary, shall wear head cover, apron, musk mouth and use gloves etc	
b	Avoidance of unhygienic practices such as chewing tobacco, touching face, mouth, ear or other body parts, Spitting, sneezing, coughing by food handler.	
c	Adequate facilities for toilets, hand wash and footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided	
d	Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
e	All food handlers are inoculated against the enteric group of micro-organisms	
6	**WATER SUPPLY**	
a	Adequate supply of potable water for beverages.	
b	Appropriate facilities for safe & clean storage of water.	
c	The water is examined chemically and bacteriologic ally by a NABL Accredited laboratory at a defined frequency and whenever the potential for contamination or an epidemic is identified.	
d	Ice and steam wherever in use during processing is made from potable water.	
7	**PEST CONTROL SYSTEM**	
a	Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
b	Adequate control measures are in place to prevent insect and rodents from entry into the processing area.	
c	The area has proper mesh and fly catchers at appropriate locations to prevent pest entry.	
8	**CONVEYANCE AND TRANSPORTATION AND HANDLING OF FOOD**	
a	The vehicle/transportation used to carry cooked/prepared/processed food is clean and not used to carry anything else.	
b	The conveyance and transportation are provided with temperature	

	control system.	
c	Handling of food should be minimal. It should be ensured that utensils, crockery, cutlery and specially hands of the food handlers/seller are clean and sanitized	
9	**CLEANING AND MAINTENANCE**	
a	Cleaning and sanitation programme is drawn up, observed and the record of the same is properly maintained. The schedule include: • Area needs to be cleaned • Frequency of cleaning • Method of cleaning	
b	Sinks with a draining board, detergent and hot water shall be provided to ensure proper cleaning of utensils, crockery and cutlery there will be a separate place for washing pots and pans.	
10	**OPERATIONAL FEATURES**	
a	The source and standards of raw material used are of optimum quality and as per Regulation and standards laid down under the Act.	
	Meat, poultry, fish and other non-veg products are only sourced from licenced / authorized vendors.	
	Frozen products to be received at temperature below -18C and fresh / chilled products to be received at temperature below 5C	
b	Test report from own or NABL accredited/ FSSAI notified labs regarding microbiological contaminants in food items are available.	
c	Thawing of frozen meat or poultry are carried out in one of the following ways - At refrigeration temperature for not more than 24 hours - Under running water at room temperature for not more than 90 mins - In a microwave.	
d	Cooling of products for further use are treated as follows: - Temperature brought down from 60C to 21C in 2 hours and to 5 C or below in the next 4 hours.	
11	**AUDIT/ DOCUMENTATION AND RECORDS**	
a	Records of daily production, raw material utilized and sales are available.	
b	Appropriate records of food processing/ preparation, food quality, laboratory test results, pest control etc. for a period of 1 year or the shelf-life of the product; whichever is more.	
12	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	
a	All packaged food products carrying label and requisite information as per Regulations are made.	

13	**TRAINING**	
a	Food handlers and production floor managers/ supervisors underwent appropriate food hygiene training.	

Sample FSMS Plan for Food Service Units

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Receiving	Microbial Growth in RTS received	Receive below the danger zone	4^0C +/- 2 degrees	Incoming Receipt Check	Reject Lot	Purchase Manager	Incoming Material Receipt Log
Storage	Microbial Growth in Food to be consumed raw	Store below the danger zone	Fish 4^0C +/- 2 degrees for 7 days	Daily Monitoring of Freezer Temperature	Inform Chef, and re adjust freezer temperature	Sanitation Officer	Refrigerator, Freezer Temp Log
Preparation	Microbial Contamination through food contact surface, and handlers	• Restrict ill employees;	Nil	Thrice a day checks	Inform Chef, reject lot if contamination suspected	Sanitation Officer	Food Area Checklist
		• Control bare hand contact	Nil				
		• Separate raw from ready to eat food	Always				
Preparation	Microbial Growth during Process 1 Food preparation	Work at 4^0C or below	4^0C +/- 2 or below and within 2 hours	Chef to control Time and temperature	reject lot	Chef	Raw Foods Preparation Log
Cooking	Bacterial, Parasitic, Viral Survival during Cooking	Cook to Product Internal Temperature, Time	Product core temperature 75^0C+/- 2 degrees for 60 secs	Chef to control Time and temperature	reheat till requirements satisfied	Chef	Cooked Food Preparation Log
Cooling	Microbial Growth during Cooling of foods, Process3	Quick chilling to below danger zone	Cool food from 75^0 C to 5^0 C within 2 hours	Chef to control Time and temperature	reject lot	Chef	Raw Foods Preparation Log
Reheating	Microbial Growth during Re heating of foods, Process 3	Bring and hold to Safe zone	Reheat to 75^0 C for 60 sec	Chef to control Time and temperature	reject lot	Chef	Cooked Food Preparation Log
Holding	Microbial Growth during Holding of foods, Process 1	Hold below danger zone	5^0 C or below and use within 4 hours	Chef to control Time and temperature	reject lot	Chef	Raw Foods Preparation Log
Holding	Microbial Growth during Holding of foods, Procees 2, 3	Hold above danger zone	75^0 C or above and use within 4 hours	Chef to control Time and temperature	reject lot	Chef	Cooked Food Preparation Log

SELF- INSPECTION REPORTFORM

Fruit Processing

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: FaxNo.:	
Category of licence (Central/State)	
License No.:	
E-mail Address:	
Name of the Manager/Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order	X	not in order

* If Status is marked not in order, please provide target completion date

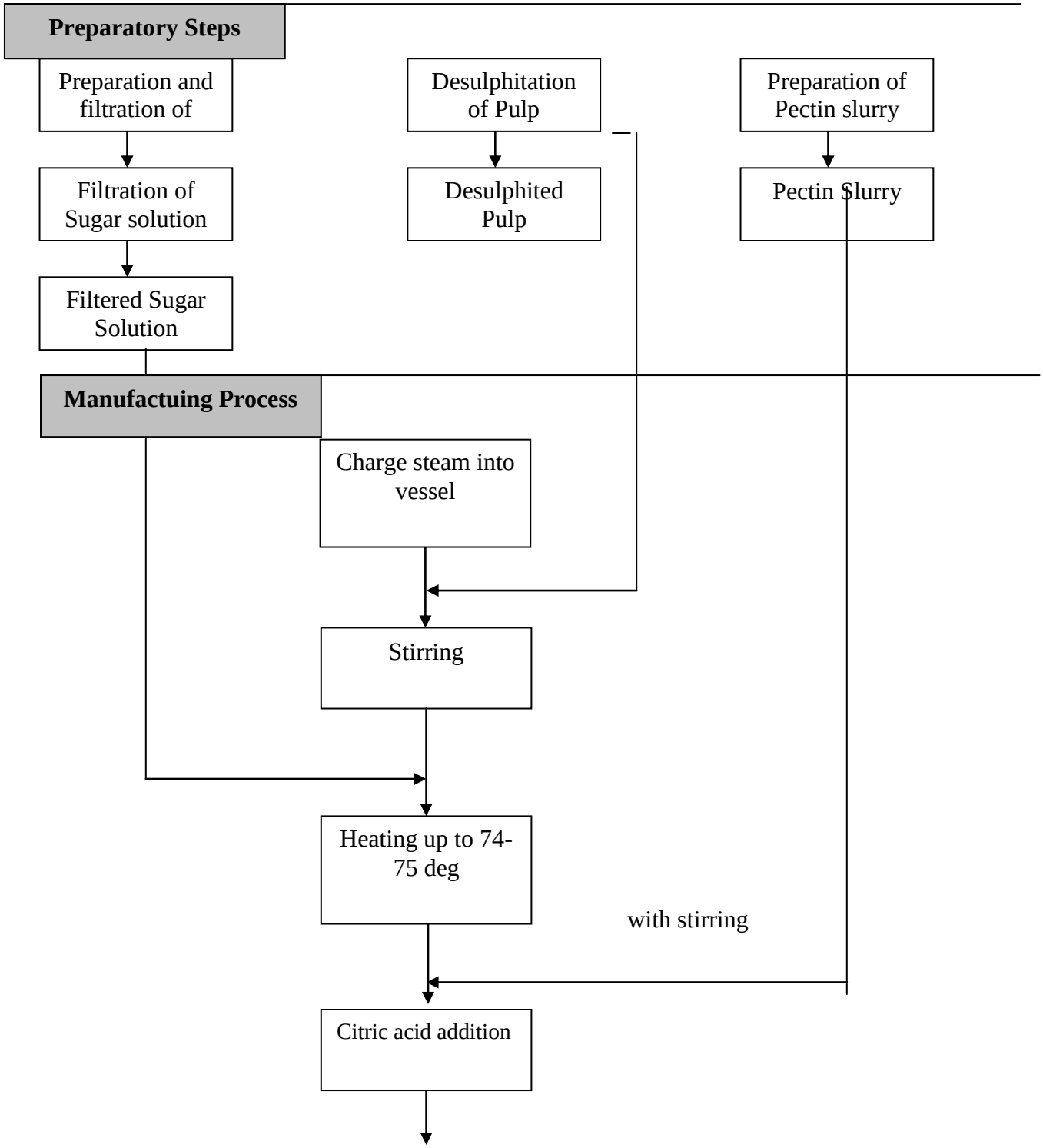
No.	Particular/ Point of inspection	Observation
1	**LOCATION AND LAYOUT OF FOOD ESTABLISHMENT**	
a)	The factory is ideally located away from industries which are emitting harmful gases, obnoxious odour, chemical etc.	
b)	The nature of ceiling roof is of permanent nature (Iron-sheet/ Asbestos sheet/ R.C.C).	
c)	The floor of building is cemented, tiled or laid in stone/pakka floor.	
d)	The production area walls are smooth, made with impervious material upto a height of not less than five feet and the junction between the walls and floors are curved.	
e)	The premises of the factory is adequately lighted and ventilated, properly white-washed or painted.	
f)	Provision for disposal of refuse and effluents is available.	
g)	The food production/ food service area provided with adequate drainage facility.	
h)	Incase cooking is done on open fire, proper outlets for smoke/steam etc, like chimney, exhaust fan etc are installed and the fans installed at a suitable height.	
i)	Doors are provided with air curtain/strip curtain & automatic door closer.	
j)	Doors, Windows and other openings are fitted with net or screen to prevent insects etc.	
k)	Windows are fitted with insect proof screen/mesh & are maintained cleaned.	
l)	Antiseptic/ disinfect and foot bath is provided at the entrance (not applicable if internal & external shoes are separate).	
m)	Sufficient number of latrine and urinals for worker are provided and located outside the processing hall.	
n)	All the machinery is installed in such a manner which may allow continuous flow of production and permits hygienic production and easy cleaning & maintenance.	
2.	**EQUIPMENTANDFIXTURES**	
a)	Equipments kept clean, washed, dried and free from moulds and fungi.	

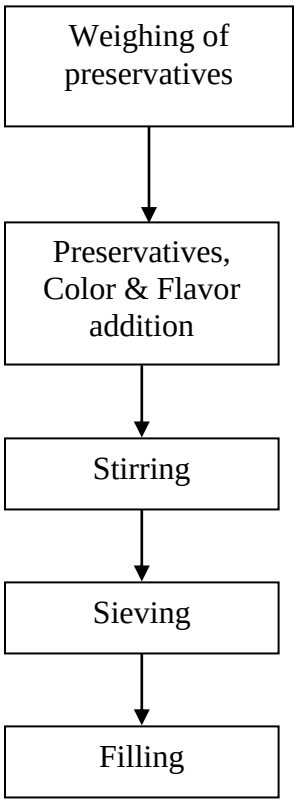
b)	No such Container/Vessel/Equipments in use likely to cause metallic contamination.	
c)	The table tops used for food preparation are made of close joint and impervious material.	
d)	The equipments are made of stainless steel/galvanized iron/noncorrosive materials as permitted by the product characteristics.	
e)	Appropriate facilities for the cleaning and disinfecting of equipments and Instruments and preferably cleaning-in-place (CIP) system are adopted; Wherever necessary.	
3.	**WATER SUPPLY**	
a)	Adequate supply of potable water is available.	
b)	Appropriate facilities for safe & clean storage of water.	
c)	The water is examined chemically and bacteriologically by a FSSAI approved NABL Accredited laboratory.	
d)	Ice and steam wherever in use during processing is made from potable water.	
e)	Identifying marks have been applied to the pipelines for easy identification of potable and non-potable water.	
f)	Waste disposal is done efficiently & there is no waste accumulation.	
g)	Lighting fixtures are protected in all departments/areas	
4.	**PERSONAL HYGIENE**	
a)	Suitable aprons, head cover, disposable gloves & footwear are provided.	
b)	Adequate facilities for toilets, handwash and if required footbath, with provision for detergent/bactericidal soap, hand drying facility and nail cutter are provided.	
c)	Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
d)	The food handlers are inoculated against the enteric group of disease and vaccinated.	
e)	No employee permitted in process who is suffering from a hand or face injury, skin infection or clinically recognizable infectious or contagious disease.	
f)	Do's & don'ts for the workers is placed in prominent place in local language	
g)	Smoking & spitting is not permitted in the food process/handling areas.	

5.	**FOOD OPERATIONS & CONTROL**	
a)	Raw Egg is stored & handled in clean place to prevent any kind of contamination	
b)	Raw Egg is cooled at temperature of 4 ^{0}C or lower and maintained at that temperature until further processed.	
c)	Facilities for hygienic handling and protection of raw materials and of non–packed or non-wrapped products during loading and unloading, transport and storing including cooling facilities are provided.	
d)	Proper facilities for cleaning and is infecting of tanks used	
e)	Appropriate arrangement for storage of food & food ingredients provided and adequately segregated, labeled & stock rotation system followed.	
f)	Raised platform with sides and top sufficiently protected to prevent contamination.	
g)	Systems to adequately maintain time- temperature control at the time of storage as per the product requirements.	
h)	The source and standards of raw material, food additives, ingredients& packaging material wherever applicable are conforming to regulations laid down under the Act.	
i)	The cans/containers used for storage and transportation of egg and egg products are not made up of mild steel metal and plastic material.	
j)	Equipment are equipped with temperature indicator. All specific process controls/temperatures are maintained & recorded	
k)	The receiving section is away from the processing area to prevent contamination.	
l)	Separate area is provided for packaging of various products under satisfactory hygienic conditions	
m)	Conveyance & transportation of food being done in an appropriate state of Cleanliness.	
n)	Valid weight &measure certificates for weighing scales and weights from a Designated Authority are available	
o)	Pallets are made of non-absorbent material provided on the floor for keeping egg products	
p)	The products are properly stacked on pallets at least one foot away from wall.	
q)	Details of vehicles used for transportation of products are maintained in stipulated format.	
6.	**AUDIT/DOCUMENTATION AND RECORDS**	
a)	Adequate documented system SOPs is in place for core processes like procurement, storage, processing, packing, etc.	
b)	Records of daily production, raw material utilized and sales are available.	

c)	A periodic audit of the whole system according to the Standard Operating Procedure conducted regarding Good Manufacturing Practices/Good Hygienic Practices (GMP/GHP) system.	
d)	Appropriate records of food processing/ preparation, food quality, laboratory Test results, pest-control etc for a periodof1yearor the shelf-life of the product; whichever is more.	
e)	Records of sale and purchase that the food product sold to registered/ Licensed vendor and raw material purchased from registered/licensed supplier.	
f)	A documented recall plan is available & traceability is implemented to assure effectiveness of recall plan.	
7.	**FOOD TESTING FACILITY**	
a)	Raw fruit/vegetable testing facility/Parameters available at reception. Is in-house laboratory is available for testing of fruits and vegetables.	
b)	Test report from own or NABL accredited/FSSAI notified labs regarding microbiological contaminants in food items are available.	
8.	**CLEANING AND MAINTENANCE**	
a)	Cleaning and sanitation program is documented, implemented and the record of the same is properly maintained.	
b)	Food preparation areas are cleaned at regular intervals, with water, and detergent and with the use of a disinfectant.	
c)	The fruit receiving area is equipped with cleaning facilities	
d)	Approved waste water disposal system is hygienically operated.	
9.	**PEST CONTROL SYSTEM**	
a)	Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
b)	Adequate control measures are in place to prevent insect and rodents from The processing area.	
10.	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	
a)	All packaged food products carrying label and requisite information as per Regulations are made.	
11.	**TRAINING**	
a)	Food production personnel and production floor managers, supervisors, food handlers under gone appropriate food hygiene training& records maintained.	
b)	Training programs are reviewed & scheduled to meet the hygiene compliance by food handlers.	

Sample Flowchart for Jam Manufacturing Process




Weighing of preservatives
Preservatives, Color & Flavor addition
Stirring
Sieving
Filling

Sample FSMS Plan for Jam manufacturing Process

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Desulphitation of Pulp	Due to high residual SO2 content	• Monitor TSS (Brix) of desulphited pulp	TSS of desulphited pulp as defined	TSS of desulphited pulp with hand refractometer at the end of desulphitation of the lot on site	Further boiling of the pulp to bring it to desired TSS	Production personnel	Desulphitation Log sheet
Weighing of preservatives for batch preparation	Chemical hazard: due to excess preservative Biological hazard: Multiplication of microbes due to low preservative content	• Weighing preservative on electronic balance at the time of issuing preservatives for every lot	Specifications in SOP	Calibration of weighing balance Random cross verification of preservative quantities weighed for a batch	Recalibrate the balance	Production	log sheets
Filling (in bottles)	Inadequate vacuum due to lower temperature of jam at fiiling stage resulting in spoilage due to microbial growth	• Monitor temperature of the batch at the end of every lot filling •	Minimum temperature of jam as per specification in SOP	Vacuum in jam bottles for minimum vacuum specified Calibration of vacuum guage Calibration of thermometer	Mixing of fresh jam lot to the batch and recheck the temperature	Production	Filling Logsheet

SELF- INSPECTION REPORT FORM

Storage / Warehouse

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ proprietorship/other.

Please mark as Status as appropriate

√	In order		x	not in order

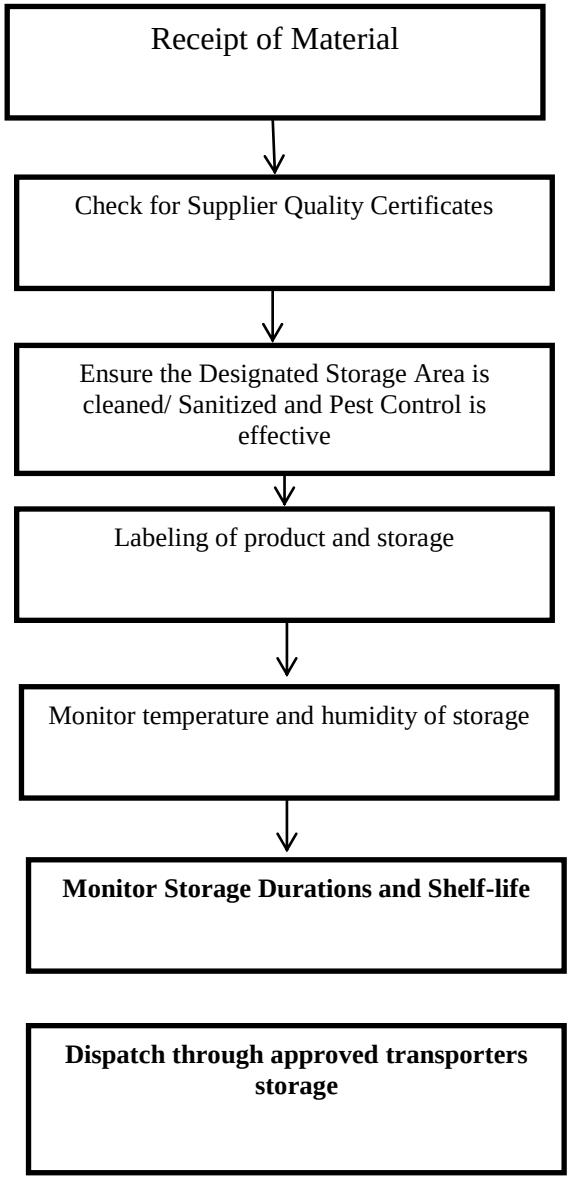
* If Status is marked not in order, please provide target completion date

Sr No	Area	Observation
1	**LOCATION AND LAYOUT OF THE ESTABLISHMENT**	
a	Establishment is located away from environmental pollution and industrial activities producing disagreeable or obnoxious odor, fumes, dust, smoke, emissions and pollutants, and areas that are prone to infestations of pests or where wastes cannot be removed effectively.	
b	The premises do not have direct access to any residential area	
c	The premises of the storage is adequately lighted and ventilated, properly white washed or painted.	
d	Windows, doors & all other openings to outside environment are well screened with wire-mesh or insect proof screen to prevent insect entry & the doors be fitted with automatic closing springs .The mesh or the screen are easy to clean	
e	The floors have adequate and proper drainage and are easy to clean and disinfect	
f	Waste storage is located in such manner that it does not contaminate the storage areas, the environment inside and outside the establishment and waste is kept in covered containers and is removed at regular intervals	
2	**EQUIPMENT AND FIXTURES**	
a	Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
3	**STORAGE SYSTEMS**	
a	Appropriate arrangement for storage of food & food ingredients provided and adequately segregated and labelled.	
b	Systems to adequately maintain time- temperature control at the time of storage.	
c	Containers used for storage are made of non toxic material.	
d	Cold Storage facility, wherever necessary/ provided.	
4	**PERSONAL HYGIENE**	
a	No person suffering from any infection or contagious disease	
b	Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and	

	other diseases	
c	The workers refrain from smoking, spitting, chewing, sneezing or coughing habits, scratching nose etc within the premises	
5	**PEST CONTROL SYSTEM**	
a	Food materials are stored in pest-proof containers stacked above the ground and away from walls.	
b	Adequate control measures are in place to prevent insect and rodents from the processing area.	
c	Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out.	
6	**CONVEYANCE AND TRANSPORTATION**	
a	All critical links in the supply chain are identified and provided for to minimize food spoilage during transportation Packaged food is protected as per the required storage conditions during transportation and/or service	
7	**CLEANING AND MAINTENANCE**	
a	Cleaning and sanitation programme is drawn up, observed and the record of the same is properly maintained	
b	Cleaning chemicals are handled and used carefully in accordance with the instructions of the manufacturer and are stored separately away from food materials, in clearly identified containers, to avoid any risk of contamination	
8	**OPERATIONAL FEATURES**	
a	Arrangements for monitoring Temperature & Relative Humidity of the storage place where ever necessary.	
b	Storage of packaged food products is subject to FIFO (First in, First Out), FEFO (First Expire First Out) stock rotation system as applicable	
c	The food materials are stored on racks / pallets such that they are reasonably well above the floor level and away from the wall so as to facilitate effective cleaning and prevent harboring of any pests, insects or rodents	
9	**AUDIT/ DOCUMENTATION AND RECORDS**	
a	A periodic audit of the whole system according to the Standard Operating Procedure conducted regarding Good Manufacturing Practices/Good Hygienic Practices (GMP/ GHP) system.	
b	Appropriate records of storage, distribution, cleaning and sanitation, pest control and product recall are kept and retained for a period of one year or the shelf-life of the product, whichever is more	

10	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	
a	All packaged food products carry a label and requisite information as per provisions of Food Safety and Standards Act, 2006 and Regulations so as to ensure that adequate and accessible information is available to each person in the food chain to enable them to handle, store, process, prepare and display the food products safely and correctly and that the lot or batch can be easily traced and recalled if necessary.	
11	**TRAINING**	
a	Workers, managers/ supervisors underwent appropriate food handling, storage and food hygiene training.	

Sample Flowchart for Food Warehouse Operation



Sample FSMS Plan for Storage / Warehouse Operation

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Cleaning of Warehouse	Physical (dirt, stone particles woodchips in vegetables) Residual Cleaning / pest Control Chemical	Establish Warehouse Cleaning and Sanitation SOPs Define levels of cleaning chemicals Establish Pest Control SOPs with approved agents	As per FSSA 2006 and company internal specifications	Verify cleaning and sanitation schedules Through visual inspection	Do not unload vehicles unless they warehouse is clean and sanitized	QA/QC	Cleaning and Sanitation logs Pest Control logs
Storage	Growth of Microbiological (high microbiological load of raw materials, presence of pathogenic bacteria)	Control temperatures and humidity of Storage		Temperature and Humidity montioring	Maintenance of Air Handling System/De-humidifier / Chillers	QA/QC	Temperature and Humidity Logs

SELF- INSPECTION REPORT FORM

Transporter

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: Fax No.:	
Category of licence (Central/ State)	
License No.:	
E-mail Address:	
Name of the Manager / Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Private limited/ Public sector undertaking/ Co-operative/ Partnership/ Proprietorship/other.

Please mark as Status as appropriate

√	In order		x	not in order

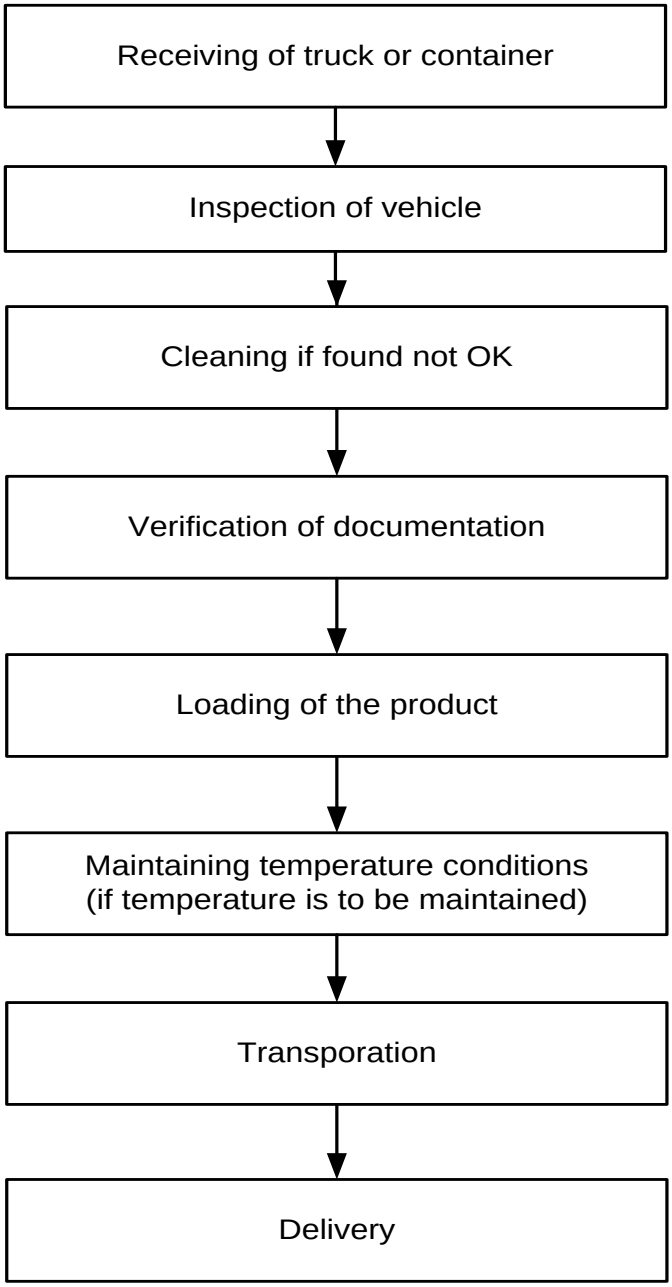
* If Status is marked not in order, please provide target completion date

	Area	Status
1	**LAYOUT**	
a	The premise to keep transport vans is a sanitary place and free from filthy surroundings	
b	Food transporting vans are built of solid, rust/ corrosion resistant materials and kept in clean and good condition.	
c	Food transporting vans shall be protected from sun, wind and dust and when not in use, are kept in clean place and properly protected.	
2	**TRASPORTATION SYSTEMS**	
a	While transporting, appropriate arrangement for storage of food & food ingredients is provided and adequately segregated and labeled.	
b	Systems to adequately maintain time- temperature control at the time of transport, where ever necessary. .	
c	Containers used for transport are made of non toxic, non corrosive, non absorbent material.	
d	Cold Storage facility, wherever necessary/ provided.	
e	Conveyance & transportation of food being done in an appropriate state of cleanliness, particularly if the same vehicle has been used to carry non-food items.	
f	Appropriate arrangement for storing the food during transport to prevent physical damage.	
3	**EQUIPMENT AND FIXTURES**	
a	Appropriate facilities for the cleaning and disinfecting of equipments and instruments and preferably cleaning in place (CIP) system are adopted; wherever necessary.	
4	**PERSONAL HYGIENE**	
a	No person suffering from any infection or contagious disease.	
b	Arrangements are made to get the staff medically examined once in six months to ensure that they are free from infectious, contagious and other diseases.	
5	**PEST CONTROL SYSTEM**	
a	Treatment with permissible chemical, physical or biological agents within the permissible limits are carried out in transport vehicles.	
b	Adequate control measures are in place to prevent infestation from insects and rodents during transport.	
7	**CLEANING AND MAINTENANCE**	
a	Cleaning and sanitation programme is drawn up, observed and the record of the same	

	is properly maintained.	
8	**OPERATIONAL FEATURES**	
a	Arrangements for monitoring Temperature & Relative Humidity	
9	**AUDIT/ DOCUMENTATION AND RECORDS**	
a	A periodic audit of the whole system according to the Standard Operating Procedure conducted regarding Good Manufacturing Practices/Good Hygienic Practices (GMP/ GHP) system.	
b	Appropriate Record of daily food transport, pest control etc. for a period of 1 year or the shelf-life of the product; whichever is more.	
10	**PRODUCT INFORMATION AND CONSUMER AWARENESS**	
a	All packaged food products carry a label and requisite information as per provisions of Food Safety and Standards Act, 2006 and Regulations so as to ensure that adequate and accessible information is available to each person in the food chain to enable them to handle, store, process, prepare and display the food products safely and correctly and that the lot or batch can be easily traced and recalled if necessary	
11	**TRAINING**	
a	It is ensured that all workers are aware of their role and responsibility in protecting food from deterioration. The workers have the necessary knowledge and skills which are relevant to transporting/handling of food so as to ensure the food safety and food quality.	

Sample Flowchart for Transportation

Transporation



Sample FSMS Plan for Transporters

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Cleaning of vehicles	Physical (dirt, stone particles woodchips in vegetables) Residual Cleaning / pest Control Chemical Growth of Microbiological (high microbiological load of raw materials, presence of pathogenic bacteria)	Establish Vehicle Cleaning and Sanitation SOPs Define levels of cleaning chemicals Establish Pest Control SOPs with approved agents	As per FSSA 2006 and company internal specifications	Verify cleaning and sanitation schedules Through visual inspection	Do not load vehicles unless they are in compliance with specifications	QA	Cleaning and Sanitation logs Pest Control logs
Transportation	Physical (dirt, stone particles woodchips in vegetables) Growth of Microbiological (high microbiological load of raw materials, presence of pathogenic bacteria)	Ensure trucks are covered, and maintained Control temperatures of transportation	Company internal specifications based on product sensitivity	Vehicle Inspection Temperature logs	Product to be discarded or processed to make safe if unsafe conditions occur	QA	Vehicle Inspection Reports Temperature logs in transit

SELF- INSPECTION REPORT FORM

Food Retail Establishment

Date of Self-Inspection:	
Name of the Establishment:	
Address of premises:	
Tel. No.: FaxNo.:	
Category of licence (Central/State)	
License No.:	
E-mail Address:	
Name of the Manager/Authorized Signatory:	
No. of Shifts:	
No. of Employees:	
Kind of business:	
Type of business ownership:	Limited/ Privatelimited/ Publicsector undertaking/Co-operative/ Partnership/ proprietorship/other.

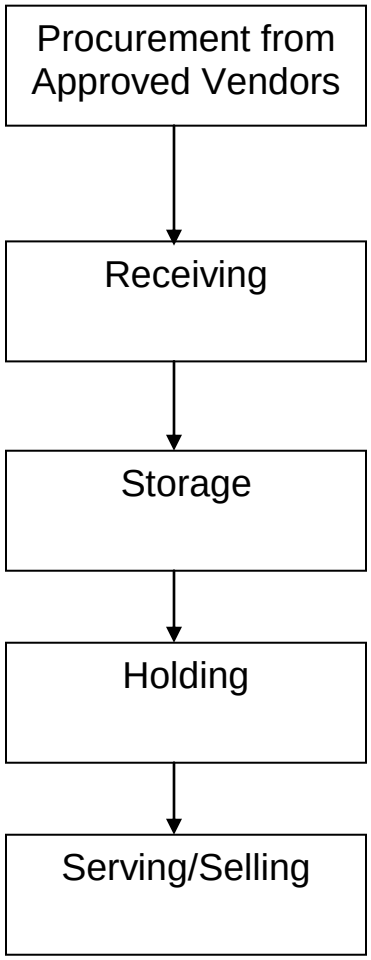
Please mark as Status as appropriate

√	In order		X	noting order

* If Status is marked not in order, please provide target completion date

Sr. No.	Particular/Point of Inspection	Observation
1	Whether daily records of quantity of fruits, vegetables, fish, milk etc. is maintained or not.	
2	Whether periodic cleaning and disinfection of store is carried out and record thereof is maintained.	
3	Whether staff engaged in handling of food stuff is having basic knowledge of importance of health, hygiene and contamination of food etc.	
4	Facility for keeping perishable food products is available.	
5	Facility for frozen food products is maintained.	
6	Containers used for storage are made of non-toxic material.	
7	Exhaust system in food store room in good working condition, and kept clean.	
8	No person handling food is suffering from any infection or contagious disease.	
9	The working area is well ventilated and well lit	
10	Facility for keeping the food items covered.	
11	Proper pest-proof measures taken to prevent infestation of pests.	
12	Adequate facilities for toilets, hand wash and footbath, with provision for detergent/bactericidal soap etc.	

Sample Flowchart for Retail



Sample FSMS Plan for Retail

Operational Step	Hazard	Control Measure	Critical Limit	Monitoring Method	Corrective Action	Responsibility	Record
Receiving	Pathogenic contamination Formation of harmful toxins	• Receiving food at proper temperatures • Moving perishable foods to cold storage quickly • Obtaining foods, ingredients, packaging materials from approved sources	Specifications for temperature/time	Visual check of foods (appearance, odor, color, packing conditions) Temperature monitoring	Reject Lot	Manager	Temperature logs
Storage	Cross contamination of raw foods with ready to eat foods Growth of Pathogenic bacteria that may be present in ready to eat foods	• Storage at proper temperatures • Segregated storage for raw and ready to eat foods • Maintaining and Monitoring temperature control	Specifications for Time/ temperature Monitoring frequency	Recording Thermometer /other Temperature monitoring mechanisms	Evaluate the time food is out of temperature and reheat/cool or discard food	Manager	Temperature logs
Holding	Microbial contamination and multiplication Cross contamination	• Segregated storage • Maintaining foods at appropriate temperatures • Management of personal hygiene	Specifications for Time/ temperature Monitoring frequency	Recording Thermometer /other Temperature monitoring mechanisms	Evaluate the time food is out of temperature and reheat/cool or discard food	Manager	Temperature logs
Serving/Selling	Contamination from food contact surfaces/soiled utensils/handlers	1. Proper hand washing 2. Use of clean gloves, dispensers 3. Avoid bare hand contact with RTE foods 4. Exclusion of ill employees Use of clean equipments/utensils/serving means		Hygiene verification Cleaning methods and frequency		Manager	Hygiene checklist Cleaning & Sanitation checklist

Reference Document:

Implementation of FSMS Requirements – a Guidance

OCTOBER 2012

This Document is a Guidance document published by FSSAI to function as a training resource for FBOs and help them in developing their Food Safety Management System documents, specific to their operations.

These Guidance documents are not meant to be used 'as-is' and need to be adapted for use by FBOs.

An FBO might choose alternate procedures for implementing the requirements of the Act and Schedule IV.

This Guidance document is divided into 2 sections:

1. **Section 1: Schedule IV Implementation Guidance and Tools**
2. **Section 2: Conducting a Food Safety Assessment and Developing a FSMS Plan – Guidance.**

Section 1:
Implementing Schedule IV Requirements – Guidance.

Personal Hygiene

EMPLOYEE PERSONAL HYGIENE POLICIES

Employees shall be responsible for using safe food handling methods as trained and instructed, and for practicing good personal hygiene. The following are the policies for every employee to follow to eliminate food borne illness and injury, and to achieve certainty in customer satisfaction.

Individual illness and disease control

Any person who, by medical examination or supervisory observation, is shown to have, or appears to have, an illness, open lesions (boils, sores, infected wounds) or any abnormal source of microbial contamination that could contaminate food, food contact surfaces, or food packaging materials shall not be allowed to work with these items.

If an employee's illness is not severe and symptoms are not acute, the employee can be assigned to tasks that do not involve food handling or can be excused from work altogether until he/she is completely well. Illness must not be passed on to customers or other employees.

Employees, notify your supervisor / PIC if you are ill with diarrhea, vomiting, or other illness so that you can either be assigned to tasks that do not involve food handling, or excused from work altogether.

When employees are hired, they will be taught to tell the supervisor / PIC if they have:

1. Diarrhea or vomiting.
2. *Salmonella*, *Shigella, E. coli* O157:H7, hepatitis A, or other intestinal illness (diagnosed by a doctor).
3. Open, blistered, or infected burns, boils, cuts, etc. on the hands or forearms.
4. Burns, wounds, or boils on the hands or forearms that are open, blistered, or have pus.
5. Jaundice (yellowing of the skin or eyeballs).

What to do when an employee has:

1. Diarrhea or vomiting.
    a. Do not allow employees to work until they are well.
    b. Keep a written record of all employee reports of diarrhea and vomiting. A sample log page is included in this manual.

2. Hepatitis A. *Salmonella*, *Shigella, E. coli* O157:H7, other intestinal illness.
    a. Call your local health department to report the illness.
    b. Do not allow employees with diarrhea or vomiting to work until they are well.

c. Employees without diarrhea or vomiting can work, but not with food or food contact surfaces (clean equipment, utensils, linens, and single-service and single-use items).

3. Open, blistered, or infected burns, boils, cuts, etc. on the hands or forearms.
   a. Supply the employee with a waterproof bandage to apply to the boil or wound.
   b. Supply gloves, which must be worn it the boil or wound is on the hand or wrist.

4. Persistent sneezing, coughing, or a runny nose: People with these symptoms can work, but should not work with food.

Encl. A1 will be used to record employee illness.

Cuts and abrasions

Clean all cuts and abrasions using soap and disinfectant, water, and a brush. There is no need to put a glove on the other hand if it has no problems. When the uncovered hand gets dirty, it will be a signal to the worker to change gloves and continue to wash his or her hands. Bacteria will grow on the warm, moist skin under the glove, so take the glove off, wash hands and put on a fresh glove frequently. Never handle food with an infected cut or abrasion. (See also FIRST AID in this section.)

Personal cleanliness

1. Maintain adequate personal cleanliness by bathing daily and using a deodorant to control body odor. Use only mild perfumes or colognes that do not interfere with the aroma of food. Keep hands free of foreign perfume odors.
2. Wear clean uniforms and closed-toed shoes. Replace clothing if it becomes dirty while working.
3. Store clothing and personal belongings away from food production or equipment/
   utensils washing areas.

Fingernails

Keep fingernails neatly trimmed. Fingernails should not protrude past the ends of the fingertips more than 1/16" in length to make them easier to clean. Do not use fingernail polish or artificial fingernails while working, because they might flake or fall off into a customer's food.

Hair restraint

Restrain or cover your hair at all times (e.g., hairnets, headbands, caps, beard covers). The covering or restraint must ensure that no hair will fall into the customer's food. Employees with mustaches and beards keep facial hair clean, neat, and trimmed. Mustaches cannot extend below the lip. Beards must be kept closely trimmed to no more than 1/2 inch. A beard net must be worn at all times in the processing area.

Jewelry and hard objects in pockets

Do not wear jewelry on the hands, wrist, neck, or ears. Do not carry hard objects in

your outside pockets. Plain wedding bands are acceptable but not recommended.

Handkerchiefs and facial tissues
Never carry a handkerchief or facial tissue when working with food. If you must use a tissue, use it at the hand sink, then immediately wash your hands at the hand sink. If you sneeze, direct it toward your shoulder and away from foods.

Chewing gum, smoking, and eating
Do not chew gum when working with food. Never smoke in the food production area. Never eat or drink while handling foods. Food and beverages are only consumed in the employee break room.

GLOVES
How to use gloves
1. Cover cuts, scrapes, burns, etc. on the hands with a bandage AND a glove or finger cot.
2. Wash your hands before using gloves.
3. Wash your hands after using gloves.
4. Change gloves when you switch tasks.
5. Discard gloves when you leave the work area.
6. REMEMBER: Gloves can spread germs just as easily as hands can!

Disposable gloves
When employees wear disposable plastic gloves for preparing / producing and packaging food, they will:
1. Wash their hands both before putting gloves on and after gloves are removed.
2. Change gloves when there is any possibility of cross- contamination.

Note: Employees shall not wear latex gloves when preparing /producing food due to transfer of latex allergens to food.

Heavy-duty gloves
Some employees will need to wear heavy- duty, non-disposable gloves to protect their hands from harsh chemicals (e.g., personnel who wash pots and pans with strong detergent solutions). These employees shall be given their own personal gloves that will not be shared with any other person, in order to prevent skin cross-infection(s). Employees should wash their hands before putting on these gloves and after removing them.

HAND WASHING

Employee hand washing policies
1. Get hands ready.
    a. Remove rings except for plain wedding bands. Rings interfere with good hand washing technique and provide a home for bacteria to hide and grow.
    b. Bracelets are also a hazard.
    c. Fingernails need to be trimmed, filed, free of polish, and clean (both over and under).
    d. Long, glue-on nails are a hazard. They can fall off and end up in the food, and

are also a place for bacteria to live.

2. When to wash: the big three.
   a. Before starting work.
   b. After using the toilet.
   c. After touching raw meat.

Double hand wash.
Mandatory times for the **double hand wash** at the hand wash station:

- Upon entering the department.
- After using the toilet.

The **double wash method** requires a fingernail brush. The procedure is as follows:
FIRST WASH:

1. Turn on warm water at 2 litres per minute, 75 to 110ºF.
2. Apply plain hand soap / detergent to brush.
3. With water flowing, work up a good lather on the fingernails using the brush.
4. With water flowing over fingers, rinse hands and brush; put brush down to dry.

SECOND WASH:

5. Apply soap to the hands.
6. Soap, lather, and scrub without the fingernail brush, as far up the arms as you will put into the food.
7. Rinse a second time.
8. Dry hands with a single use, disposable towel.

Single hand wash.
Times to use the **single hand wash** (steps 5 through 8 of the above procedure) without the fingernail brush:

- Between handling raw and cooked foods, especially raw chicken and raw hamburger.
- After covering coughs and sneezes or blowing your nose.
- After handling dirty boxes.
- Whenever you feel that your hands are dirty.
- After touching your skin, hair, beard, or soiled apron.
- After handling garbage.
- After handling dirty dishes.

Handling food, money, and dirty tableware
If your job specifies that you prepare and serve food, bus dishes, and collect money all in plain view of the customers, you need to be aware that customers consider multiple activities without hand washing hazardous. While no foodborne illness has ever been caused by handling money and then foods, for appearance sake, do not touch food being served to customers with your hands. Use tongs, spoons, or paper wrappers on the foods, and wash your hands frequently. The single wash for about 5 seconds, with detergent, 75-to-110ºF water, and friction will make the hands safe from cross-contamination.

MEDICINES

Employees' personal medicines should be stored _____.
In case an employee must taken personal medicine immediately but is unable to self-administer, _____.

FIRST AID
First aid materials shall be stored so that these materials cannot contaminate food. First aid supplies shall be checked weekly by the PICs and shall be replenished.

Hand cuts and abrasions
Employees will inform supervisors of cuts and abrasions on the hands and any other skin abrasions on exposed areas of the body. Employees shall not work with any uncovered, ungloved infected cut or abrasion on the hands. Cuts and abrasions that are not severely infected and do not interfere with an employee's ability to perform tasks shall be cleaned, disinfected, bandaged, and covered with a clean, waterproof covering (e.g. a clean, plastic glove) at the entrance to the plant. After putting on glove, wash your ungloved hand.
You will need to use your gloved hand in the process of doing this.

Contact with blood or body fluids from another person
Before any personnel touch the blood (e.g., if bandaging the wound of another individual) or any other body fluid such as vomitus of another person, they shall put on properly fitting, disposable gloves that will prevent the body fluid from entering any cuts or breaks in the skin of their own hands.

Prereq Encl. A1

ILL EMPLOYEE EXCLUSION

Date	Name of Employee	Reason for exclusion	Current position assignment	Temporary assigned position	Date restriction began	Date restriction removed

Facility and Equipment Cleaning, Sanitation, and Pest Control

CLEANING PLAN AND REPORT

Facilities and equipment will be cleaned according to the plan and report. Encl. B1 is provided as an example.

Refrigeration units are cleaned and sanitized weekly, or more often, if necessary. Freezer units are cleaned and sanitized monthly, or more often, if necessary. All dry storage areas are cleaned weekly.

CLEANING CHEMICALS AND CONTROL

Proper detergents are used in specified proportions for each cleaning and sanitizing task. Highly alkaline cleaning solutions are not used to wash aluminum surfaces.

A chemical list and Material Safety Data Sheets, Encl. B2, will be maintained.

KNOWING THAT SURFACES AND EQUIPMENT ARE SANITIZED

Use equipment in food preparation and service that you know is sanitized. If you are not sure that a surface is sanitized, clean and sanitize it before you use it. Follow the **Facility Cleaning Plan and Report**, Encl. B1.

CROSS-CONTAMINATION

What is cross-contamination?

Transferring germs from dirty hands, utensils, or equipment to clean equipment, or to food that will not be cooked. (e.g., Using a knife to cut up raw chicken and then, using the same knife to cut up salad ingredients.

How to prevent cross-contamination

1. Utensils: Wash, rinse, and sanitize after every use.
2. Cutting boards: Washing, rinse, and sanitize after every task.
3. Hands: Wash often, and always between tasks.
4. Equipment: Wash, rinse, and sanitize after every use.
5. Storage: Keep raw meat below ready-to-eat food.

USING SANITIZER

What to use

1. Bleach water
   a. 1 teaspoon bleach per gallon of water.
   b. Use chlorine test strips to check the concentration.
   c. Aim for 100 to 200 ppm.
2. Quaternary ammonium compounds
   a. Read label directions or check with your supplier.
   b. Use quat test strips to check the concentration.
   c. Aim for 200 to 400 ppm.

How to use

1. In a labeled spray bottle.
   a. Spray, wait about 30 seconds, and then, wipe with a clean, damp paper towel.

Let the rest of the moisture air dry.

b. Make new sanitizer at least once a day.

2. In a bucket.
   a. Keep a clean cloth or wiper in the bucket (not on the counter).
   b. Wring out the cloth and wipe down the clean surface.
   c. Let the surface air dry.
   d. Use one bucket for food-contact surfaces and another for non-food contact surfaces. Label the buckets.
   e. Make new sanitizer often—dirty sanitizer does not kill germs.

FREQUENCY OF SANITIZING FOOD CONTACT SURFACES

All equipment used in food preparation and service shall be clean and sanitized. If there is uncertainty whether the surface is clean and sanitized, it shall be cleaned and sanitized again.

Make sure that soiled customer eating areas are promptly cleared and cleaned with detergent-water solution, rinsed with clean water, and allowed to air dry. Change the towel and the detergent-water as needed or at least once every hour. Sanitize with sanitizer in a bottle so that it maintains its concentration.

Apply the four-step cleaning and sanitizing process at least every 4 hours to work stations and food preparation work surfaces. With proper scheduling, this can often coincide with the clean-up at the end of a shift. Begin by making a fresh, 1-gallon solution of hot detergent water and 1 gallon of hot rinse water. The procedure is to:

1. **Wash** the surface with clean, hot detergent water to dissolve the grease. With the cloth, wipe left and right; rinse, then wipe, top down, and rinse.
2. **Rinse** away the dirt using the same procedure and the plain water. The surface must be clean; otherwise, the sanitizer is ineffective.
3. **Sanitize**, using a 50 parts per million (ppm) hypochlorite bleach solution.
4. **Air dry**. Never use a sponge or rag for drying. If necessary, use a single use paper towel to remove excess sanitizer.

FOOD CONTACT SURFACE WIPING CLOTHS

If you use multiple-use wet towels, they must be kept **clean**. The detergent wash and a second towel in clear rinse water should be changed as often as necessary to keep it clean, about every 2 hours.

FOOD SINKS VS. HAND AND UTILITY SINKS

Use food sinks for food and hand sinks for hands. Never contaminate a food sink by washing hands or pots and pans in the sink. Never empty dirty, soapy cleaning water into a food sink. Use a separate utility sink.

3-COMPARTMENT SINK OPERATION

Fill the first wash sink with water at 110ºF and detergent. The second rinse sink has water at 110ºF. The third sink is for chemical immersion sanitizing or hot water. The temperature of the chemical solution must be between 75 and 110°F. The solution should be 50 ppm chlorine bleach. The object must stay in the chlorine solution for 10 seconds, the quat for 1 minute. If hot water is used, the temperature should be 171ºF, for 30 seconds.

CLEANING TABLES AND NON-FOOD CONTACT SURFACES

Clear tables promptly and neatly. Use a 1-gallon container of clean detergent water and a cleaning cloth. Dispose of leftover food so that it cannot possibly get mixed in with fresh food. No unwrapped food that has been left with the customer is to be reused.

Normally, dining tables do not need to be sanitized, because they are not food contact surfaces. If a surface does need to be sanitized, however, begin by wiping with a clean cloth in a 1- gallon bucket of clean detergent solution. Next, rinse the surface, using a second bucket containing clean, warm water and clean cloth. Finally, apply a correctly diluted sanitizer solution to the surface from a squirt bottle. The sanitizer solution is then spread over the surface with a clean cloth or a clean paper towel.

Detergent solutions are changed at least once every hour. Sanitizing solutions should be tested with test strips. Chlorine solutions must be 50 ppm.

Employees wash their hands after clearing tables, loading dishwasher, etc., before handling clean dishes and tableware.

EQUIPMENT CLEANING

Keep the washing machinery, sinks, and storage equipment clean, so that they will function properly and will not contaminate sanitized dishes, utensils, pots, and pans. Clean the machine strainers and the wash nozzles every shift. Clean rinse nozzles every day or as prescribed by the manufacturer. Keep soap and sanitizer supply systems filled. Change wash water at least every 3 hours during use. Delime the machine when necessary.

The procedure for cleaning equipment and utensils is essentially the same as for food contact surfaces.

1. Wash in hot water with detergent.
2. Rinse with clean, warm water.
3. Sanitize in warm water.
4. Air dry.

MACHINE WARE WASHING PROCEDURES

Follow the correct washing, scraping, and soaking procedures so that all plateware, glassware, and tableware are thoroughly cleaned. Make sure that the water is at the machine-specified temperature.

FOOD WASTE CANS

Food waste cans must be cleaned and sanitized daily.

TABLEWARE

Do not touch food contact surfaces of tableware, because hands can always spread bacterial contamination. Double-check tableware for a clean, spot-free appearance before it is used. Return any unsatisfactory tableware to the dish washing area. Never use chipped, cracked, or scarred-surface tableware. Show it to your supervisor, who will record the disposal of the item.

WORK STATION CLEANLINESS

Make certain that work stations are always clean and orderly, and free of debris and

spilled food. Never sweep crumbs on the floor; sweep them onto a plate or tray.

PEST CONTROL PLAN AND REPORT

A **Pest Control Plan and Report** will be followed, Encl. B3.
The area / grounds around the facility, including waste storage, shall be litter free, and cleaned and maintained on an adequately scheduled basis. The grounds shall be kept in a condition that will protect against food contamination.

1. Equipment shall be properly stored.
2. Litter and waste shall be removed, and grass and weeds shall be cut within the immediate vicinity of the buildings / structures to prevent breeding / harborage of pests.
3. Roads, yards, and parking lots shall be maintained so as to not constitute a source of contamination to exposed food.
4. If neighboring grounds are not under the operator's control and not maintained as above, the plant will be inspected, and extermination / other means shall be taken to exclude pests, dirt, and filth that could contaminate food.

There shall be defined entry points for goods and people. The interior and exterior of the building shall be litter-free and maintained according to the cleaning schedule. Outside doors shall be self-closing and shall fit tightly. Screens on windows are made of 16 mesh. A plan of the building and grounds with pest control CCP identified is shown in the _____.

The pest control schedule shall be followed on a continuing basis. Open poison bait stations shall not be used. Rodents shall be trapped in a manner that allows proper disposal. A record shall be kept of the number of rodents caught.

All facilities will maintain a certified pest control operator who meets state regulations. The facility shall also maintain a monthly report and Material Safety Data Sheet as pertains to PCO chemicals and services rendered (Encl. B2).

All managers / PICs will have knowledge regarding the location and maintenance of bait stations / traps.

The following person is responsible for pest control.

USE OF PESTICIDE
If pesticide is used in the production area, the production area must close down, and all food must be removed from the area or shielded from contact with any pesticide. All food contact surfaces must be shielded from contact with any pesticides and cleaned afterward.

Maintenance personnel must check all door closings, screens, and windows to make sure that they are tight in order to prevent entrance of pests.
Do not allow litter and garbage to collect and offer refuge to pests.

FACILITY CLEANING PLAN AND REPORT

Equipment / area / surface (reference #)	Assigned to*	When done**	What to do, cleaning and sanitizing chemicals to use	Done by (Initial / date)	Comments and corrective action
Building exterior **and surrounding area** Exterior walls Front doors, including glass Back door and area Sidewalk / area outside backdoor Windows and sills Exterior trash cans, cigarette ash cans Newspaper machines Parking area Dumpster area, inside and outside surrounding area					-
Interior, general Floors, walls, ceilings Floors, including corners, Mats or rugs; tile grout, ridged tiles Floor drains; covers, screens Carpets, Baseboards, base tiles Walls, Ceiling, Shelving Fixtures Walls / décor / screens Pictures, plants Glass screens, glass partitions Ledges and trim Windows Windows, sills, ledges Blinds / shades Equipment Countertops, cutting boards Lighting Light, shades, covers, shields, fixtures Emergency and exit lighting Trash bins					

Equipment / area / surface (reference #)	Assigned to*	When done**	What to do, cleaning and sanitizing chemicals to use	Done by (Initial / date)	Comments and corrective action
Entrance / foyer Blinds / shades Brass and brass fixtures Host / podium stand and area Waiting area, benches Pay phones,Menus,menu holders					
Seating / tables / counters Upholstery, stain free Booth seats Dining room chairs, legs, cross bars, casters Counter seat poles, mounts, seat bottoms, backs Countertops Highchairs, booster seats Tables, table set ups					
Service area Countertops, shelves Bus tubs, shelves Condiment bottles Ice bins / machine Soda pop dispensers Tea urn Coffee machines Salad refrigeration unit Pie / dessert unit					
Prep area Sinks, Counters Smallwares: can opener and blade, lemon wedger, tomato tamer slicing machine, associated blades Portion scales					
Cooks' line All refrigerators Hoods; duct work, Hood filters Stainless steel counters Hot table, cold table					
Storeroom Shelving					
Walk-in freezer Freezer 0°F Floor, walls, door, Shelving					

Equipment / area / surface (reference #)	Assigned to*	When done**	What to do, cleaning and sanitizing chemicals to use	Done by (Initial / date)	Comments and corrective action
Walk-in refrigerator Refrigeration system Floor, walls, door Air curtain Shelving					
Dish area Sinks Stainless steel counters Dish machine Silverware catches Trash containers					
Back of house Ice buckets, scoops Equipment not currently used					
Break area Table tops, chairs					
Restrooms Vents Air fresheners Partitions, doors, frames Toilets, urinals Mirrors Hand sinks Countertops Stainless steel Paper towel dispensers Trash receptacles Soap dispensers Hand sanitizer dispensers Hand washing signs					
Utility area Mop buckets, wet floor cones Dust pans Mops, brooms, squeegees					

Verification: _____ Date: _____

*You may use a code such as: fp = food preparation person; st = sanitation technician; sp = service person; ap = administrative person.

**Be as specific as possible. You may use a code such as: 3h = every 3 hours; a/u = after each use; a/o = at opening of the restaurant; a/c = at closing of the restaurant; a/r = as required during daily operations; wk = weekly.

CHEMICALS LIST AND MATERIAL SAFETY DATA SHEETS

The following is a list of chemicals used in this facility and the suppliers.

Name	Supplier	Description

Material Safety Data Sheets for the chemicals are included.

PEST CONTROL PLAN AND REPORT

Area / Facility (reference #1)	Assigned to	When done	What to do, pest control solutions	Done by (Initial / date)	Comments and Corrective Action

Verification: _____ Date: _____

Facility and Equipment Maintenance

PREVENTIVE MAINTENANCE PLAN AND REPORT, INCLUDING EQUIPMENT CALIBRATION

A maintenance plan will be followed, Encl. C1. The maintenance plan includes equipment calibration, which is recorded on Encl. B1 in *MANAGEMENT / QA, QC, AND FSMS TEAM*.

FOOD CONTACT SURFACE EQUIPMENT CONSTRUCTION

All equipment and utensils shall be designed and of such materials and workmanship as to be adequately cleanable. Design and construction (and use) shall prevent the adulteration of food with lubricants, fuel, metal fragments, contaminated water, or any other contaminants. All equipment shall be installed so that it, and adjacent spaces, can be easily cleaned.

Holding, conveying, and manufacturing systems (e.g., gravimetric, pneumatic, closed, automated) shall be designed and constructed to enable them to be maintained in an appropriate sanitary condition.

Food contact surfaces shall be maintained to protect food from contamination from any source, including unlawful, indirect food additives. They shall be corrosion resistant when in contact with food; of non-toxic materials; and designed to withstand intended use, the action of food, and if applicable, cleaning compounds and sanitizing agents. Seams on food contact surfaces shall be smoothly bonded or maintained so as to minimize accumulation of food particles, dirt, and organic matter, thus minimizing the opportunity for growth of microorganisms. Worn surfaces shall be repaired or replaced immediately.

NON-FOOD CONTACT SURFACE EQUIPMENT CONSTRUCTION

Non-food-contact surfaces of equipment shall be cleaned as frequently as necessary to protect against contamination of food.

EQUIPMENT OPERATION

Equipment shall be operated so that the food produced will meet FSSAI recommendations.

Refrigerators	
Meat, Fish, Poultry	<41ºF
Produce	<41ºF
Dairy	≤41ºF
Freezer	0ºF

GASKETS

All gaskets on containers, refrigerators, and freezers shall be cleaned and maintained. They will be replaced when damaged.

COOLING AND REFRIGERATION UNITS

Refrigeration or cooling units shall have non-toxic, corrosion- resistant racks with no restriction for bottom heat removal (e.g. food sitting on a solid shelf). Reach-in refrigerators shall not be used to cool more than 5 Kgs of hot food above 120°F per full-door section per hour, unless specifically designed for food cooling. Refrigerators

and food display units, when tested empty in operation, must be capable of holding a temperature of 38°F or less over a 4-hour period with the door never opened, compressor on no more than 70% of the time.
Air flow will be more than 50 feet per minute across the bottom of containers in the cooling area. Refrigeration compressors shall be kept free of dirt.

FREEZERS
All freezing and refrigeration units shall be self-defrosting. Freezers shall operate at 0°F (-17.8°C) when tested empty, door never opened in the kitchen over a 4-hour period. The compressor is allowed to be on 80% of the time.

SURPLUS EQUIPMENT AND ITEMS FOR REPAIR
All articles that are not pertinent to the current operation of the food establishment shall be stored properly or will be removed from the premises. Items for repair shall be handled within "-" days.

STORAGE RACKS, SHELVING, PALLETS ETC.
These items shall be made of easy to clean materials and shall be designed to store food 6 inches off of the floor.

BACKFLOW PREVENTION VALVES FOR PLUMBING
All equipment, sinks, or floor drains between potable water systems and sewage lines shall have adequate backflow prevention devices.

WASHING EQUIPMENT
The manufacturer's manual shall be available and shall be used to specify correct operating temperatures. An approved chemical feeder on the automatic washer shall be maintained. The audible or visible warning device for replenishing the chemical sanitizer shall be in functioning condition. An accurate thermometer machine will be used to indicate all wash water, rinse, and sanitize temperatures. The pressure gauge and a valve to check pressure on the final rinse line shall be functional and maintained. Test kits shall be used to accurately measure sanitizer concentration. The temperature of the sanitizing rinse water in a high-temperature washing machine shall be at 180°F (82.2°C). There shall be an adequate concentration of detergent in clean water in the wash tank of the machine / hand wash facility.

PREVENTIVE MAINTENANCE PLAN AND REPORT

Equipment / area / surface (reference #)	Assigned to*	When done**	What to do	Done by (Initial / date)	Comments and corrective action
Exterior Building Walls, paint Front doors, including glass, gaskets Back door and area, gaskets Windows and sills Dumpster area Dumpster gates Dumpster area walls Dumpsters and grease traps Parking lot Lot surface, free of potholes; no standing water; striping visible; car stops unbroken, secure, no tie rods exposed Lights Sidewalk (uneven expandable joints marked until fixed) Ramps, hand rails secure Signage Monument and pole signs, entrance / exit and directional signs working					
Interior, general Floors, walls, ceilings Floors, including corners, mats or rugs; tile grout, ridged tiles Floor drains; covers, screens Carpets Baseboards Walls, ceilings Shelving, fixtures Front doors, glass, frames; no gaps / voids at door to prevent pest entry Walls / décor / screens Pictures, screens, plants Windows Blinds / shades, hung evenly Equipment Countertops, cutting boards, utensils Lighting Lights operating; covers, shields, fixtures Adequate lighting, no burnt-out bulbs; shatter-proof bulbs or diffusers, Emergency and exit lighting Trash bins : are odour free					

Equipment / area / surface (reference #)	Assigned to*	When done**	What to do	Done by (Initial / date)	Comments and corrective action
Entrance / foyer Blinds / shades, hung evenly Host / podium stand					
Seating / tables / counters Upholstery repaired Booth seats secure, repaired Dining room chairs, legs, cross bars, casters repaired Countertops repaired Highchairs, booster seats Tables					
Service area Countertops, shelves Clean bus tubs, shelves; china, silverware separated from glass to prevent breakage Clean condiment bottles, adequately stocked Dining room temperature – air conditioning / heat calibrated					
Prep area Sinks, plumbing Smallwares Clean heavy or sharp objects stored on waist-high shelves or lower Clean knives stored in knife rack, not in drawer Portion scales calibrated					
Cooks' line Microwave and timer buttons calibrated; service timers calibrated, properly programmed All reach-ins; lighting functioning, shielded; air temperature 40°F or below; thermometers Hoods; duct work					
Storeroom Shelving					

Verification: _____ Date: _____

*You may use a code such as: fp = food preparation person; st = sanitation technician; sp = service person; ap = administrative person.

**Be as specific as possible. You may use a code such as: 3h = every 3 hours; a/u = after each use; a/o = at opening of the restaurant; a/c = at closing of the restaurant; a/r = as required during daily operations; wk = weekly.

Supplies / Buying Food
QUALIFIED SUPPLIERS
Buy from approved sources only. List your approved sources and the qualification criteria in Encl. D1. These are sellers, producers, and processors who are inspected or licensed by the FSSAI. *It is best to purchase food from suppliers with FSMS programs.* If you need it, a supplier qualification checklist is shown at Encl. D2.

Do NOT buy or serve:
1. Home-canned food or other food prepared in an unlicensed kitchen.
2. Custom processed meat that is not FSSAI inspected.
3. Raw or unpasteurized milk.
4. Privately caught fish.

Fresh vegetables from a local farmers' market can be used.

INGREDIENT SPECIFICATION
It is desirable to have specification sheets for ingredients. Encl. D3 is a model form to follow.
Raw materials and other ingredients shall either not contain levels of microorganisms that may produce food poisoning or other disease in humans, or they shall be pasteurized or otherwise treated during manufacturing so that they no longer contain levels that could cause the product to be adulterated.

Raw materials and other ingredients susceptible to contamination with aflatoxin or other natural toxins shall comply with current FSSAI regulation, guidelines, and action levels for poisonous or deleterious substances before they are incorporated into the finished food. Suppliers shall provide certifications.

Raw materials, other ingredients, and rework that are susceptible to contamination with pests, undesirable microorganisms, or extraneous material shall be tested for natural or unavoidable defects.

Compliance with the above shall be achieved by purchasing raw materials and other ingredients under a supplier's guarantee or certification, or by analyzing these materials and ingredients for aflatoxins, other natural toxins, and contamination.

When a supplier does not have a FSMS certification program, there can be random hazard contamination of raw food. If the food supplier provides no microbiological data, assume the following pathogenic microbial levels:
Ice shall be produced by a supplier with a FSMS program and from water obtained from an approved commercial source / supplier. All glass objects, including coffee pots and water glasses, shall be kept away from the ice bins or machine. Ice that has been in contact with food packages or used for displays shall not be reused. Packaged food shall not be stored in undrained ice. Food, beverages, or food containers shall not be stored in ice intended for human consumption. Drainage lines from beverage

dispensers shall not run through potable ice bins.

INSPECTION OF INCOMING PRODUCTS
Encl. D4 is an incoming supplies record form. (The completed sheets are filed in the monthly section.) This can also be noted on the incoming invoice/receiving sheet.

When products are delivered, the bed of the incoming delivery truck should be inspected. The interior of the truck should be clean and show no presence / evidence of food spills or open containers of food that could lead to cross-contamination of products. No food should be resting on the bed /floor of the truck. Inspect incoming food products for frozen (less than 10ºF) or chill (less than 41ºF) temperature. Check date codes, damage, suspicious odors and drips, and pest infestation. Be alert for damage to cases or boxes that might indicate contamination from an outside source or insect and rodent infestation. Spot-check for pinholes, bulging, rusting, etc. in canned products. Check items for insect or rodent infestation.
Store refrigerated and frozen supplies promptly. Completely separate any questionable food and bring it to the attention of the supervisor immediately, so it can be returned on the delivery vehicle. Lot coding information will be retained for 90 days.

RECEIVING FOOD
Inspect deliveries for:

1. Temperature.
    a. Refrigerated food should be 41ºF or colder.
    b. Frozen food should be 0ºF with no signs of thawing and refreezing.
    c. When checking the temperature of a food delivery, do not puncture sealed packages. Instead, place the thermometer between two packages.
2. Freshness: Food should smell and look fresh.
3. Packaging: Reject dented cans and torn packages.

SUBSTANDARD PRODUCTS
Immediately notify the manager or supervisor of any substandard food item to determine if the product should be kept, discarded, salvaged, or returned to the supplier. Isolate the food in a designated food return area. If the food is not returned and there is any doubt about its safety, the food should be discarded after it has been recorded on the waste control report.

PROPER STORAGE PROCEDURES: AMBIENT, FROZEN, REFRIGERATED
Store all labels to the front and date. Freezers must operate at 0ºF or below, refrigerators at 40ºF or below, and dry store at appropriately 70ºF, 65% relative humidity. Minimize fluctuations in temperature to help achieve maximum shelf life for inventory items. Assure good airflow around the inventory by keeping items away from the walls and off of the floor 6 inches.

PREVENT FOOD CONTAMINATION: PHYSICAL, CHEMICAL, BIOLOGICAL
Separate incoming food products and unwashed fresh produce from clean or cooked foods and produce. Store food so that cross-contamination is impossible – ready-to-eat food on the upper shelf and raw food on lower shelves.

CHEMICALS SEPARATION
Make sure that chemicals (detergents, cleansers, bleach, and sanitizers) are kept

separate from foods. Store these items in a separate cabinet, away from the food storage areas. Never store hazardous chemicals in the food production area. Make sure you have MSDS forms on file for all chemicals. If there is any question that chemicals may have contaminated food, the food is to be thrown out.

CONTAINER DISPOSAL

Dispose of all empty containers promptly and properly to deprive pests of hiding and nesting places. Account for all staples, plastic binders, and pieces of wire. These items may find their way into foods as physical hazards.

STOCK ROTATION

Rotate product so that the oldest food will be used first (FIFO). Place new inventory (cans, boxes, or cases) behind the older inventory. Label all stock on the side of the container with the date received.

SUPPLIER QUALIFICATION LIST

Ingredient	Item #	Supplier(s)	Qualifications
Meat, fish, poultry, seafood			
Produce: fruits, vegetables			
Groceries: flours, grains, batters,			
Groceries: spices, herbs			
Groceries: canned, bottled, etc.			

SUPPLIER FSMS QUALIFICATION STANDARDS

Vendor: _____ Date: _____

Address: _____

Since you are one of our current / potential vendors, we would like to know about your quality assurance program. If you have a FSMS program, we consider this to be part of your QA program. It is very costly for us to receive a product or service from a vendor that does not meet our expectations. Please answer the following questions and provide the material as appropriate concerning your quality assurance plan and program to achieve each requirement. When we visit with you, we will expect that you be able to demonstrate that you do each item effectively and are continually improving.

1. Who developed your FSMS / Quality Assurance program?

   Who validated your program as effective?

   Who are the members of your SMS / QA team? How often do they meet?

   Describe your pre-ship verification program.

2. Have you taught each employee who works with food the hazards associated with the task he/she performs and how to perform the necessary controls?

3. What do you require of your suppliers in terms of ingredient FSMS controls?

4. Please tell us about your recall and emergency action program.

5. Describe the responsibilities of your Quality Assurance / Quality Control department.

   What ingredient testing do you do? What product testing do you do?

6. What are the critical limits, if you have them, for the biological, chemical, and physical hazards that are reasonably likely to be in the products you provide to use?

In addition to the above, please provide specifications to us for the products we purchase from you.

We will appreciate your quick response.

Sincerely,

_____

SUPPLIER INGREDIENT SPECIFICATIONS

Product Name: _____ **Product Code:** _____

Brand: _____

Shelf Life: _____

Product Description:
Size
Case
Acceptable ingredient characteristics
Size Color Count Hazards
levels / size
Unacceptable ingredient characteristics
Size Color Count Hazards
levels / size

Ingredient Statement:

MICROBIAL SPECIFICATIONS			PHYSICAL SPECIFICATIONS		
Organism	**x**	**3σ**	**Description**	**x**	**3σ**
APC			Finished product weight:		
Escherchia coli			Dimensions:		
Listeria spp.			Texture		
Salmonella			Flavor / aroma		
Yeast			Foreign material		
Mold			Color		
CHEMICAL SPECIFICATIONS			Shape		
Allergens			pH		
Additives			a_w		

Halal Specifications:
(If desired)

Nutrition Data for Package:

Product Name:
UPC:
Product Description:
Serving Size:
Serving Description:

Nutrient Name	Value	% Daily Value **
Calories (Kcal)		
Calories from Fat (Kcal)		
Total Fat (g)		**%**
Saturated Fat (g)		**%**
Trans Fat (g)		
Cholesterol (mg)		**%**
Sodium (mg)		**%**
Total Carbohydrates (g)		**%**
Dietary Fiber (g)		**%**
Sugars (g)		
Protein (g)		
Vitamin A (IU)		**%**
Vitamin C (mg)		**%**
Calcium (mg)		**%**
Iron (mg)		**%**

** Percent Daily Values are based on a 2,000 calorie diet. Individual daily values may be higher or lower, depending on calorie needs.

Packaging:

Preparation Instructions: (consumer handling, temperature etc.)

Storage: (Before and after preparation)

Warnings:

Receiving Report
Incoming Product
Temperature / Visual
Check

This form is used to check in fresh and frozen ingredients. It is also used to record rejected food and reasons for rejection.

Date	Item and Lot #	Temperature	Comment

Section 2:

Conducting a Food Safety Assessment and Developing a FSMS Plan – Guidance.

This guidance document is designed to walk you through a series of 18 steps that will yield a completed Hazard Analysis Critical Control Point (FSMS) plan. Sample FSMS Plan Form is contained in Appendix 1. Note that these are meant as guidance and should be modified to be made specific to your process. A separate FSMS plan should be developed for each location of production and each type of product manufactured. You may group products together in a single FSMS plan if the food safety hazards and controls are the same for all products in the group.

THE HAZARD ANALYSIS WORKSHEET

In order to complete the FSMS Plan Form, you will need to perform a process called hazard analysis. A hazard analysis determines whether there are food safety hazards that are reasonably likely to occur in your product and to the preventive measures that a processor can apply to control those hazards. The use of a standardized Hazard Analysis Worksheet assists with this process. A blank Hazard Analysis Worksheet is contained in Appendix 1. Note that this is also a two-page form, with the second page to be used if your process has more processing steps than can be listed on one page.

THE STEPS

Following is a list of the steps that this guidance uses in FSMS plan development:

- **Preliminary Steps**
  - Provide general information;
  - Describe the food;
  - Describe the method of distribution and storage;
  - Identify the intended use and consumer;
  - Develop a flow diagram.

- **Hazard Analysis Worksheet**
  - Set up the Hazard Analysis Worksheet;
  - Identify potential species-related hazards;
  - Identify potential process-related hazards;
  - Understand the potential hazard;
  - Determine whether the potential hazard is significant;
  - Identify critical control points.

- **FSMS Plan Form**
  - Set up the FSMS Plan Form;
  - Set critical limits;
  - Establish monitoring procedures:
    - What,

- How,
- Frequency,
- Who;

- Establish corrective action procedures;
- Establish a recordkeeping system;
- Establish verification procedures.

PRELIMINARY STEPS

STEP 1: Provide general information.
Record the name and address of your processing facility in the spaces provided on the first page of both the Hazard Analysis Worksheet and the FSMS Plan Form (Appendix 1).

STEP 2: Describe the food.
Identify the market name and type of the product.
Examples:

- *Tuna (Thunnus albacares);*
- *Chciken*
- *Ground nut Oil*

Fully describe the finished product food.

Examples:

- *Individually quick frozen, peas;*
- *Fresh tuna steaks;*
- *Frozen, breaded chicken drumsticks;*
- *Refined Safflower oil*

Describe the packaging type.

Examples:

- *Vacuum-packaged plastic bag;*
- *Aluminum can;*
- *Bulk, in wax-coated paperboard box;*
- *Plastic container with snap lid.*

Record this information in the space provided on the first page of both the Hazard Analysis Worksheet and the FSMS Plan Form.

STEP 3: Describe the method of distribution and storage.
Identify how the product is distributed and stored after distribution.

Examples:

- *Stored and distributed frozen;*
- *Distributed on ice and then stored under refrigeration or on ice.*

Record this information in the space provided on the first page of both the Hazard Analysis Worksheet and the FSMS Plan Form.

STEP 4: Identify the intended use and consumer.
Identify how the product will be used by the end user or consumer.

Examples:

- *To be heated (but not fully cooked) and served;*
- *To be eaten with or without further cooking;*
- *To be eaten raw or lightly cooked;*
- *To be fully cooked before consumption;*
- *To be further processed into a heat and serve product.*

Identify the intended consumer or user of the product. The intended consumer may be the general public or a particular segment of the population, such as infants or the elderly. The intended user may also be another processor that will further process the product.

Examples:

- *By the general public;*
- *By the general public, including some distribution to hospitals and nursing homes;*
- *By another processing facility.*

Record this information in the space provided on the first page of both the Hazard Analysis Worksheet and the FSMS Plan Form.

STEP 5: Develop a flow diagram.
The purpose of the diagram is to provide a clear, simple description of the steps involved in the processing of your fishery product and its associated ingredients as they "flow" from receipt to distribution. The flow diagram should cover all steps in the process that your firm performs. Receiving and storage steps for each of the ingredients included. The flow diagram should be verified on-site for accuracy.

Figure A-1 (Appendix 2) is an example of a flow diagram.

HAZARD ANALYSIS WORKSHEET

STEP 6: Set up the Hazard Analysis Worksheet.
Record each of the processing steps (from the flow diagram) in Column 1 of the Hazard Analysis Worksheet.

STEP 7: Identify the potential species-related hazards.

Biological, chemical, and physical hazards can affect the safety of food products. Some food safety hazards are associated with the product. These hazards are introduced outside the processing plant environment before, during, or after harvest. This guidance refers to these as "product- related hazards." Other food safety hazards are associated with the way in which the product is processed (e.g., the type of packaging, the manufacturing steps, and the kind of storage). These hazards are introduced within the processing plant environment. This guidance refers to these as "process-related hazards." They are covered in Step 8.

Determine whether the product has a potential product -related hazard, if it does, record the potential product- related hazard(s) in Column 2 of the Hazard Analysis Worksheet, at every processing step.

You should use your own expertise, or that of outside experts, as necessary, to identify hazards. You may already have effective controls in place for a number of these hazards as part of your routine or traditional handling practices. The presence of such controls does not mean that the hazard is not significant. The likelihood of a hazard occurring should be judged in the absence of controls. .In the first case, the hazard is not reasonably likely to occur. In the second case, the hazard is reasonably likely to occur, and the controls should be included in the FSMS plan.

STEP 8: Identify potential process-related hazards.
Record the potential hazard(s) listed in the table for that product in Column 2 of the Hazard Analysis Worksheet, at every processing step.
You should use your own expertise or that of outside experts as necessary, to identify any hazards that may not be included in the table (e.g., those that are new or unique to your physical plant, equipment, or process).

STEP 9: Understand the potential hazard.
Understand the hazards and associated controls for each of the potential hazards that you entered in Column 2 of the Hazard Analysis Worksheet. Look at information about the significance of the hazard, the conditions under which it may develop in the product, and methods available to control the hazard.

STEP 10: Determine whether the potential hazard is significant.
Narrow the list of potential hazards that you entered in Column 2 of the Hazard Analysis Worksheet to those that are significant or, in other words, "reasonably likely to occur." The Seafood FSMS Regulation defines a food safety hazard that is reasonably likely to occur as "one for which a prudent processor would establish controls because experience, illness data, scientific reports, or other information provide a basis to conclude that there is a reasonable possibility that it will occur in the particular type of food product being processed in the absence of those controls."

You should evaluate the significance of a potential hazard independently at each processing step. It may be significant at one step but not at another. A potential hazard is significant at the processing or handling step if (1) it is reasonably likely that the hazard can be introduced at an unsafe level at that processing step; or (2) it is reasonably likely that the hazard can increase to an unsafe level at that processing step; or (3) it is significant at another processing or handling step and it can be prevented, eliminated, or reduced to an acceptable level at the current processing or handling step. When evaluating the significance of a hazard at a processing step, you should consider the method of distribution and storage and the intended use and consumer of the product, which you developed in Steps 3 and 4.

If you determine that a potential hazard is significant at a processing step, you should answer "Yes" in Column 3 of the Hazard Analysis Worksheet. If you determine that a potential hazard is not significant at a processing step, you should answer "No" in that column. You should record the reason for your "Yes" or "No" answer in Column 4. You need not complete Steps 11 through 18 for a hazard for those processing steps where you have recorded a "No."

It is important to note that identifying a hazard as significant at a processing step does not mean that it must be controlled at that processing step. Step 11 will help you determine where in the process the critical control point is located.

STEP 11: Identify critical control points.
For each processing step where a significant hazard is identified in Column 3 of the Hazard Analysis Worksheet, determine whether it
is necessary to exercise control at that step in order to control the hazard. Figure A-2 (Appendix 3) is a critical control point (CCP) decision tree that can be used to aid you in your determination.

Control strategies could differ for how the hazard can be controlled, because there are often more ways than one to control a hazard. CCP(s) for one control strategy often differ from those of another example for the same hazard.

Record the preventive measure(s) in Column 5 of the Hazard Analysis Worksheet for each "Yes" answer in Column 3.

For every significant hazard, there must be at least one CCP where the hazard is controlled.

In some cases, control may be necessary at more than one CCP for a single

hazard. In other cases, a processing step may be a CCP for more than one hazard. CCPs are points in the process (i.e., processing steps) where the FSMS control activities will occur.

Control activities at a CCP can effectively prevent, eliminate, or reduce the hazard to an acceptable level.

If you determine that a processing step is a CCP for a significant hazard, you should enter "Yes" in Column 6 of the Hazard Analysis Worksheet. If you determine that a processing step is not a CCP for a significant hazard, you should enter "No" in that column. You need not complete Steps 12 through 18 for a hazard for those processing steps where you have recorded a "No."

FSMS PLAN

STEP 12: Set up the FSMS Plan.

Find the processing steps that you have identified as CCPs in Column 6 of the Hazard Analysis Worksheet. Record the names of these processing steps in Column 1 of the FSMS Plan Form.

Enter the hazard(s) for which these processing steps were identified as CCPs in Column 2 of the FSMS Plan Form. This information can be found in Column 2 of the Hazard Analysis Worksheet.

Complete Steps 13 through 18 for each of the significant hazards. These steps involve setting critical limits, establishing monitoring procedures, establishing corrective action procedures, establishing a recordkeeping system, and establishing verification procedures.

STEP 13: Set critical limits.

For each processing step where a significant hazard is identified on the FSMS Plan Form, identify the maximum or minimum value to which a parameter of the process must be controlled in order to control the hazard.

You should set a critical limit at such a value that if it is not met, the safety of the product may be questionable. If you set a more restrictive critical limit, you could, as a result, be required to take corrective action when no safety concern actually exists. On the other hand, if you set a critical limit that is too loose, you could, as a result, allow an unsafe product to reach the consumer.

As a practical matter, it may also be advisable to set an operating limit that is more restrictive than the critical limit. In this way, you can adjust the process when the operating limit is not met, but before a critical limit deviation would require you to take corrective action. You should set operating limits based on your experience

with the variability of your operation and with the closeness of typical operating values to the critical limit.

Consider that the critical limit should directly relate to the parameter that you will be monitoring. For example, if you intend to monitor the temperature of the water in the cooker and the speed of the belt that carries the product through the cooker (because you have determined that these factors result in the desired internal product temperature for the desired time), you should specify water temperature and belt speed as critical limits, not the internal temperature of the product.

Enter the critical limit(s) in Column 3 of the FSMS Plan Form.

STEP 14: Establish monitoring procedures.

For each processing step where a significant hazard is identified on the FSMS Plan Form, describe monitoring procedures that will ensure that critical limits are consistently met.

To fully describe your monitoring program, you should answer four questions: (1) What will be monitored? (2) How will monitoring be done? (3) How often will monitoring be done (frequency)? and (4) Who will do the monitoring?

It is important for you to keep in mind that the monitoring process should directly measure the parameter for which you have established a critical limit. The necessary frequency of monitoring is dependent upon the circumstances. Continuous monitoring is always desirable, and in some cases necessary. In other cases, it may not be necessary or practical. You should monitor often enough that the normal variability in the values you are measuring will be detected. This is especially true if these values are typically close to the critical limit. Additionally, the greater the time span between measurements, the more products you are putting at risk should a measurement show a deviation from a critical limit has occurred, because you should assume that the critical limit had not been met since the last "good" value. Even with continuous monitoring, the paper or electronic record of the continuous monitoring should be periodically checked in order to determine whether deviations from the critical limit have occurred. The frequency of that check should be at least daily, and more frequent if required in order to implement an appropriate corrective action.

Enter the "What," "How," "Frequency," and "Who" monitoring information in Columns 4, 5, 6, and 7, respectively, of the FSMS Plan Form.

STEP 15: Establish corrective action procedures.

A corrective action must be taken whenever there is a deviation from a critical limit

at a CCP. For each processing step where a significant hazard is identified on the FSMS Plan Form, describe the procedures that you will use when your monitoring indicates that the critical limit has not been met. Corrective It provides detailed instructions to the processing employee that can be followed in the event of a critical limit deviation; (2) it can be prepared at a time when an emergency situation is not calling for an immediate decision; and (3) it removes the obligation to reassess the FSMS plan in response to a critical limit deviation.

An appropriate corrective action procedure must accomplish two goals: (1) ensure that an unsafe product does not reach the consumer and (2) correct the problem that caused the critical limit deviation . If the corrective action involves testing the finished product, the limitations of the sampling plan should be understood. Because of these limitations, microbiological testing is often not a suitable corrective action. Corrective actions should be fully documented in records. If a critical limit deviation occurs repeatedly, the adequacy of that CCP for controlling the hazard should be reassessed. Remember that deviations from operating limits do not need to result in formal corrective actions.

Enter the corrective action procedures in Column 8 of the FSMS Plan Form.

STEP 16: Establish a recordkeeping system.
For each processing step where a significant hazard is identified on the FSMS Plan Form, list the records that will be used to document the accomplishment of the monitoring procedures discussed in Step 14.

Records must document monitoring of the CCP and shall contain the actual values and observations obtained during monitoring.

Enter the names of the FSMS monitoring records in Column 9 of the FSMS Plan Form.

STEP 17: Establish verification procedures.
For each processing step where a significant hazard is identified on the FSMS Plan Form, describe the verification procedures that will ensure that the FSMS plan is (1) adequate to address the hazard and (2) consistently being followed.

The information should cover validation of the adequacy of critical limits (e.g., process establishment); calibration (including accuracy checks) of CCP monitoring equipment; performance of periodic end-product and in-process testing; and review of monitoring, corrective action, and verification records.

When calibration or an accuracy check of a CCP monitoring instrument shows that the instrument is not accurate, you should evaluate the monitoring records since the

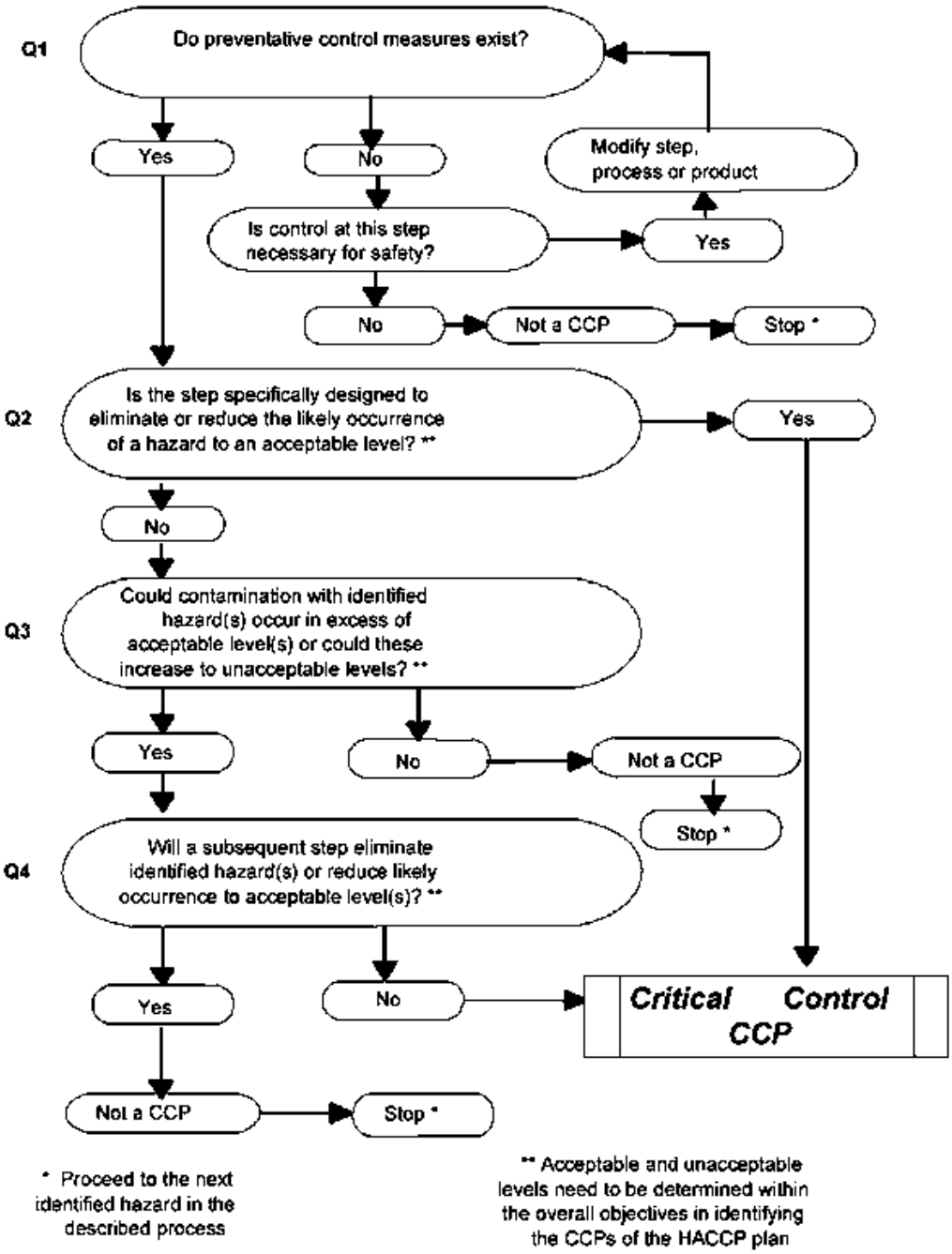
last instrument calibration to determine whether the inaccuracy would have contributed to a critical limit deviation. For this reason, FSMS plans with infrequent calibration or accuracy checks can place more products at risk than those with more frequent checks should a problem with instrument accuracy occur.

Enter the verification procedures in Column 10 of the FSMS Plan Form.

STEP 18: Complete the FSMS Plan Form.

When you have finished these steps for all significant hazards that relate to your product, you will have completed the FSMS Plan Form. You should then sign and date the first page of the FSMS Plan Form. The signature must be that of the most responsible individual on-site at your processing facility. It signifies that the FSMS plan has been accepted for implementation by your firm.

EXAMPLE OF DECISION TREE TO IDENTIFY CCP$_S$ (answer questions in sequence)



Annexure 1:

List of Common Hazards

Main Materials of Concern as Physical Hazards and Common Sources

Material	Injury Potential	Sources
Glass fixtures	Cuts, bleeding; may require surgery to find or remove	Bottles, jars, lights, utensils, gauge covers
Wood	Cuts, infection, choking; may require surgery to remove	Fields, pallets, boxes, buildings
Stones, metal fragments	Choking, broken teeth Cuts, infection; may require surgery to remove	Fields, buildings, machinery, wire, employees
Insulation	Choking; long-term if asbestos	Building materials
Bone	Choking, trauma	Fields, improper plant processing
Plastic	Choking, cuts, infection; may require surgery to remove	Fields, plant packaging materials, pallets, employees
Personal effects	Choking, cuts, broken teeth; may require surgery to remove	Employees

Common Chemical Hazards, Along with Their Associated Foods and Control Measures:

A) Naturally Occurring Chemical Hazards:

Chemical Hazards		Associated Foods	Control measures
Scombrotoxin		Primarily associated with tuna fish, mahi-mahi, blue fish, anchovies bonito, mackerel; Also found in cheese	Check temperatures at receiving; store at proper cold holding temperatures; buyer specifications: obtain verification from supplier that product has not been temperature abused prior to arrival in facility.
Ciguatoxin		Reef fin fish, king mackerel, large groupers, and snappers	Purchase fish from approved sources. Fish should not be harvested from an area that is subject to an adverse advisory
Tetrodoxin		Puffer fish (Fugu; Blowfish)	Do not consume these fish.
Mycotoxins	Aflatoxin	Corn and corn products, peanuts and peanut products, cottonseed, milk, and tree nuts such as Brazil nuts, pecans, pistachio nuts, and walnuts. Other grains and nuts are susceptible but less prone to contamination.	Check condition at receiving; do not use moldy or decomposed food.
	Patulin	Apple juice products	Buyer Specification: obtain verification from supplier or avoid the use of rotten apples in juice manufacturing.
Toxic mushroom species		Numerous varieties of wild mushrooms	Do not use unknown varieties or mushrooms from unapproved source.
Shellfish toxins	shellfish poisoning	Molluscan shellfish;mackerel, viscera of lobsters some varieties of crabs	Ensure molluscan shellfish are: from an approved source; and properly tagged and labeled.
Phtyohaemmagglutinin		Raw red kidney beans (Undercooked beans may be more toxic than raw beans)	Soak in water for at least 5 hours. Pour away the water. Boil briskly in fresh water, with occasional stirring, for at least 10 minutes.

B) Added Chemical Hazards:

Chemical Hazards	Associated Foods	Control measures
Environmental contaminants: Pesticides, fungicides, fertilizers, insecticides, antibiotics, growth hormones	Any food may become contaminated.	Follow label instructions for use of environmental chemicals. Soil or water analysis may be used to verify safety.
PCBs	Fish	Comply with fish advisories.
Prohibited substances (21 CFR 189)	Numerous substances are prohibited from use in human food; no substance may be used in human food unless it meets alapplicable requirements.	Do not use chemical substances that are not approved for use in human food.
Toxic elements/compounds Mercury	Fish exposed to organic mercury: Marine products. Grains treated with mercury based fungicides	Do not use mercury containing fungicides on grains or animals
Copper	High acid foods and beverages	Do not store high acid foods in copper utensils; use backflow prevention device on beverage vending machines.
Lead	High acid food and beverages	Do not use vessels containing lead.
Preservatives and Food Additives: Sulfiting agents (sulfur dioxide, sodium and potassium bisulfite, sodium and potassium metabisulfite) Nitrites/nitrates Niacin	Fresh fruits and Vegetables Shrimp Lobster Wine Cured meats, fish, any food exposed to accidental contamination, spinach Meat and other foods to which sodium nicotinate is added	Sulfiting agents added to a product in a processing plant must be declared on labeling. Do not use on raw produce in food establishments. Do not use more than the prescribed amount of curing compound according to labeling instructions. Sodium nicotinate (niacin) is not currently approved for use in meat or poultry with or without nitrates or nitrates.
Flavor enhancers Monosodium glutamate	Prepared Foods	Do not use amounts in excess of permissible limits.

Chemical Hazards	Associated Foods	Control measures
Chemicals used in food establishments (e.g., lubricants, cleaners, sanitizers, cleaning compounds, and paints	Any food could become contaminated	Address through SOPs for proper labeling, storage, handling, and use of chemicals; retain Material Safety Data Sheets for all chemicals.
Allergens	Foods containing or contacted by: Milk Egg Fish Crustacean shellfish Tree nuts Wheat Peanuts Soybeans	Use a rigorous sanitation regime to prevent cross contact between allergenic and non-allergenic ingredients

Selected Biological Hazards and Control Measures

A) Bacteria:

Hazard	Associated Foods	Control Measures
Bacillus cereus(intoxication caused by heat stable, preformed emetic toxin and infection by heat labile, diarrheal toxin)	Meat, poultry, starchy foods (rice, potatoes), puddings, soups, cooked vegetables	Cooking, cooling, cold holding, hot holding
Campylobacter jejuni	Poultry, raw milk	Cooking, handwashing, prevention of cross-contamination
Clostridium botulinum	Vacuum-packed foods, reduced oxygen packaged foods, under-processed canned foods, garlic-in-oil mixtures, time/temperature abused baked potatoes/sautéed onions	Thermal processing (time + pressure), cooling, cold holding, hot holding, acidification and drying, etc.
Clostridium perfringens	Cooked meat and poultry, Cooked meat and poultry products including casseroles, gravies	Cooling, cold holding, reheating, hot holding
E. coli O157:H7 (other shiga toxin-producing *E. coli*)	Raw ground beef, raw seed sprouts, raw milk, unpasteurized juice, foods contaminated by infected food workers via fecal-oral route	Cooking, no bare hand contact with RTE foods, employee health policy, handwashing, prevention of cross-contamination, pasteurization or treatment of juice

Hazard	Associated Foods	Control Measures
Listeria monocytogenes	Raw meat and poultry, fresh soft cheese, paté, smoked seafood, deli meats, deli salads	Cooking, date marking, cold holding, handwashing, prevention of cross-contamination
Salmonella spp.	Meat and poultry, seafood, eggs, raw seed sprouts, raw vegetables, raw milk, unpasteurized juice	Cooking, use of pasteurized eggs, employee health policy, no bare hand contact with RTE foods, handwashing, pasteurization or treatment of juice
Shigella spp.	Raw vegetables and herbs, other foods contaminated by infected workers via fecal-oral route	Cooking, no bare hand contact with RTE foods, employee health policy, handwashing
Staphylococcus aureus(preformed heat stable toxin)	RTE PHF foods touched by bare hands after cooking and further time/temperature abused	Cooling, cold holding, hot holding, no bare hand contact with RTE food, hand-washing
Vibrio spp.	Seafood, shellfish	Cooking, approved source, prevention of cross-contamination, cold holding

B) Parasites:

Hazard	Associated Foods	Control Measures
Anisakis simplex	Various fish	Cooking, freezing
Taenia spp.	Beef and pork	Cooking
Trichinella spiralis	Pork	Cooking

C) Viruses:

Hazard	Associated Foods	Control Measures
Hepatitis A and E	Shellfish, any food contaminated by infected worker via fecal-oral route	Approved source, no bare hand contact with RTE food, minimizing bare hand contact with foods not RTE, employee health policy, handwashing
Other Viruses (Rotavirus, Norovirus, Reovirus)	Any food contaminated by infected worker via fecal-oral route	No bare hand contact with RTE food, minimizing bare hand contact with foods not RTE, employee health policy, handwashing