

The 12<sup>th</sup> November, 2021

**Subject: Direction under Section 16 (5) of Food Safety and Standards Act, 2006 regarding re-operationalisation of Food Safety and Standards (Licensing and Registration of Food Business) Amendment Regulations, 2021.**

In exercise of the powers conferred under Section 92 of the Food Safety and Standards Act, 2006 (34 of 2006), FSSAI has framed the Food Safety and Standards (Licensing and Registration of Food Business) Amendment Regulations, 2018 and the same were approved by the Food Authority in its meeting held on 21<sup>st</sup> September, 2017. These regulations contain amendments in respect of the following Sections:

1. Section-I: Licensing and Registration of E-Commerce food business operator.
  2. Section-II: Documents to be enclosed for new application for license to State/Central Licensing Authority for restaurant.
  3. Section-III: Conditions of license for restaurant.
  4. Section-IV: Part-II of Schedule 4 relating to general requirements on Hygienic and sanitary practices to be followed by all food business operators applying for license.
  5. Section-V: Part IV of Schedule 4 relating to establishing a small slaughter house.
  6. Section-VI: Part V of Schedule 4 relating to good hygienic and manufacturing practices to be followed by licensed food business operators engaged in catering or food service operations.
2. These regulations were operationalised in exercise of the power vested with the Food Authority under Section 18 (2) (d) read with Section 16(5) of the Food Safety and Standards Act, 2006 with effect from 15.02.2018 and subsequently re-operationalised w.e.f. 16.08.2018, 28.02.2019 and 28.08.2019, 16.02.2020, 16.08.2020 & 19.03.2021 respectively. Some other provision of these regulations were also operationalised vide direction dated 16.11.2020 and 05.04.2021.

3. The draft regulations are notified dated 17.11.2020 inviting comments from the stakeholders and are currently under the process of finalization. Since, notification of the final amendment regulation is likely to take some time, it has been decided to re-operationalize the Food Safety and Standards (Licensing and Registration of Food Business) Amendment Regulations, 2021 as enclosed herewith with effect from 16.08.2021 to ensure food safety and fair practices in food business operations.

4. The food business operators shall follow these regulations and the enforcement of these regulations shall commence only after the final regulations are notified in the Gazette of India, except the amendment in sub-regulations 2.1.9 which has already come into effect from 27<sup>th</sup> March, 2020 and, in so far as schedule 4 requirements are concerned, if required, improvement Notice under Section 32 of the Food Safety and Standards Act, 2006 may be issued to Food Business Operators and accordingly action may be taken for compliance of these requirements.

5. This issues with the approval of the Competent Authority in exercise of the power vested under Sections 18(2) (d) and 16(5) of Food safety and Standards Act, 2006.

Encl: As above

  
(Inoshi Sharma)

Executive Director (Regulatory Compliance)

1. All Food Safety Commissioner.
2. All Authorized Officer, FSSAI.
3. All Central Designated Offices of FSSAI.
4. CITO, FSSAI- for uploading on the website.

Copy for information to:

1. PPS to Chairperson, FSSAI
2. PS to CEO, FSSAI
3. All Directors, FSSAI

**Notice for operationalisation of Food Safety and Standards (Licensing and Registration of Food Business) Amendment Regulations, 2021.**

1. The Food Safety and Standards Authority of India, hereby makes the following regulations operational with immediate effect. The Food business operators shall follow these revised regulations. The enforcement of these regulations shall commence only after the final regulations are notified in the Gazette of India, except the amendment in sub-regulation 2.19 which shall come into force with immediate effect. Any non-compliance w.r.t. schedule-4 of these regulations may be addressed by issuing Improvement Notice under Section 32 of the Food Safety and Standards Act, 200 for further compliance with immediate effect.

2. In the Food Safety and Standards (Licensing and Registration of Food Business) Regulations, 2011 (herein after refer as said regulations), -

**Section I: Licensing and Registration of E-Commerce food business operator-regarding**

(1) In regulation 1.2 relating to definitions

(a) after item 2, the following item shall be inserted, namely:

2(a). "Digital and electronic network" means network of computers, television channels and any other internet application used in an automated manner such as web pages, extranets, mobiles, etc.

2(b). "E-commerce" means buying and selling of goods and services over digital and electronic network.

2(c). "E-commerce FBO" means any Food Business Operator carrying out any of the activities in Section 3(n) of Food Safety & Standards Act, 2006, through the medium of e-commerce.

2(d). "Inventory based model of e-commerce FBOs" means an e-commerce activity where inventory of food products and food services is owned by e-commerce FBO and is sold to the customers directly.

(b) after item 3, the following item shall be inserted, namely:

3 (a). "Marketplace based model of e-commerce FBO" means providing of an information technology platform by an e-commerce FBO on a digital and electronic network to act as a facilitator between the buyer and seller/brand owner/ manufacturer. E- Commerce marketplace includes entities providing support services to sellers/brand owners/product manufacturers in respect of warehousing, logistics, order fulfilment, payment selection, facilitator of delivery and other services.

(2) In regulations 2.1,-

(a) in sub-regulation 2.1.9, in the proviso, the words “equivalent to one-year license fee”, shall be substituted with words “of Rs. 1000 along with differential amount of annual fee in case of upgradation of license.”;

(b) after sub-regulations 2.1.16, following sub-regulations shall be inserted, namely:-

**“2.1.17: Fee and other charges**

(1) The fee and other charges under these regulations shall be as prescribed by the Food Authority in accordance with the Section 82 of the Act.

(2) The non-payment of prescribed fees and charges, action against FBO shall be initiated in accordance with sub-regulation 2.1.8

**2.1.18: Testing**

(1) Manufacturing/Processing license holder shall implement and maintain a system of control to ensure the quality of his production or process by means of a specific plan of testing so that the food product or process comply with the relevant regulations/standard(s):

Provided that the Food Authority may specify the periodicity of the tests to be carried out on certain products or category of products.

Provided further that Food Authority may also specify the tests to be carried out in-house along with the required laboratory and the testing personnel.

**2.1.19: Inspection and Audit**

(1) Food Authority may by order provide a scheme of periodic inspections of the food businesses.

(2) The Commissioners of Food Safety shall draw plans for periodic inspections of food businesses in their respective jurisdiction on the basis of risk associated with food and the establishment.

(3) The Food Business operator, himself or on the direction of the Commissioner of Food Safety or Food Authority, shall be required to get a food safety audit done by one of the third party auditing agencies/auditors recognized by FSSAI at its own cost. Food Business Operator shall grant access to the auditor and provide them all records requested by them.

(4) The Central Advisory Committee may approve inspection checklist for different kind of food businesses based on the requirements under schedule 4 of these regulations or any other requirements under the Act and rules and other regulations made there under or any direction issued by the Food Authority.

(5) The Registering Authority or any officer or agency specifically authorised for this purpose shall carry out inspection of the registered food business operators periodically or as approved by Commissioner Food Safety under clause 2.1.19 (2).

(6) The Food Business Operator, himself or on the direction of the Commissioner of Food Safety or Food Authority, shall be required to obtain hygiene rating for his food business as per the terms determined by the Food Authority.

**Explanation** – Hygiene rating shall be as per the framework approved by the Food Authority and is different from the audit mentioned in clause 2.1.19(3).

#### **2.1.20 Training of Food Safety Supervisor and Food Handlers**

Food Business Operators shall ensure training of Food Safety Supervisor under training programmes of FSSAI. Food Authority may by an order prescribe the requirements regarding the training of Food Safety Supervisor and also the minimum number of Food Safety Supervisors required for any Food Business Operator. Food Safety Supervisor shall supervise the food handlers and also ensure their training.

#### **2.1.21 Scheme for Facilitators**

(1) The Food Authority may empanel individuals/companies/organisations to facilitate the food business operators in applying for Registration/License and the related activities such as modifications, and submission of annual returns and annual declaration with such terms and conditions as may be determined by the Food Authority.

(2) The Food Authority may empanel individual auditors/agencies for implementing the clause 2.1.19 (6). The Food Authority may prescribe by an order the requirements, conditions etc. for empanelling auditors for hygiene rating.”

(3) After regulation 2.1, the following regulation shall be inserted, namely:-

### **2.2 LICENSING OF E-COMMERCE FOOD BUSINESS OPERATOR**

#### **2.2.1 Licensing of E-Commerce Food Business**

(1) E-commerce FBOs shall obtain central license from the concerned central licensing authority.

Provided that E-commerce entities providing listing/directory of FBO/food products may not be required to obtain license under the Act, Rules & Regulations made thereunder, subject to the condition that they are not covered under the definition of food business as per section 3 (n) of FSS Act.

Provided that E-commerce entities providing listing/directory of FBO/food products and also facilitating orders/transaction on their website shall require FSSAI licenses.

#### **2.2.2 Responsibilities of E-commerce Food Business Operators**

(1) The sellers/brand owners/manufacturers on the ecommerce platform shall be required to display their License/Registration obtained under the FSS Act and Regulations and hygiene grading of FBO as may be assigned by FSSAI.

(2) All e-commerce FBOs are required to sign an agreement with the sellers/brand owners/manufacturers averring that the said ‘sellers/brand owners/manufacturers’ are

compliant with FSS Act and Rules and Regulations made thereunder and the liabilities shall rest with these FBOs.

(3) The 'sellers/brand owners/manufacturers' who display or offer any 'pre-packed food' for sale to the customers, either on their own e-commerce platform or on the marketplace based model of e-commerce, shall ensure that legible and clear picture of the 'principal display panel' of such pre-packed food is made available for viewing by the customers, except batch number/lot number, best before, expiry date, date of manufacturing/packing and MRP.

(4) Any food article delivered to consumer by e-commerce FBO shall have shelf life of 30 percent or 45 days before expiry at the time of delivery to the consumer.

Provided that in case of caters or restaurant receiving order through electronic media only fresh food item shall be delivered to the consumer.

(5) The sellers/brand owners/manufacturers dealing in fresh produce will provide an indicative image of the same produce to the e-commerce FBOs for displaying on their platform to enable the consumers to recognize the product.

(6) Mandatory food information mentioned in the FSS Act, Rules and Regulations made thereunder shall be provided to the consumers without charging supplementary costs. The relevant mandatory food information should also be available before the purchase is concluded.

(7) The food products offered for sale by any e-commerce FBO shall be liable to sampling at any point of the supply chain.

(8) It shall be ensured by the e-commerce FBOs that the last mile delivery is undertaken by trained delivery personnel and the safety of food product is not compromised at the time of delivery.

(9) E-commerce FBOs shall ensure that no misleading information/false claims to the product or misleading images of food products are made available or shown on their platform.

(10) The e-commerce FBO/entities shall immediately delist any food products listed on their platform, which are not in compliance with the FSS Act or Rules or Regulations, made thereunder.

(11) All the FBOs i.e. sellers/brand owners, vendors, importers, manufacturers, restaurant, hotel etc. shall comply with the basic hygiene and sanitary practices mentioned in the Schedule 4 of Food Safety and Standards (Licensing and Registration of Food Businesses), Regulations 2011.

(12) Complaints relating to products efficacy, quality, or any other such issues shall be communicated immediately by e-commerce FBO to the sellers/brand owners/importers/manufacturing company concerned for expeditious resolution.

(13) E-commerce entities providing listing/directory of FBO/food products on their platform shall list the rating/ranking of FBO, voluntary or mandatory, as may be specified by Food Authority.



Explanations: For the purpose of these regulations,

(1) E-commerce FBO includes, but is not limited to, the following:

(i) E-commerce entity providing listing services to sellers/brand owners/ /manufacturers/restaurants on their platform, thereby providing platform for commerce to the sellers, manufacturers, restaurants etc.

(ii) Sellers/brand owner/manufacturer, vendors, importers, processors, packagers or manufacturers who display or offer their food products, including food services, catering services, sale of food or food ingredients for sale to the customers, through either the market based model or the inventory based model of e-commerce.

(iii) Operating and providing storage and/or distribution services to the sellers/brand owners, vendors, importers or manufacturers of the food products listed on their marketplace.

(iv) Providing transportation services to the sellers/brand owner, vendors, Importers or manufacturers of the food products and/or providing last mile delivery transportation to the end consumers.

(2) The term 'seller/brand owners/manufacturers' used here should be read to mean seller /brand owner/restaurant/ vendor/ importer/processor/packager/manufacturer responsible for the listing of their product/offering on the e-commerce platform, and will be visible to the end consumer as the 'seller' of the said product/offering.

(3) in schedule 2, in Form 'B', in kind of business, after the kind of business 'Restaurant', the following kind of business shall be inserted, namely:-

“E-commerce”

## **Section II: Documents to be enclosed for new application for license to State/Central Licensing Authority - regarding**

(b) in *Annexure-2*, in “Documents to be enclosed for new application for license to State/Central Licensing Authority”,-

(i) In serial number 2, after the words “operation-wise area allocation.” the following words and parentheses shall be inserted, namely,-

“(not applicable for restaurant)” ;

(ii) In serial number 4 after the words “installed capacity and horse power used.” the following words and parentheses shall be inserted, namely,-

“(not applicable for restaurant)”;

(iii) In serial number 6 for the words and parentheses “(In case of manufacturers)” the following shall be substituted, namely,-

“(In case of manufacturers except restaurant)”;

(iv) In serial number 11, after the words “in case of Cooperatives.” the following words and parentheses shall be inserted, namely,-

“(not applicable for restaurant)” ;

(v) In serial number 12, after the words “in case of Re-labellers.” the following words and parentheses shall be inserted, namely,-

“(not applicable for restaurant)” ;

(vi) In serial number 17, after the words “whom the product is distributed.” the following words and parentheses shall be inserted, namely,-

“(not applicable for restaurant)” ;

### **Section III: Conditions of license - regarding**

(c) in *Annexure-3*,

(i) in “Conditions of License”,-

(A) In serial number 1, after the words “prominent place in the premises.” the following shall be inserted, namely,-

“In case of restaurant display a Food Safety Display Board at all times at a prominent place in the premises.”;

(B) In serial number 4, after the words “university or institute or equivalent.” the following shall be inserted, namely,-

“In case of restaurant employ at least one technical person or Food safety Supervisor trained by Food Safety and Standards Authority of India ” ;

(C) serial number 5 and 7 shall be omitted;

(D) In serial number 8, after the words “utilization and sales separately.” the following words and parentheses shall be inserted, namely,-

“(not applicable for restaurant)” ;

(E) serial number 9, 10 and 11 shall be omitted;

(F) In serial number 14, after the words “licensed/registered vendors and maintain



record thereof.” the following words shall be inserted, namely,-

“The restaurants shall buy food raw materials only from licensed/registered vendors and maintain record thereof”;

(ii) in “Other conditions”, -

(A) for serial number 1, the following shall be substituted, namely, -

“Hotels, restaurants and other food establishment who sell or expose for sale savouries, sweets or other articles of food shall put up a notice board containing separate lists of the articles which have been cooked in ghee, edible oil, vanaspati and other fats for the information of the intending purchasers.”;

#### **Section IV: Part II of Schedule 4 - regarding**

(4) in schedule 4,-

(a) in Part – I after the existing text, the following shall be inserted, -

##### **Specific considerations for fish retail vendors:**

Fish retail vendors may be grouped into two major categories:

- a. Stationary street vendors - Those operating on fixed locations such as fish retail shops in the market or petty shops at the road side.
- b. Moving street food vendors - Those who move from one place to another carrying their wares by hand or on the head or in wheeled transport such as bicycles, push carts and wagons.

(A) To ensure hygiene and safety of fish being sold by the moving street food vendors, the following best practices shall be followed:

1. They shall commence their business in areas not subjected to regular and frequent flooding, and shall be free from undesirable odour, smoke, dust, pest, and other contaminants.
2. In case more than one type of fish is being sold, care shall be taken to avoid cross-contamination.
3. Water used for cleaning the fish/utensil shall be clean and microbiologically safe.
4. Ice used for chilling of fish shall be produced from clean and microbiologically safe water.
5. The equipment such as knives etc. shall be of food grade material so as to enable easy cleaning, maintain hygiene and to avoid contamination. They shall be durable, resistant to corrosion and capable of withstanding repeated exposure to normal cleaning and disinfection.
6. The chopping block shall be of food-grade synthetic material, which does not contaminate the fish and fish products. If the block is of wooden it shall be of hardwood trunk, must be free of splits, cracks and holes and must be maintained in a hygienic condition and shall not contaminate the fish and fish products.
7. Fish and fish products shall only be procured from reliable and traceable vendors. The quality of fish and fish products shall be checked for organoleptic tests like texture, colour, odour, etc. Products exhibiting signs of decomposition shall be rejected.

8. The fish and fish products shall not contain any preservative including formaldehyde which is not permitted under these regulations.
9. Clean, disinfected fish holding crates shall be used for storage and transportation of fish. It is ideal to use a different colour crates for waste disposal.
10. Cleaning and disinfection shall be done preferably with hot water or 50 ppm chlorinated water.
11. Fish laid down for sale shall not come into direct contact with floor.
12. They shall have waste and garbage collection bins with lids which shall be effectively cleaned and sanitized. The garbage bins shall be lined with garbage collection bags and shall have lids to be kept closed so that they do not provide a breeding ground for pests.
13. Fish and fish products handlers shall undergo a medical examination by a registered medical practitioner annually to ensure that they are free from any infectious and other communicable diseases.
14. Every person engaged in a fish and fish product handling shall keep their finger nails trimmed and shall wash his hands frequently and thoroughly with a suitable hand cleaner with potable water. Hands shall always be washed before commencement of work, immediately after using the toilets, after handling contaminated material and whenever else necessary.
15. Fish and fish products handlers shall wear clean clothing and head wears and if possible disposable gloves.
16. Fish and fish products handlers shall not chew/smoke tobacco, gums, any other such item.
17. All personnel handling fish in the markets shall be trained in all aspects of food safety and hygienic fish handling practices.

(B) In addition to the above mentioned practices, the stationary street vendors shall follow the following best practices:

1. A sign board indicating the type of fish and fish products sold shall be displayed prominently.
2. The surfaces of walls, partitions and floors of retail area shall be made of impervious materials for easy cleaning and sanitation and to avoid accumulation / absorption of dust, blood / fish material, microbial / fungal growth.
3. Doors, windows and floors shall be constructed for effective cleaning & sanitation to avoid accumulation / absorption of dust, blood / fish particles, microbial / fungal growth
4. Fish vending tables/wares for display and sale of fish shall be easy to clean, maintain and made of smooth, non-absorbent materials. It must be inert to the food, to detergents and disinfectants under normal operating conditions.
5. Vending table / platform/ wares shall have proper drainage facility and proper slope towards drain.
6. There shall be an adequate supply and storage of clean and microbiologically safe water.
7. Fish handlers shall have access to hand washing and toilet facilities.
8. Facility shall ensure there are no pest infestations which may cause food safety threat. Regular pest control treatments have to be adopted.
9. The temperature at the point of receiving and during storage shall be between 0-4 °C. However, in case of frozen products it shall be -18°C.
10. For retailing frozen fish and fish products, the facility shall have deep freezers capable of maintaining product temperature of -18°C or lesser. In case of fresh or chilled product, storage must be below 4°C.
11. Product shall be stacked to allow proper air circulation.
12. A proper product rotation system shall be established. This system could be based on first-in, first-out usage, production date or "best before" date on labels, sensory quality of the lot, etc., as appropriate.

- 13.Raw product shall be stored on shelves below cooked product to avoid cross-contamination from drip.
- 14.Ready-to-eat items and molluscs shellfish shall be separated from each other and from raw food products in a chilled display.
- 15.Product temperature shall be maintained in cabinet self-service display cases of packaged products.
- 16.Each commodity in a display shall have its own container and serving utensils to avoid cross-contamination
- 17.Eating and chewing of tobacco, gums, any other items, smoking and spitting shall be prohibited in any part of retail facility. It is recommended to display sign boards like 'No Smoking' and 'No Spitting'.

(b) for part –II the following shall be substituted, -

## Part II

General Requirements on Hygienic and Sanitary Practices to be followed by all Food Business Operators applying for License.

The establishment in which food is being handled, processed, manufactured, packed, stored and distributed by the food business operator and the persons handling them should conform to the sanitary and hygienic requirement, food safety measures and other standards as specified below. It shall also be deemed to be the responsibility of the food business operator to ensure adherence to necessary requirements.

In addition to the requirements specified below, the food business operator shall identify steps in the activities of food business, which are critical to ensure food safety, and ensure that safety procedures are identified, implemented, maintained and reviewed periodically.

### *I. ESTABLISHMENT – DESIGN & FACILITIES*

#### **1. Location & Surroundings**

**1.1** Food Establishment shall be located away from potential sources of environmental contaminants like smoke, chemical pollutants, objectionable odours that pose a serious threat to food safety. In case there are hazards from environmental pollution, appropriate measures shall be taken to protect the food establishment from any potential contamination.

**1.2** Food Establishment shall be located away from areas subject to flooding unless sufficient safeguards have been provided.

**1.3** The site boundaries shall be clearly identified with access controlled.

**1.4** The surrounding areas of the establishment shall be kept clean, maintained in good order and adequately drained to minimize any potential contamination from pests, water, debris etc.

**1.5** The manufacturing premise shall not have direct access to any residential area. In case that cannot be achieved, sufficient measures shall be demonstrated to show that it is not posing any threat to food safety.

## 2. Premises and rooms

### 2.1 Construction, design and Layout –

The construction, design & layout of food premises shall be:

- i) permit adequate maintenance, cleaning and/or disinfection, prevent any potential contamination, and provide adequate working space to allow good manufacturing and hygienic practices for all operations;
- ii) to the extent that is practicable, neither permit the entry of pests nor provide harbourage for pests.
- iii) be such that the movement patterns of materials, products and people, and the layout of equipment, shall be designed to protect against potential cross-contamination between and during operations by foodstuffs.

### 2.2 Internal Structure & fittings

This requirement applies to areas used for food handling, cleaning, sanitizing & personal hygiene. All interior structures (including floors, walls, ceilings, doors, windows, partitions, overhead fixtures, working surface, stairs, elevators, etc.) shall be soundly constructed of materials that are durable, impervious to food particles, grease and water, with no toxic effect in intended use, shall be unable to provide pest harbourage, as far as practicable; and be easily and effectively cleaned and where appropriate, disinfected. Where appropriate, all junctions and corners should be rounded in processing areas to facilitate effective cleaning. Structures where glass breakage could result in the contamination of food, shall be constructed of alternative materials or be adequately protected.

In addition, following specific conditions are necessary to be met to protect the safety and suitability of food:

- i) Walls and partitions
  - shall be provided where they are necessary to protect food from contamination.
  - walls shall have a smooth surface upto a height appropriate to the operation
  - sealed to prevent the entry of dirt, dust and pests;
  - shall be free from flaking paint or plaster, finished and maintained to prevent the accumulation of dust, minimise condensation, and shedding of particles
- ii) Ceilings and overhead fixtures
  - ceilings shall be provided where they are necessary to protect food from contamination
  - sealed to prevent the entry of dirt, dust and pests;
  - shall be free from flaking paint or plaster, finished and maintained to minimize the accumulation of dust, condensation, mould growth, and shedding of particles

iii) floors

- shall be sloped appropriately, to allow adequate drainage and cleaning, and non-slippery,
- shall be maintained in good repair and facilitate cleaning
- shall withstand operations, cleaning materials and methods.

iv) Windows

- shall be constructed to minimize the accumulation of dirt
- windows, roof vents or exhaust fans that open to the external environment shall be fitted with removable and cleanable insect-proof screens;
- where open windows would result in contamination, windows must remain closed and fixed during operations.

v) doors

- shall have smooth, non absorbent surfaces
- shall be close-fitting and with suitable precautions to prevent entry of pests.

### 3. Equipment & containers

#### 3.1 Equipment, containers and other food contact surfaces that come in direct contact with food:

- i) shall be hygienically designed, constructed, located and, if necessary, installed to ensure that they can be adequately cleaned, if necessary, disinfected and maintained to avoid contamination of food.
- ii) should be, where necessary, durable, movable or capable of being disassembled to allow maintenance, cleaning , disinfection, monitoring for effective cleaning, pest control
- iii) shall be made of suitable material that is corrosion resistant non-toxic, impervious to grease, water and intended products as well as to cleaning or flushing agents
- iv) shall be kept in good order, repair and condition as to minimize any risk of contamination, shall be placed to achieve easy and effective cleaning of adjacent areas like floors, walls, ceilings and other surfaces.

#### 3.2 Food control and monitoring equipment

Equipment used to cook, heat treat, cool, store or freeze food shall be designed to achieve the required food temperatures as rapidly as necessary to meet the food safety requirements, and maintain them effectively. Such equipment shall also be designed to allow temperatures to be monitored and controlled. Where necessary, such equipment should have effective means of controlling and monitoring humidity, air-flow and any other characteristic likely to have a detrimental effect on the safety or suitability of food.

#### 3.3 Containers for chemicals and hazardous substances

Containers for chemicals (eg. cleaning materials, lubricants, fuels, boiler chemicals etc.) or hazardous substances, shall be specifically identifiable and suitably constructed, closable, made of impervious material, be easy to clean, and where necessary to disinfect. Containers holding hazardous substances shall be closed when not in use, stored separately and lockable to prevent malicious or accidental contamination of food.

#### 4. Facilities/Utilities

##### 4.1 Water Supply

- i) Adequate supply of potable water (for example volume, temperature and pressure) shall be available to meet operational and cleanup needs.
- ii) Water including ice or steam (including culinary steam) used as a product ingredient or in contact with food or food contact surfaces or used for equipment and plant cleaning shall be potable.
- iii) Potable water quality shall be as specified in the latest edition of BIS standard on drinking water (IS 10500). Potable water shall be analysed at least semi-annually to confirm that it meets the requirements of this standard.
- iv) Where it is necessary to store water, storage facilities shall be adequately designed, made of food grade material, cleaned periodically and maintained to prevent contamination. Records of the same shall be maintained.
- v) Where water filters are used, they shall be regularly changed or effectively maintained.
- vi) Recycled water used in processing or as an ingredient shall not present risk of contamination. It shall be of the same standard as potable water.
- vii) Non potable water (for use in, for example, steam production, fire fighting & refrigeration equipment and other similar purposes where it will not come in direct contact with food) shall have a separate system. Non-potable water systems shall be identified and shall not connect with, or allow reflux into, potable water systems.

##### 4.2 Waste disposal and drainage

- i) Containers for holding waste should be of adequate size, made of impervious material, leak-proof, clearly identified, easy to clean, and where necessary to disinfect shall be provided in the premises for collection of waste material.
- ii) Waste shall be segregated into wet and dry garbage and shall be removed periodically.
- iii) It shall be kept closed, preferably foot operated or arrangements shall be made to prevent cross contamination like removal of waste after each cycle of meal preparation to prevent microbial degradation.
- iv) Drains shall be designed to meet expected flow loads, constructed so as to prevent accumulation or back flow of waste water. Drains should be located so that they can be easily and effectively cleaned and inspected.
- v) Drainage shall be equipped with appropriate traps to effectively capture contaminants.
- vi) Wherever existing, refuse stores shall be designed and managed in such a way as to enable them to be kept clean and free from animals and pests.

- vii) Disposal of waste shall be done in a hygienic way in accordance with local rules which are enforced from time to time.

#### **4.3 Cleaning**

- i) Adequate facilities, suitably designated shall be provided for cleaning food, utensils and equipments.
- ii) These facilities are to be constructed of corrosion resistant materials, be easy to clean and shall have an adequate supply of hot and cold potable water, where appropriate.
- iii) Utensil and equipment cleaning and sanitizing facilities should be separated from food processing, storage, distribution and handling areas to prevent contamination.

#### **4.4 Personnel hygiene and employee facilities**

Personnel hygiene facilities shall be available to ensure that an appropriate degree of personal hygiene can be maintained and to avoid contaminating food. Such facilities shall be suitably located & designated.

Adequate number, size and means of hygienic washing, drying and where required, sanitizing hands facility (including wash basins and a supply of hot and cold or suitable temperature controlled water and/or sanitizer) shall be provided. Where necessary, the facilities designated for hand washing should be separate from facilities for washing food. They should ideally be located at the entrance of the food processing, storage, distribution and handling areas.

An adequate number of toilets of appropriate hygienic design each with hand-washing, drying and, where required, sanitizing facilities; shall be available and connected to an effective drainage system. Adequate changing facilities for personnel shall be provided. Toilets and change rooms shall not open directly into rooms in which food is handled and shall be maintained in a clean condition.

Rest & refreshments areas, where provided and designated areas for storage and consumption of food by personnel shall be situated away from the production area so that the potential for cross-contamination is minimized.

#### **4.5 Temperature control**

Depending on the nature of the food operations undertaken, adequate facilities shall be available for heating, cooling, cooking, refrigerating and freezing food, for storing refrigerated or frozen foods, monitoring & recording food temperatures, and when necessary, controlling ambient temperatures to ensure the safety and suitability of food.

#### **4.6 Air quality and ventilation**

Food premises shall have adequate natural and/ or mechanical ventilation including air filters, exhaust fans to effectively remove fumes, smoke, dust, condensation, steam and vapours from the premises. Where temperature and/or humidity are deemed critical to ensure safety and suitability of food, a control system shall be put in place and monitored.

Ventilation systems shall be designed and constructed so that air does not flow from contaminated areas to clean areas and can be adequately maintained and cleaned. Sanitary conveniences are to have adequate natural or mechanical ventilation.



#### **4.7 Lighting**

Adequate natural or artificial lighting shall be provided to enable the personnel to operate in a hygienic manner. Where necessary, lighting should not be such that the resulting colour is misleading. The intensity (that is, the lux level) should be adequate to the nature of the operation.

Lighting fixtures shall be protected to ensure that food is not contaminated in case of breakages.

#### **4.8 Storage facilities**

Where necessary, adequate facilities for the storage of food, ingredients, packaging, non-food chemicals and hazardous substances (e.g. cleaning materials, lubricants, fuels) shall be provided. The food storage facilities shall be designed and constructed to:

- i) provide protection from dust, condensation, waste, pest access and harbourage and other sources of contamination.
- ii) be dry, well ventilated and enable monitoring and control of temperature and humidity in storage areas where specified.
- iii) be easy to maintain and clean. All materials and products shall be stored off the floor and away from the walls to allow inspection and pest control activities to be carried out.

Separate secure storage facilities for non-food chemicals and hazardous substances shall be provided. Such facilities shall be located where there is no possibility for cross-contamination of food or food contact surfaces.

#### **4.9 Compressed air and other gases**

Compressed air, carbon dioxide, nitrogen and other gas systems wherever required used in manufacturing and/or filling shall be constructed and maintained so as to prevent contamination.

## **II. CONTROL OF OPERATION**

### **5. Food Receipt (*Procurement of raw materials and ingredients*)**

**5.1** No raw material or ingredient or any other material used in processing products shall be accepted by a food business operator, if it is known to contain chemical, physical or microbiological contaminants which would not be reduced to an acceptable level by normal sorting and/or processing.

**5.2** Packaged raw materials must be checked for 'expiry date'/ 'best before'/ 'use by' date, packaging integrity and storage conditions before accepting them and stored accordingly.

**5.3** All raw materials or ingredients, where applicable, shall conform to the Regulations laid down under the Act. Raw materials or ingredients should be inspected and sorted before processing. The FBO shall have procedures in place to confirm that the incoming food materials meet the documented specifications. This may be ensured through supplier control, certificate of conformity, incoming inspection, testing, review of label for allergens etc.

**5.4** Records of raw material or ingredient or any other material used in processing as well as their source of procurement shall be maintained for inspection and traceability.

**5.5** Receiving temperature of potentially hazardous food must be 5°C or below; or 60°C or above. Receiving temperature of frozen food shall be -18 °C or below. Records of the receiving temperatures of potentially hazardous and frozen foods must be maintained.

**5.6** Ingredients containing allergens should be clearly identified and stored to prevent cross-contamination with ingredients and products not containing allergens and with other material and products.

## **6. Food and packaging materials storage including warehousing**

**6.1** A food business shall store food and packaging materials in appropriate areas for effective protection from dust, condensation, drains, waste and other sources of contamination during storage.

**6.2** Storage areas shall be dry and well ventilated. When storing potentially hazardous food, a food business must store it under temperature control (and humidity control where necessary) and if the food is intended to be frozen, ensure that the food remains frozen during storage. Monitoring of temperature and/or humidity shall be applied in such cases.

**6.3** All materials and products shall be stored off the floor and with sufficient space between the material and the walls to allow inspection, cleaning and pest control activities to be carried out.

**6.4** All raw materials, food additives and ingredients shall be stored in separate areas from packaging materials, stationery, hardware and cleaning materials.

**6.6** Segregation shall be provided for the storage of raw, processed, rejected, recalled or returned materials or products and shall be clearly marked.

**6.7** The storage of raw materials, ingredients, work-in-progress and processed / cooked or packaged food products shall be subjected to *FIFO (First in First out)*, FEFO (First Expire First Out). To meet this, adequate stock rotation systems should be in place.

**6.8** Ingredients and products containing allergens should be clearly identified and stored to prevent cross-contamination with ingredients and products not containing allergens.

## **7. Food processing and preparation**

**7.1** Systems shall be in place to prevent contamination of foods by foreign bodies such as glass, metal shards from machinery and dust. In manufacturing and processing, suitable detection or screening devices should be used where necessary. Procedures shall be in place for food handlers to follow in the case of breakage. Equally systems shall be in place to prevent contamination of foods by harmful chemicals.

**7.2** The Food Business shall develop and maintain the systems to ensure that the time and temperature is controlled effectively where it is critical to the safety and suitability of food. Such controls shall include time and temperature of receiving, processing, cooking, cooling, storage, packaging, distribution, upto retail as applicable. Such systems shall also specify the tolerable limits for time and temperature variations. Temperature shall be appropriately monitored with temperature recording devices and records thereof shall be maintained.

**7.3** Whenever frozen food / raw materials are used / handled / transported, adequate care shall be taken so that defrosted / thawed material are not refrozen for future use. Personnel shall wash their hands before entering and may need to be required to put on clean protective clothing.

**7.3** Surfaces, utensils, equipment, fixtures and fittings shall be thoroughly cleaned and where necessary disinfected after raw food preparation, particularly when meat and poultry has been handled or processed.

### **7.4 Allergenic Contamination**

Presence of allergens listed in the Food Safety and Standards (Labelling) Regulations, 2017 must be identified in food ingredients and products and controls shall be put in place to prevent their presence in foods where they are not labelled. Controls to prevent cross-contact of foods containing allergens with other foods shall be implemented e.g. separate storage facilities. Where cross-contact cannot be guaranteed, consumers shall be informed.

**7.5** Wherever steam is used directly on food during processing, the steam shall be made from potable water (refer 4.1 ).

## **8 Food Packaging**

**8.1** The packaging design and materials shall provide protection for products in order to prevent contamination, damage and accommodate required labelling as laid down under the FSS Act & the Regulations there under. Only Food grade packaging materials shall be used. Packaging materials like aluminium, tin and plastic shall conform to the Indian standards as mentioned under the FSS Regulations.

**8.2** The food packaging materials shall be inspected before use to prevent using damaged, defective or contaminated packaging, which may lead to contamination of the product. The food business operator shall have effective procedures in place to confirm that contaminated, damaged or defective reusable containers are properly cleaned and sanitized, repaired or replaced, as appropriate, before re-use.

**8.3** The packaging materials or gases where used, shall be non-toxic and shall not pose threat to the safety and suitability of food under the specified conditions of storage and use.

**8.4** Wrapping and packaging operations shall be carried out so as to avoid contamination of the products.

## 9. Rework and control of non-conforming products

**9.1** Stored rework materials shall be protected from exposure to microbiological, chemical or extraneous matter contamination.

**9.2** Rework shall be clearly identified and/or labelled to allow traceability. All traceability records for rework shall be maintained. (e.g. Product name, production date, shift, line of origin, shelf-life).

**9.3** Where rework is incorporated into a product as an “in-process” step, the acceptable quantity, the process step and method of addition, including any necessary pre-processing stages, shall be defined.

**9.4** Where rework activities involve removing a product from filled or wrapped packages, controls shall be put in place to ensure the removal and segregation of packaging materials and to avoid contamination of the product with extraneous matter.

## 10 Food Transportation

**10.1** Conveyances and/or containers used for transporting foodstuffs shall be kept clean and maintained in good repair and condition to protect foodstuffs from contamination and shall be designed and constructed to permit adequate cleaning and/or disinfection. Where

direct contact with food may occur, materials used in carrier construction should be suitable for food contact.

**10.2** Food products in conveyances and/or containers are to be so placed and protected as to minimize the risk of contamination.

**10.3** Where conveyances and/or containers are used for transporting anything in addition to foodstuffs or for transporting different foods at the same time, there shall be, where necessary, effective separation of products to prevent cross-contamination.

**10.4** Where conveyances and/or containers are used for transportation anything other than foodstuffs or for transporting different foods, there shall be effective cleaning between loads to avoid risk of contamination.

**10.5** Bulk foodstuffs in liquid, granulate or powder form shall be transported in receptacles and/or containers/tankers reserved for the transport of foodstuffs. Such containers are to be marked in a clearly visible and indelible fashion, to show that they are used for the transport of foodstuffs.

**10.6** Wherever necessary, conveyances and/or containers used for transporting foodstuffs shall be capable of maintaining foodstuffs at appropriate temperatures and allow those temperatures to be monitored. For example Ingredients and products requiring refrigeration shall be transported and stored at 5°C or less but not frozen. Frozen ingredients and products shall be transported and stored at temperatures which do not permit thawing (for example, below 0°C).

## 11 Food Traceability and recall

12.1 The food business operator shall have a system for assigning codes or lot numbers to incoming materials, packaging materials and finished products, etc. This will help to identify products.

12.2 The FBO shall have a documented and effective product recall plan in place in accordance with the Food Safety & Standards (Food Recall) Regulations, 2017. Such a plan shall allow the FBO to effectively locate all affected food products that may cause a potential threat to public health and enable the complete, rapid recall of the implicated lot of the product from the market.

12.3 Where a product has been recalled because of an immediate health hazard, other products which are produced under similar conditions which may also present a hazard to public health shall be evaluated for safety and may need to be recalled.

12.4 Recalled products shall be held under supervision until they are destroyed, used for purposes other than human consumption, determined to be safe for human consumption, or reprocessed/reworked in a manner to ensure their safety.

## 12. Quality control

12.1 The food business operator shall have a quality control programme in place to include inspection and testing of incoming, in-process and finished products. Adequate infrastructure including a laboratory facility and trained and competent testing personnel should be available for carrying out testing. Calibration of laboratory equipments shall be done periodically.

12.2 In case adequate in-house test facilities are not available, a system shall be in place for testing these materials in an NABL accredited external laboratory/ laboratory notified by FSSAI. In case of complaints or feedback on the product, the food business operator shall carry out the testing either through their in-house/ external accredited laboratories notified by FSSAI to ensure product compliance to standards.

12.3 Each category or type of finished food product shall be tested as per FSS standards & regulations 2011 at least once in six months from an NABL Accredited or FSSAI notified laboratory. It is recommended to retain the control samples, till the end of shelf life.

### *III. ESTABLISHMENT – MAINTENANCE AND SANITATION*

## 13 Cleaning and sanitation

13.1 Food premises and equipment shall be maintained in an appropriate state of repair and cleanliness in order to function as intended, facilitate all sanitation procedures and prevent contamination of food, such as from metal shards, flaking plaster, food debris and chemicals.

13.2 Cleaning shall remove food residues and dirt which may be a source of contamination. The necessary cleaning methods and materials will depend on the nature of the food business. Disinfection may be necessary after cleaning.

13.3 Cleaning and disinfection chemicals shall be food grade, handled and used carefully and in accordance with manufacturers' instructions, for example, using the correct dilutions, and stored, where necessary, separated from food, in clearly identified containers to avoid the risk of contaminating food.

### 13.4 Cleaning procedures and methods

Cleaning can be carried out by the separate or the combined use of physical methods, such as heat, scrubbing, turbulent flow and vacuum cleaning or other methods that avoid the use of water, and chemical methods using detergents, alkalis or acids.

Cleaning procedures should generally involve:

- removing gross visible debris from surfaces;
- applying a detergent solution to loosen soil and bacterial film (cleaning);
- rinsing with water (hot water where possible) to remove loosened soil and residues of detergent;

- dry cleaning or other appropriate methods for removing and collecting residues and debris (may be needed in some operations where water enhances the risk of microbiological contamination); and
- where necessary, cleaning should be followed by disinfection with subsequent rinsing.

### 13.5 Cleaning Methods and Programs

A cleaning and disinfection programmes shall be drawn up, observed and records of the same shall be maintained. The programme should ensure that all parts of the establishment are appropriately clean, and shall include the cleaning of cleaning equipment.

The cleaning programmes shall specify:

- areas, items of equipment and utensils to be cleaned;
- responsibility for particular tasks;
- cleaning method and frequency of cleaning; and
- monitoring arrangements for checking effectiveness of cleaning ( eg. through audits or microbiological sampling and testing of the environment and food contact surfaces)

## 14 Maintenance

14.1 Preventive maintenance of equipment and machinery shall be carried out regularly as per the instructions of the manufacturer. A preventive maintenance (including calibration) programme must include all devices used to monitor and/or control food safety hazards and cover the maintenance procedure, frequency and identification of the person (and/ or external agency) responsible for maintenance activity.

14.2 Corrective maintenance shall be carried out in such a way that production on adjoining lines or equipment is not at risk of contamination.

14.3 Temporary fixes when used shall not put product safety at risk and should be removed / permanently fixed in a timely manner.

**14.4** Lubricants, heat transfer fluids or any other similar material used shall be food grade where there is a risk of direct or indirect contact with the product.

## 15 Pest Control Systems

15.1 Good sanitation, inspection of incoming materials and good monitoring can minimize the likelihood of infestation and thereby limit the need for pesticides.

### 15.2 Preventing access

Buildings shall be kept in good repair and condition to prevent pest access and to eliminate potential breeding sites. Holes, drains and other places where pests are likely to gain access shall be kept sealed. Wire mesh screens, for example on open windows, doors and ventilators, will reduce the problem of pest entry. Animals, birds and pets shall be excluded from the food premises.

### 15.3 Harbourage and infestation

Storage practices shall be designed to minimize the availability of food and water to pests. Food materials shall be stored in pest-proof containers and/or stacked above the ground



and away from walls. Where outside space is used for storage, stored items shall be protected from weather or pest damage (e.g. bird droppings). Where appropriate, refuse shall be stored in covered, pest-proof containers. Any potential harbourage, such as old, unused equipment shall be removed. Potential pest harbourage (e.g. burrows, undergrowth, stored items) shall be removed. Materials found to be infested shall be handled in such a way so as to prevent contamination of other materials or products.

#### 15.4 Monitoring and detection

Establishments and surrounding areas must be regularly examined for evidence of infestation. Pest monitoring programmes shall include the placing of detectors and/or traps in key locations to identify pest activity. A map of detectors and/or traps shall be maintained. Detectors and/or traps shall be designed and located so as to prevent potential contamination of materials, products or facilities.

#### 15.5 Eradication

Pest infestations shall be dealt with immediately by a competent person and without adversely affecting food safety or suitability. Treatment with permissible chemical, physical or biological agents, within the appropriate limits, shall be carried out by trained operatives without posing a threat to the safety or suitability of food. The cause should be identified and corrective action taken to prevent a recurrent problem.

Records of pesticides/insecticides used shall be maintained to show the type, quantity and concentrations used; where, when and how applied, and the target pest.

### 16 Waste disposal Management

16.1 Accumulation of food waste, non-edible by products and other refuse shall not be allowed in food handling or storage areas. Removal frequencies shall be managed to avoid accumulation and overflow in food handling, food storage, and other working areas and the adjoining environment except so far as is unavoidable for the proper functioning of the business, with a minimum daily removal.

16.2 No waste shall be kept open inside the premise and shall be disposed as per local rules and regulations including those for plastics and other non-environment friendly materials.

16.3 Waste stores must be kept appropriately clean and free of pests.

16.4 The disposal of sewage and effluents (solid, liquid and gas) shall be in conformity with standards laid down under Environment Protection Act, 1986 and the local rules wherever prevalent.

## *IV. ESTABLISHMENT – PERSONAL HYGIENE*

### 17 Health Status

17.1 Food handlers and employees of the establishment shall undergo a medical examination by a registered medical practitioner annually to ensure that they are free from any infectious and other communicable diseases. A record of these examinations shall be maintained.

17.2 The employees in the food premises shall be inoculated against the enteric group of diseases as per recommended schedule of the vaccine and a record shall be maintained.

## 18 Illness and injuries

18.1 Personnel known, or, suspected to be suffering from, or to be a carrier of a disease or illness likely to be transmitted through food, shall be prevented from handling food or materials which come in contact with food.

18.2 Employees shall report the following conditions to the management for possible exclusion from food handling areas – jaundice, diarrhoea, vomiting, fever, sore throat with fever, visibly infected lesions, (boils, cuts or sores) and discharges from ear, eye or nose. Medical examination of a food handler shall be carried out apart from the periodic medical examination, if clinically or epidemiologically indicated.

18.3 In food-handling areas, personnel with open cuts, wounds or burns shall be required to cover them with suitable water-proof dressings before starting operations. Any lost dressing must be reported to supervision immediately. The dressings should preferably be brightly coloured and metal detectable.

## 19 Personal Cleanliness

19.1 Food handlers shall maintain a high degree of personal cleanliness and shall wear work clothing, head covering, and footwear that is fit for purpose, clean and in good condition (eg. free from tears, rips or fraying material). Workwear shall provide adequate coverage to ensure that hair, beards, moustaches, perspiration, etc. cannot contaminate the product.

19.2 Where gloves are used for product contact, they shall be clean and in good condition.

19.3 Protective clothing mandated for food protection areas or hygiene purposes shall not be used for any other purposes.

19.4 All people entering food processing, storage, distribution and handling areas shall wash their hands with soap and potable water, followed by drying and sanitizing, where required:

- before starting work;
- after handling chemicals;
- after handling incompatible food products (for example, raw versus cooked or ready-to eat) or contaminated materials;
- after breaks;
- after coughing or sneezing or blowing their nose; and
- after using toilet facilities.
- after using telephone / cell phones,
- after smoking in designated areas etc.

Hand washing notices shall be posted at appropriate places.

**19.5** Fingernails shall be kept clean without nail polish and trimmed.

## 20 Personal Behaviour

20.1 The FBO shall implement an effective personal hygiene programme that identifies hygienic behaviour and habits to be followed by personnel to prevent contamination of food.

20.2 Any behaviour or unhygienic practices which could result in contamination of food shall be prohibited in food processing, distribution, storage and handling areas. This includes smoking, chewing or eating, sneezing or coughing over unprotected food, spitting.

20.3 Personal effects such as jewellery, watches, pins or other items should not be worn or brought into food handling areas if they pose a threat to the safety and suitability of food.

20.4 Food contact tools and equipments shall not be kept in personal lockers.

## 21 Visitors

Generally Visitors should be discouraged from going inside the food handling areas. The Food Business shall ensure that visitors to its food manufacturing, processing or handling areas must wherever appropriate, wear protective clothing, footwear and adhere to the all the personal hygiene provisions envisaged in this section.

## *V. ESTABLISHMENT – PRODUCT INFORMATION AND CONSUMER AWARENESS*

### 22 Product information & labelling

All packaged food products shall carry a label and requisite information as per provisions of Food Safety and Standards Act, 2006 and Regulations made there under so as to ensure that adequate and accessible information is available to next 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 (See Section 11). This should also include information that identifies food allergens in the product as ingredients or where cross-contamination cannot be excluded as per FSS (Food Labelling) Regulations, 2011 .

### 23 Consumer awareness and complaint handling

23.1 Information shall be presented to consumers in such a way so as to enable them to understand its importance and make informed choices. Information may be provided by labelling or other means, such as company websites, education programmes and advertisements, and may include storage, preparation and serving instructions applicable to the product.

23.2 The Food Business shall have a system to handle product complaints with identified person or people responsible for receiving, evaluating, categorizing, investigating and addressing complaints. Complaints shall be accurately categorized according to safety concerns and other regulatory concerns, such as labelling and shall be investigated by appropriately-trained technical personnel.

## *V. ESTABLISHMENT – TRAINING AND MANAGEMENT*

### 24 Training

24.1 All personnel should be aware of their role and responsibility in protecting food from contamination or deterioration. The Food Business operators shall ensure that all food handlers have the necessary knowledge and skills to enable them to handle food hygienically. Those who handle strong cleaning chemicals or other potentially hazardous chemicals should be instructed in safe handling techniques.

24.2 The Food Business shall ensure that all the food handlers are instructed and trained in food hygiene and food safety aspects along with personal hygiene requirements commensurate with their work activities, the nature of food, its handling, processing, preparation, packaging, storage, service and distribution.

24.3 Periodic assessments of the effectiveness of training as well as routine supervision and checks to ensure that food hygiene and food safety procedures are being carried out effectively.

24.4 Training programmes shall be routinely reviewed and updated wherever necessary. Systems should be in place to ensure that food handlers remain aware of all procedures necessary to maintain the safety and suitability of food. Records of training shall be kept.

### 25 Management and supervision

25.1 The Food Business Operator shall supervise and monitor all operations appropriately. The type of supervision needed will depend on the size of the business, the nature of its activities and the types of food involved. Managers and supervisors should have the necessary knowledge and skills of food hygiene principles and practices to be able to judge potential hazards and take the necessary preventive and corrective action to remedy deficiencies.

25.2 The FBO management shall provide and maintain documented standard operating procedure for FSMS systems compliance and its supervision at site through records /checklists on routine basis to control any possible hazards throughout supply chain.

## *VII. ESTABLISHMENT – AUDIT, DOCUMENTATION AND RECORD KEEPING*

### 26. Self-evaluation and review

26.1 The FBO shall conduct a self-evaluation of the process to verify the effectiveness of the implemented food safety system at periodic intervals through internal and external audits or other mechanisms, but at least once in a year. Necessary corrective actions based on self evaluation results shall be taken.

26.2 FBO should also undertake a complete review of the systems including self-evaluation results, customer feedback, complaints, new technologies and regulatory updates at periodic intervals, but at least once in a year for continual improvement.

### 27. Documentation and records

27.1 Appropriate documentation & records of processing, production and distributions shall be maintained in a legible manner, retained in good condition for a period of one year or the shelf-life of the product, whichever is more.

27.2 The important records that shall be maintained include incoming material checks, inspection and testing, calibration of food safety equipments, water testing, operational controls (such as temperature, pressure, time etc.), product recall and traceability, storage, cleaning and sanitation, pest control, medical examination and health status of food handlers, training etc.

### **Section V: Part IV of Schedule 4 - regarding**

(c) in part IV, after item (b) relating to Sanitary & Hygienic Requirements for the retail meat shops, the following item shall be inserted, namely:-

“c) Sanitary and hygienic requirements for establishing a small slaughter house (which are under State licence/registration)

1. General
  - 1.1 No Objection Certificate from the Municipality or Panchayat and State Pollution Control Board to be obtained.
2. Premise Requirements
  - 2.1 Every such establishment/Slaughter House shall make separate provision in the slaughter hall for the slaughter of different species of animals and for different methods of slaughter. After every type of operation, the slaughter house shall be cleaned, washed & sanitized.
  - 2.2 The slaughter house shall have adequate separation between clean and dirty sections. The rooms and compartments where edible products are handled shall be separate and distinct from the rooms and compartments for inedible products.
  - 2.3 The slaughter house shall have a reception area/resting area/lairage with a facility of unloading ramp and shall have facilities for watering and examining animals, slaughter room/hall, ancillary accommodation and refrigeration facilities.
  - 2.4 The lairage shall be adequate in size for the number of animals to be laired.
  - 2.5 All the floors in lairage, slaughter hall, work rooms shall be impervious and non-slippery material.

- 2.6 The internal walls will be paved with impervious glazed tiles upto 1 meter height in case of small animal ruminants and 5 meter height in case of large ruminants.
- 2.7 Ceiling or roofs shall be so constructed and finished to minimize condensation, mould development, flaking and accumulation of dirt.
- 2.8 The establishments/Slaughter Houses shall be so constructed and maintained as to permit hygienic production, easy cleaning & proper disposal of wastages.
- 2.9 Windows, doors and other openings should be fitted with screening which shall be fly proof.

### 3. Facilities

- 3.1 There shall be efficient drainage and plumbing systems and all drains and gutters shall be properly and permanently installed. There shall be adequate provision for the disposal of slaughter house waste.
- 3.2 The drainage system for blood shall be underground with facility for easy cleaning or a portable receptacle with lid.
- 3.3 A constant and sufficient supply of clean potable cold water with pressure hose pipes and supply of hot water preferably shall be made available in the slaughter hall during working hours. Both cold and hot water shall be identified with separate colour.
- 3.4 Suitable and adequate facilities shall be provided for persons working in the slaughter house for changing and cleaning their footwear, cloths and cleaning their hands before entering rooms used for the preparation and storage of meat.
- 3.5 Adequate facilities for latrines, toilets and change rooms etc. shall be ensured.
- 3.6 Suitable and sufficient facilities shall be made available at convenient places with in the slaughter house for the sterilisation of knives and other equipment used in the slaughter house.
- 3.7 All slaughter house refuse and waste materials will be dumped in pits that are suitably covered as this material could be composted which can be used for manure purpose and this will prevent its access to scavengers and protect environment.

### 4. Sanitary Practices

- 4.1 All operations in connection with the slaughtering, processing & preparation or packing of meat/meat food products shall be carried out under strict hygienic conditions. No portion of the establishments/Slaughter Houses premises shall ever be used for living or sleeping purposes unless it is separated from the abattoir by a wall.
- 4.2 Every part of the internal surface of the walls and every part of the floor and pavement of the slaughter house shall be kept in good order and repair at all time, so as to prevent the absorption therein of any blood or liquid refuse or filth which may be spilled or splashed thereon or offensive or noxious matter which may be deposited there in or brought into contact therewith and subsequently sanitized suitably.

- 4.3 Every part of the internal surface above the floor or pavement of such slaughter house shall be washed thoroughly with hot lime wash.
- 4.4 Every part of the floor or pavement of the slaughter house and every part of the internal surface of every wall on which blood or liquid refuse or filth may have been spilt or splashed or with which any offensive or noxious matter have been brought into contact during the process of slaughtering, dressing and cutting, shall be thoroughly washed and cleaned with water and sanitized within three hours after the completion of slaughter.
- 4.5 Animals suspected of contagious or infectious diseases shall be segregated and kept in separate pens.
- 4.6 The slaughtering of an animal shall not be done in the sight of other animals. The dressing of the carcass shall not be done on floor.
- 4.7 Rooms and compartments in which animals are slaughtered or any product is processed or prepared shall be kept sufficiently free from steam, vapours and moisture and obnoxious odours so as to ensure clean and hygienic operations. This will also apply to overhead structure in those rooms and compartments.
- 4.8 All parts of the establishments/Slaughter Houses shall always be kept clean, adequately lighted and ventilated and shall be regularly cleaned, disinfected and deodorized. The Floorings shall be impervious and washed daily. Lime washing, colour washing or painting as the case may be, shall be done at least once in every twelve months. The floors, walls, ceilings, partitions, parts, doors and other parts of all structures shall be of such materials, construction and finish that they can be readily and thoroughly cleaned.
- 4.9 All yards, outhouses, stores and all approaches to the establishments/ Slaughter Houses shall always be kept clean and in a sanitary condition.
- 4.10 Suitable and sufficient receptacles furnished with properly fitted covers shall be provided for collection and removal of all garbage, filth and refuse from the slaughter house at convenient time to remove from the slaughter house for disposal.
- 4.11 All blood, manure, garbage, filth or other refuse from any animal slaughtered and the hide, fat, viscera and offal there from, shall be removed from the slaughter house within 8 hours after the completion of the slaughtering and in such a manner and by such means as will not cause nuisance at the premises or elsewhere. Every such vessel or receptacle shall be thoroughly cleaned and disinfected immediately after use and shall be kept thoroughly clean when not in actual use.
- 4.12 The inner side of the skin shall not be rubbed or caused to be rubbed upon the ground within any portion of the slaughter hall. Hides and skins shall not be dragged within the slaughter hall.
- 4.13 Every practicable precautions shall be taken to exclude flies, rats, mice and vermin from the Slaughter Houses. The use of poisons for any purpose in rooms or compartments where any unpacked products is stored or handled is forbidden.
- 4.14 Entry of dogs, cats, birds etc is prohibited.
- 4.15 Water used in the Slaughter Houses shall be potable and suitable arrangements shall be made if bore well water is used for production of meat and meat products. As required by the licensing authority, the water shall be got examined chemically and bacteriologically by a recognized laboratory.



- 4.16 'Hot meat' meant for immediate sale need not be stored in cool conditions. It can be transported in suitable a hygienic and sanitary condition in clean containers with covers (lids) to the meat shops/selling units with adequate precautions to ensure that no contamination or deterioration takes place.
- 4.17 The equipment and fittings in slaughter hall except for chopping blocks, cutting boards and brooms, shall be of such material and of such construction as to enable them to be kept clean. The implements shall be of metal or other cleansable and durable material resistant to corrosion.

## 5. Personnel Hygiene

- 5.1 No person suffering from infectious or contagious diseases shall be allowed to work in the slaughter house & meat processing unit. The workers shall be medically examined annually to ensure that they are free from infectious, contagious and other diseases. A record of these examinations signed by a registered medical practitioner shall be maintained for inspection.
- 5.2 The staff shall be inoculated against the enteric group of diseases once a year and a certificate thereof shall be kept for inspection.
- 5.3 In case of an epidemic, all workers should be inoculated or vaccinated.
- 5.4 The workers working in processing and preparation shall be provided with proper aprons and head wears which shall be clean and tidy.

## 6. Stunning

- 6.1 Animals are slaughtered by being first stunned and then bled out. Stunning can be effected through asphyxiating the animals with carbon dioxide, shooting them with a gun or a captive bolt pistol, or shocking them with electric current. The equipment utilized for stunning and slaughter shall be maintained in good working condition and that all operators involved are well trained and have a positive attitude towards the welfare of animals.

Note: In case of ritual slaughter (Halal and Kosher) only non-penetrating, percussive mechanical stunning is permitted.

The following method of stunning shall be considered humane:—

(i) Mechanical stunning of cattle may be carried out by one of three methods; captive bolt stunning, mushroom head percussive stunning and pneumatic percussive stunning. For cattle, pneumatic stunning should be preferred and the optimum position is that the centre of the stunner should contact the animal at a point of intersection of lines drawn from the medial corners of the eyes and the base of the ears. The best position for pigs is on the midline just above eye level, with the host directed down the line of the spinal cord. The optimum position for sheep and goat is behind the poll, aiming towards the angle of the jaw. If an animal shows signs of regaining consciousness after the initial stun, the animal must be immediately killed by the use of a captive bolt gun.

(ii) Electrical stunning - Electrical Head Stunners may be preferred for sheep and goat where both electrodes are placed on the head region. Water bath electrical stunning may be used for poultry birds. A low and controlled voltage must be maintained so that the

stunning will not damage the heart and brain or cause physical disability and death to the animals. The minimum current level recommended for stunning are indicated in the table below.

#Note: In case of ritual slaughter (Halal and Kosher) every care must be taken that birds do not die during electrical stunning, otherwise it is not considered to be fit for human consumption.

Species	Minimum current levels for head-only stunning
Cattle	1.5 Amps
Calves (bovines of less than 6 month of age)	1.0 Amps
Pigs	1.25 Amps
Sheep and goats	1.0 Amps
Lambs	0.7 Amps
Broilers	100 mili Amps
Turkeys	150 mili Amps

(iii) Gas stunning - Stunning of pigs by exposure to carbon dioxide (CO<sub>2</sub>) may be preferred. The concentration of CO<sub>2</sub> should be 90% by volume but shall not be less than 80% by volume. Ideally pigs should be exposed for 3 minutes. Sticking should be done immediately after exit from the gas chamber. Over-crowding of animals should be avoided in the gas chamber.

## 7. Ante mortem & Post mortem Inspection

7.1 All animals shall be subjected to ante-mortem examination and Post mortem inspection by the authorised veterinarian. The Veterinary Doctor should be made available or deployed for the purpose by the concerned Panchayats/ Municipalities responsible for local administration and may make deputation arrangements for availing the services of qualified Veterinary staff available with the Animal Husbandry Depts., of the concerned State/U.T. in the country for meat inspection.

7.2 Carcasses, parts and the organs thereof found to be sound, wholesome, healthful and fit for human consumption shall be marked as “Inspected and passed”.

7.3 Humane Slaughtering methods shall be used for slaughtering.

7.4 Destruction of condemned carcasses, organs or parts thereof shall be carried out under the direct supervision of the authorised veterinarian.

## 8. Water requirement

- 8.1 The water used shall be potable and be tested once in a month for microbiological & chemical quality. The management shall keep all the records of water testing.
- 9. Plant waste disposal
- 9.1 The issues related to ecofriendly disposal of solid & liquid waste i.e. Sewage Treatment Plant & Effluent Treatment Plant shall be as per norms & standards prescribed by CPCB & respective State Pollution Control Boards.

## **B. FISH AND FISH PRODUCTS**

In addition to Part-II of Schedule 4, specific requirement for processing of fish and fish products specified below shall be followed:

- 22. Internal Structure & fittings
  - 22.1 All interior structures (including floors, walls, ceilings, doors, windows, partitions, overhead fixtures, working surface that come into direct contact with fish and fish products, such as stairs, elevators, etc.) shall be constructed of materials that are corrosion-resistant, light-coloured, durable, impervious to minimize the build-up of fish slime, blood, scales and guts and to reduce the risk of physical contamination, with no toxic effect in intended use, shall be unable to provide pest harbourage,; and be easy for cleaning and disinfection.
  - 22.2 Equipment & containers
    - 22.2.1 Conveying equipment for live and dressed products shall be constructed of suitable corrosion- resistant material that doesn't transmit toxic substances and shouldn't cause mechanical injuries.
    - 22.2.2 Cooling chambers for storage of fish food products shall be equipped with thermometers and (or) automatic air temperature controllers in the chamber as well as with temperature recording devices.
- 23. Procurement of raw materials and ingredients
  - 23.1 Both the raw material and ingredients, where feasible shall be procured from registered or approved supplier. Raw material shall be washed or cleaned as necessary to remove soil or other contaminants using potable water. It is recommended that temperature of fish and fish products at the time of delivery shall be 4.0°C or below. In case of frozen products, receiving temperature shall be -18°C or below.
  - 23.2 Shrimps shall be procured from farmers registered under authorized agencies and use only approved aquaculture inputs.

- 23.3 Fish should smell fresh and mild, not fishy, sour, or ammonia-like. A fish's eyes shall be clear and shiny.
  - 23.4 Whole fish should have firm flesh and red gills with no odour. Fresh fillets should have firm flesh and red blood lines, or red flesh if fresh tuna. The flesh should spring back when pressed.
  - 23.5 Fish fillets should display no discoloration, darkening, or drying around the edges.
  - 23.6 Shrimp, scallop, and lobster flesh should be clear with a pearl-like colour and little or no odour.
24. Food and packaging materials storage including warehousing

It is recommended that temperature of fish and fish products at the time of storage shall be 4.0°C or below for chilled and -18°C or below for frozen. Too long storage time and severe fluctuation should be avoided. Where the product is susceptible to temperature abuse and / or weather damage, covered bays should be provided for loading and unloading.

25. Processing

- 25.1 Fin fish and shellfish should be handled and conveyed with care during processing operations to avoid physical damage such as puncture and mutilation. Food contact surfaces shall be made of food grade material. Personnel shall put on clean protective clothing and wash their hands before entering processing area.
- 25.2 Ice used in cooling and holding raw material should not be mixed with ice used to store processed and packed products. Wherever steam is used directly on food during processing, the steam shall be generated from clean and microbiologically safe water.

26. Packaging

- 26.1 Avoid packages with signs of frost or ice crystals, which may mean the fish has been stored a long time or thawed and refrozen.
- 26.2 Avoid packages where the "frozen" fish flesh is not hard. The fish should not be bendable.
- 26.3 Packaging used for storing ice cooled fish food products should ensure the drainage of the melt water.
- 26.4 The packaging of fish food products should ensure safety of fish food products and invariability of the organoleptic properties before the expiration date of such products.

27. Transportation

- 27.1 Transportation facility for fish and fish products shall have chilling equipment to maintain temperature and -18 oC or below for freezing during transportation to a temperature at 4 °C or below for chilled products or at-18 °C or below for frozen products. The temperatures shall be monitored.
  - 27.2 Contamination, exposure to extreme temperatures and the drying effects of the sun or wind shall be avoided.
  - 27.3 Free flow of chilled air around the load when fitted with mechanical refrigeration means.
  - 27.4 Cargo compartments of transport vehicles and containers should be subjected to regular washing and disinfection with a frequency necessary to prevent cargo compartments of transport vehicles and containers from becoming sources of contamination (dirtying) of products.
28. Quality control
- 28.1 Fresh fish shall only contain permitted ingredients and comply with the regulation.
  - 28.2 Biological water resources catchments and food products of aquaculture of animal origin should be examined for parasites (parasitic affections).
  - 28.3 The fish and fish products shall not contain any preservative including formaldehyde which is not permitted in these regulations.

### **Section VI: Part V of Schedule 4 – regarding**

(d) For part V, the following shall be substituted, namely:-

#### Part V

Good Hygienic and Manufacturing Practices to be followed by licensed Food Business Operators engaged in catering or food service operations

Catering/ food establishment in which food is being handled, processed/prepared, stored, distributed and ultimately sold to the customers and the persons handling them should conform to the sanitary and hygienic requirement, food safety measures and other standard as specified below. It shall also be deemed to be the responsibility of the food business operator to ensure adherence to the necessary requirement.

It includes premises where public is admitted for repose or for consumption of any food or drink or any place where cooked food is sold or prepared for sale. It includes:

- (a) Eating Houses
- (b) Restaurant and Hotels
- (c) Snack Bars
- (d) Canteen and mess (Schools, Colleges Office, Institutions)

- (e) Food Service at religious places
- (f) Rail and Flight catering
- (g) Hospital Catering
- (h) Event caterings

## *1. ESTABLISHMENT – DESIGN & FACILITIES*

### 1.1 Location & Surroundings

1.1.1 Food Establishment shall be located away from potential sources of environmental contaminants like smoke, chemical pollutants, objectionable odours that pose a serious threat to food safety. In case there are hazards from environmental pollution, appropriate measures shall be taken to protect the food establishment from any potential contamination.

**1.1.2** Food Establishment shall be located away from areas subject to flooding unless sufficient safeguards have been provided.

**1.1.3** The surrounding areas of the establishment shall be kept clean, maintained in good order and adequately drained to minimize any potential contamination from pests, water, debris etc.

### 1.2 Premises and rooms

#### 1.2.1 Construction, design and Layout –

The construction, design & layout of food premises shall:

- iv) permit adequate maintenance, cleaning and/or disinfection, prevent any potential contamination, and provide adequate working space for carrying out all tasks hygienically;
- v) to the extent that is practicable, neither permit the entry of pests nor provide harbourage for pests.
- vi) be such that the movement patterns of materials, products and people, and the layout of equipment, is designed for protection against potential cross-contamination between and during operations by foodstuffs.

#### 1.2.2 Internal Structure & fittings

This requirement applies to areas used for food handling, cleaning, sanitizing & personal hygiene. All interior structures (including floors, walls, ceilings, doors, windows, partitions, overhead fixtures, working surface, stairs, elevators, etc.) shall be soundly constructed of materials that are impervious to food particles, grease and water, with no toxic effect in intended use, shall be unable to provide pest harbourage, as far as practicable; and be easily and effectively cleaned and where appropriate, disinfected. Where appropriate, all junctions and corners should be rounded in kitchen areas to facilitate effective cleaning. Structures where glass breakage could result in the contamination of food, shall be constructed of alternative materials or be adequately protected.

In addition, following specific conditions are necessary to be met to protect the safety and suitability of food:

- viii) Walls and partitions
  - shall be made of materials that are non-absorbent and washable

- walls shall have a smooth surface up to a height appropriate to the operation
  - sealed to prevent the entry of dirt, dust and pests;
  - shall be free from flaking paint or plaster, finished and maintained to prevent the accumulation of dust, minimise condensation, and shedding of particles
- ix) Ceilings and overhead fixtures
- sealed to prevent the entry of dirt, dust and pests;
  - shall be free from flaking paint or plaster, finished and maintained to minimize the accumulation of dust, condensation, mould growth, and shedding of particles
- x) floors
- shall be sloped appropriately, to allow adequate drainage and cleaning, and non-slippery,
  - shall be maintained in good repair
  - shall withstand operations, cleaning materials and methods.
- xi) Windows
- shall be constructed to minimize the accumulation of dirt
  - windows, roof vents or exhaust fans that open to the external environment shall be fitted with removable and cleanable insect-proof screens;
  - where open windows would result in contamination, windows must remain closed and fixed during preparation of food.
- xii) Doors
- shall have smooth, non-absorbent surfaces
  - shall be close-fitting and with suitable precautions to prevent entry of pests. In case of kitchens without doors, measures shall be taken to prevent entry of pests.
- vi) food contact surfaces (including working surfaces and surfaces of equipment)
- shall be in sound condition, and easy to maintain.
  - shall be made of smooth, washable, corrosion-resistant, inert to detergents and disinfectants under normal operating conditions

### 1.3 Equipment & containers

#### 1.3.1 Equipment and containers that come in direct contact with food:

- v) shall be hygienically designed, constructed, located and, if necessary, installed to ensure that they can be adequately cleaned, if necessary, disinfected and maintained to avoid contamination of food.
- vi) shall be made of impervious, non-toxic and corrosion resistant materials that do not transfer odour or flavour to food. They shall be durable, movable or capable of being disassembled to allow maintenance, cleaning, disinfection, monitoring for effective cleaning, pest control
- vii) shall be kept in good order, repair and condition free from holes, cracks or crevices as to minimize any risk of contamination

- viii) shall be able to withstand frequent cleaning and disinfection or operation
- ix) shall be placed to achieve easy and effective cleaning of adjacent areas like floors, walls, ceilings and other surfaces.

### 1.3.2 Food control and monitoring equipment

Equipment used to cook, heat treat, cool, store, freeze or serve food shall be designed to achieve the required food temperatures as rapidly as necessary to meet the food safety requirements, and maintain them effectively. Such equipment shall also be designed to allow temperatures to be monitored and controlled. Where necessary, such equipment should have effective means of controlling and monitoring humidity, air-flow and any other characteristic factor likely to have a detrimental effect on the safety or suitability of food.

### 1.3.3 Containers for chemicals and hazardous substances

Containers for chemicals (eg. cleaning materials, lubricants, fuels, pest control chemicals etc.) or hazardous substances, shall be specifically identifiable and suitably constructed, closable, made of impervious material, be easy to clean, and where necessary to disinfect. Containers holding hazardous substances shall be closed when not in use, stored separately and lockable to prevent malicious or accidental contamination of food.

## 1.4 Facilities/Utilities

### 1.4.1 Water Supply

- vi) Adequate supply of potable water (for example volume, temperature and pressure) shall be available to meet operational and needs.
- vii) Potable water shall be used for cooking, pre preparation, steaming food, making ice cube and drinking purposes.
- viii) Potable water quality shall be as specified in the latest edition of BIS standard on drinking water (IS 10500). Potable water shall be analysed at least semi-annually to confirm that it meets the requirements of this standard.
- ix) Where it is necessary to store water, storage facilities shall be adequately designed, made of food grade material and maintained to prevent contamination.
- x) Where water filters are used, they shall be regularly changed or effectively maintained.
- xiii) Recycled water used in food preparation or for cleaning of food contact surfaces shall not present risk of contamination. It should be of the same standard as potable water.
- xiv) Non potable water (for use in, for example, steam production, firefighting & refrigeration equipment and other similar purposes where it will not contaminate food) shall have a separate system. Non-potable water systems shall be identified and shall not connect with, or allow reflux into, potable water systems.

### 1.4.2 Waste disposal and drainage



- viii) Containers for holding waste shall be in adequate size, made of impervious material, leak-proof, clearly identified, easy to clean, and where necessary to disinfect shall be provided in the premises for collection of waste material.
- ix) It shall be kept closed, preferably foot operated.
- x) Drains shall be designed to meet expected flow loads, constructed so as to prevent accumulation or back flow of waste water. Drains should be located so that they can be easily and effectively cleaned and inspected.
- xi) Drainage shall be equipped with appropriate traps to effectively capture contaminants.
- xii) Disposal of waste shall be done in a hygienic way in accordance with local rules which are enforced from time to time.
- xiii) Wherever existing, refuse stores are to be designed and managed in such a way as to enable them to be kept clean and free from animals and pests.

#### 1.4.3 Cleaning

- iv) Adequate facilities, suitably designated shall be provided for cleaning food, utensils and equipment.
- v) These facilities are to be constructed of corrosion resistant materials, be easy to clean and shall have an adequate supply of hot and cold potable water, where appropriate.
- vi) Utensil and equipment cleaning and sanitizing facilities should be separated from food processing, storage, distribution and handling areas to prevent contamination.

#### 1.4.4 Personnel hygiene and employee facilities

Personnel hygiene facilities shall be available to ensure that an appropriate degree of personal hygiene can be maintained and to avoid contaminating food. Such facilities shall be suitably located & designated.

Adequate numbers, size and means of hygienically washing, drying and where required sanitizing hands (including wash basins and a supply of hot and cold or suitable temperature controlled water and/or sanitizer) shall be provided. Where necessary, the facilities designated for hand washing should be separate from facilities for washing food.

An adequate number of toilets of appropriate hygienic design, each with hand-washing, drying and, where required, sanitizing facilities; shall be available and connected to an effective drainage system. Adequate changing facilities for personnel shall be provided. Toilets and change rooms shall not open directly into rooms in which food is handled and shall be maintained in a clean condition.

Rest & refreshments areas, where provided and designated areas for storage and consumption of food by personnel shall be situated away from the food preparation area so that the potential for cross-contamination is minimized.

#### 1.4.5 Temperature control

Depending on the nature of the food operations undertaken, adequate facilities shall be available for heating, cooling, cooking, , thawing , refrigerating and freezing

food, for storing refrigerated or frozen foods, monitoring, food temperatures and when necessary, controlling ambient temperatures to ensure the safety and suitability of food.

#### 1.4.6 Air quality and ventilation

Food premises shall have adequate natural or mechanical ventilation to effectively remove fumes, smoke, dust, condensation, steam and vapours from the premises. Where temperature and/or humidity are deemed critical to ensure safety and suitability of food, a control system shall be put in place and monitored.

Ventilation systems shall be designed and constructed so that air does not flow from contaminated areas to clean areas and can be adequately maintained and cleaned. Sanitary conveniences are to have adequate natural or mechanical ventilation.

#### 1.4.7 Lighting

Adequate natural or artificial lighting shall be provided to enable the personnel to operate in a hygienic manner. Where necessary, lighting should not be such that the resulting colour is misleading. The intensity (that is, the lux level) should be adequate to the nature of the operation.

Lighting fixtures shall be protected to ensure that food is not contaminated in case of breakages.

#### 1.4.8 Storage facilities

Where necessary, adequate facilities for the storage of food, ingredients, packaging, non-food chemicals and hazardous substances (e.g. cleaning materials, lubricants, fuels) shall be provided. The food storage facilities shall be designed and constructed to:

- i) provide protection from dust, condensation, waste, pest access and harbourage and other sources of contamination.
- ii) be dry, well ventilated and enable monitoring and control of temperature and humidity in storage areas where specified.
- iii) be easy to maintain and clean. All materials and products shall be stored off the floor and with sufficient space to allow inspection and pest control activities to be carried out.

Separate secure storage facilities for non-food chemicals and hazardous substances shall be provided. Such facilities shall be located where there is no possibility for cross-contamination of food or food contact surfaces.

### 1.5 Establishment – Design & Facilities for Temporary Premises

**1.5.1** Premise and structures established shall be sited, designed, constructed and kept clean and maintained in good repair. Adequate measures shall be taken to avoid risks of contamination of food, harbourage of pests and animals. Adequate facilities for safe handling of food and to maintain personal hygiene such as toilets for staff, hot and cold running water, soap and clean towels for handwashing shall be made available.

**1.5.2** Adequate arrangements for the hygienic storage and disposal of hazardous food and / or inedible substances and waste should be available.

## II. CONTROL OF OPERATION

### 2.1 Food Receipt (*Procurement of raw materials and ingredients*)

2.1.1 Receiving of food must be done at a designated place or a specific platform. It must be kept cleaned and where appropriate disinfected.

2.1.2 All packaged raw materials or ingredients or any product used in food preparation or for direct consumption must be procured from FSSAI registered or licenced vendors. Such materials must be checked for 'expiry date'/ 'best before'/ 'use by' date, packaging integrity and storage conditions before accepting them and stored accordingly.

2.1.3 Farm produce like vegetables, fruits, eggs etc. must be checked for spoilage and accepted only in good condition.

2.1.4 Non vegetarian and vegetarian items must be received separately. Non-food items shall not be received at the same time when high risk food items are received.

2.1.5 The FBO should have procedures in place to confirm that the incoming food materials meet the documented specifications (for example visual inspection upon receipt, certificate of analysis, laboratory testing, review of label for allergens, supplier control).

2.1.6 Records of raw material or ingredient or any other material used in processing as well as their source of procurement shall be maintained for inspection.

2.1.7 Receiving temperature of high risk food must be 5°C or below. Receiving temperature of frozen food shall be -18 °C or below. Such food should be transferred as quickly for storage in rooms maintained at the same temperatures.

### 2.2 Food and packaging materials storage

2.2.1 A food business shall store food and packaging/wrapping materials in appropriate areas for effective protection from dust, condensation, drains, waste and other sources of contamination during storage.

2.2.2 Storage areas shall be dry and well ventilated. When storing high risk food, a food business must store it under temperature control (and humidity control where necessary) and if the food is intended to be frozen, ensure that the food remains frozen during storage. Monitoring of temperature and/or humidity shall be applied in such cases.

2.2.3 Refrigerated food of animal origin shall be stored at a temperature less than or equal to 4°C. Other raw materials requiring refrigeration such as fruits and vegetables shall be stored at a temperature allowing their quality to be maintained. Stored raw materials or ingredients shall be kept in adequate conditions to avoid deterioration and protect them from contamination.

2.2.4 All materials and products shall be stored off the floor and with sufficient space between the material and the walls to allow inspection, cleaning and pest control activities to be carried out.

2.2.5 As far as possible, store raw materials separately from semi-finished and finished products (eg. ready-to-cook foods) to prevent cross contamination. Raw meat, fish, poultry shall be stored separately. Also, there shall be a segregation of vegetarian and non- vegetarian food items.

2.2.6 All raw materials, food additives and ingredients shall be stored in separate areas from packaging materials, stationery, hardware and cleaning materials.

2.2.7 The storage of raw materials, ingredients, work-in-progress and processed/cooked or packaged food products shall be subjected to *FIFO (First in First out)*, FEFO (First Expire First Out). For this purpose, suitable date tagging of the items shall be done.

2.2.8 Raw meat and other ingredients that need to be transferred from their original packages shall be handled in a manner that they remain prohibited and with the original label of the product intact or the label to be transcribed in any other form or any other method to ensure traceability of product.

2.2.9 Ingredients containing allergens should be clearly identified and stored to prevent cross-contamination with ingredients and products not containing allergens.

2.2.10 Rejected food products shall be marked and kept away from access for other users.

2.2.11 Hazardous substance like cleaning and sanitization chemicals, pest controls chemicals, fuel, etc. shall be stored away from food handling area where there is a potential risk for contamination. Such substances shall be adequately labelled with information about their identity, use and toxicity.

### 2.3 Pre-preparation

It includes activities like washing of raw materials, cleaning, cutting, peeling, mixing kneading, pasting, etc.

2.3.1 Pre-preparation area shall be clean, free of pests and rodents and in good state of repair. All pre-preparation surfaces shall be kept clean and sanitized before handling food.

2.3.2 Raw materials shall be cleaned, washed in potable water. Fruits and vegetables to be consumed raw shall be sanitized with 50 ppm chlorine before cutting, peeling and/or serving.

2.3.3 Different chopping boards, knives and utensils shall be used for cooked & raw food, vegetarian and non-vegetarian food.

2.3.4 Surfaces coming in contact with food which include chopping boards, knives, peelers, utensils, etc. shall be cleaned thoroughly and if necessary, disinfected after using appropriate sanitisation techniques. Vegetarian cutting boards shall be sanitized with 50 ppm chlorine and non-vegetarian cutting board with 100 ppm chlorine.

2.3.5 Pre-prepared food products being stored for later use shall be date and time tagged.

2.3.6 Thawing of Food - shall be done in such a way so as to minimise the risk of growth of pathogenic microorganisms. Items being thawed shall be labelled with defrost date to indicate the beginning of second shelf life. After thawing, food must be consumed within 12 hours.

- i) Meat, poultry and fish shall be thawed in refrigerator at 5°C or in a microwave.
- ii) Shellfish, seafood and any such special product that need to be thawed in running water shall be done in potable running water maintained at 15°C or less. The thawing in running water shall not exceed 90 minutes.
- iii) Any other means of thawing apart from refrigeration, in running water and microwave is not allowed.
- iv) Liquid coming from defrosting if posing threat/risk to health should be drained off adequately.
- v) Food once thawed shall not be re-freezed for future use.

## 2.4 Food preparation

2.4.1 Cooking/processing/preparation shall be done only in food grade containers/ equipment taking adequate precautions to prevent contamination from foreign matter.

2.4.2 Vegetarian food shall be cooked to a minimum of 60°C for 10 minutes or 65°C for 2 minute core food temperature. Non vegetarian food must be cooked for a minimum of 65°C for 10 minutes or 75°C for 15 seconds core food temperature.

2.4.3 Allergenic Contamination - Presence of allergens e.g. nuts, milk and cereal grains must be identified in food ingredients and products and controls shall be put in place to prevent their presence in foods where they are not labelled. Controls to prevent cross-contact of foods containing allergens with other foods shall be implemented e.g. effective segregation of foods containing allergens and other food items during food preparation is important. Where cross-contact cannot be guaranteed, consumers shall be informed.

2.4.4 Where cooking or frying of any kind is done, proper outlets for smoke/steam etc. like chimney, exhaust fan etc. shall be provided

2.4.5 Cooked or semi processed high risk food that is to be refrigerated shall be cooled:

- within 2 hours or less from 60°C to 21°C
- within a further 4 hours from 21°C to 5°C.

2.4.6 In frying operations, only fats and oils suitable for cooking shall be used. Where cooking fats and oil are reused, they shall be assessed to ensure they are fit for purposes. Fat and oil quality should be verified periodically by checking the texture suspended particles and rancidity.

## 2.5. Holding

2.5.1 Prepared food shall be held in clean, food grade and where necessary sanitized equipment.

2.5.2 Hot holding for vegetarian and non-vegetarian foods intended to be consumed hot shall be done at 65°C and above.

2.5.3 Desserts and foods intended to be consumed cold shall be held at 5°C or below. Frozen desserts must be held at -18°C or less.

## 2.6. Reheating

2.6.1 Reheating of food shall be done in such a way that the food is heated uniformly and it must be assured that core temperature of food shall reach 75°C.

2.6.2 Indirect heating method like adding hot water or reheating under bain mairé or reheating under lamp are not permitted.

2.6.3 High risk food such as raw and cooked meat, fish, poultry, cooked gravies, etc. that are reheated shall not be cooled and reheated again for using second time

## 2.7 Food Display and Service

2.7.1 Food Portioning: Portioning of food shall be done in strict hygienic conditions, in clean and sanitized utensils. High risk food shall be portioned in a refrigerated area, if not should be held out of refrigeration for less than 30 minutes. In large scale food preparation, where cooked and refrigerated food cannot be divided into portions within 30 minutes, portion shall be carried out in an area with temperature 16-23 °C or below. The food product shall be served quickly or stored at 5°C or below.

2.7.2 Prepared food shall be displayed/ served in clean, food grade and (where necessary) sanitized equipment, utensils, serving spoons, cutlery, etc. and shall be kept covered.

2.7.3 Each food item shall have a separate handling tool such as ladle, spoon tong, etc. at the time of serving and there should be no direct handling of ready to eat food through bare hands.

2.7.4 Temperature of hot food to be displayed or served hot shall be maintained at 65°C or above and cold food shall be maintained at 5°C or below. Temperature of frozen item at display or at the time of serving shall be maintained at less than -18°C.

2.7.5 Hot food can be kept below 65°C for up to 2 hours but this can be done only once. If any food product is left after that time it shall be reheated above 75° C for a minimum contact time of 2 minutes and put back to hot holding. Such food shall not be reheated again.

2.7.6 Cold food can be kept above 5° C but below 10 °C for up to 2 hours but this can be done only once. If any food is left after this, it shall be discarded. Dry savouries can be at displayed at room temperature with the indication of use by date visible to consumers.

2.7.7 Cutlery, crockery used of serving food shall be clean and sanitized. Disposable serving plates, cutlery and other items such as straw, stirrers, etc. shall be clean and free from contamination. They shall be made from food grade material and dyes only.

2.7.8 Dispensing containers used for accompaniments at dining service like salt, pepper, sauces etc, shall be clean, sanitized and should be free of foreign matter and pests. While refilling these containers, care shall be taken to avoid contamination.

## 2.8 Food Packaging and wrapping

2.8.1 Packaging and wrapping material (wherever used) coming in contact with food shall be clean and of food grade in conformance with FSS packaging and labelling Regulations.

2.8.2 The food packaging/ wrapping materials shall be inspected before use to prevent using damaged, defective or contaminated packaging, which may lead to contamination of the product.

2.8.3 Wrapping and packaging operations shall be carried out so as to avoid contamination of the products.

2.8.4 Nothing shall be served/packaged/ wrapped in newspapers or any other such material which is not declared as food grade.

## 2.9 Food Transportation

2.9.1 Food transportation vehicle should be designed, constructed, maintained, cleaned and used in a manner that protects the food from contamination. Regular pest control of these vehicles shall be done.

2.9.2 Any transport of food like carrying raw materials into the food zone or movement of semi processed or processed items within the food zone or transport of prepared food from one place to another shall be protected from pests, foreign matter contamination and environmental pollution.

2.9.3 Food transport equipment that are intended to be in direct contact with food products should be constructed with non-toxic, food grade materials, which shall also be easy to clean and maintain.

2.9.4 High risk hot foods shall reach the point of consumption within two hours of preparation. Where food is to be transported over longer periods of time, then the temperature during transport shall be maintained at 65°C. Alternatively, the food shall be first chilled to 5°C or below (as per Section 2.4.5 above) and then transported with the temperature during transport maintained at 5°C or below.

2.9.5 All high risk food required to be served in chilled condition must be maintained during transport at 5°C or below. If transported at normal temperature, then the food shall be consumed within 4 hours.

2.9.6 All frozen items must be taken only in freezer or such ice boxes maintaining required temperature i.e. -18° C or below.

2.9.7 No trolley, tub or container which is used for carrying any other material like garbage, coal, chemicals, engineering or other supplies shall be used for transport of food materials.

2.9.8 Food vans of caterers must be covered and should have proper locks to prevent entry of rodents and pests and be protected against any other threat to food safety during transport.

2.9.9 Food and non-food products transported at the same time in the same vehicle shall be adequately separated (eg. Wrapped and packed) to ensure that there is no risk of food spillage or contact that may contaminate the food.

2.9.10 If different types of food are transported within a vehicle, precaution should be taken to avoid cross contamination. For example, if both raw meat and ready to eat food are transported at the same time, they should be wrapped or kept separate covered and placed so that no cross contamination occurs.

## 2.10 Quality control

2.10.1 The food business operator shall have a quality control programme in place to include inspection and testing of food products bi-annually and water samples annually being used for food production. Adequate infrastructure including a laboratory facility and trained and competent testing personnel should be available for carrying out testing. Calibration of laboratory equipments shall be done periodically.

2.10.2 In case adequate in-house test facilities are not available, a system shall be in place for testing these materials in an NABL accredited external laboratory/ laboratory notified by FSSAI.

2.10.3 Records of testing shall be maintained

## III. ESTABLISHMENT – MAINTENANCE AND SANITATION

### 3.1 Cleaning and sanitation

3.1.1 Food premises and equipment shall be maintained in an appropriate state of repair and cleanliness in order to function as intended and prevent contamination of food, such as from metal shards, flaking plaster, food debris and chemicals.

3.1.2 Appropriate measures shall be taken when rooms, equipment and utensils are cleaned or disinfected in order to prevent contamination of the food eg. by water, washing-up liquids or disinfection agents.

3.1.3 Cleaning and disinfection chemicals shall be non-toxic, handled and used carefully and in accordance with manufacturers' instructions, for example, using the correct dilutions, and stored, where necessary, separated from food, in clearly identified containers to avoid the risk of contaminating food.

3.1.4 The FBO shall have a schedule for cleaning of the food areas and equipment. There shall be no stagnation of water in any food zone. All spills and food debris must be cleaned after every session. Special focus shall be there in handling critical areas like kitchen exhaust to ensure oil dripping back into food process or product is avoided.

3.1.5 Equipment and utensils shall be cleaned as frequently as required and disinfected, wherever necessary. The necessary cleaning methods and materials will depend on the nature of the food business. Cleaning can be carried out by the separate or the combined use of physical methods, such as heat, scrubbing, turbulent flow and vacuum cleaning or other methods and chemical methods using detergents, alkalis or acids. Cleaning procedures generally involve:



- i. Pre-scraping the utensils and surfaces and rinsing with water to remove most of the food residues, dirt and debris present
- ii. Washing with warm water and detergent by agitation to loosen the remaining food residues and dirt
- iii. Rinsing with clean water to remove the loosened residue and dirt
- iv. Where necessary, equipment can be sanitized using appropriate method.
- v. All clean and sanitized (where applicable) equipment and utensils shall be dried by evaporation and later stored in a clean places barring access of dust and pests.

## 3.2 Maintenance

3.2.1 A system of planned maintenance shall be in place covering all equipments that are critical to food safety. The maintenance programmes should cover the maintenance procedure, frequency and identification of the person (and/ or external agency) responsible for maintenance activity. Any measuring or monitoring devices used to monitor and/or control food safety hazards shall be calibrated at defined frequencies or at least once a year.

3.2.2 Lubricants, greases which come in contact with food shall be food grade.

## 3.3 Pest Control Systems

3.3.1 Suitable pest control programme shall be in place for controlling or eliminating the risk of pest infestation in the premises. The pest control programme shall identify the pests to be controlled, the area/locations where control is to be applied, the method of control using permissible physical, chemical or biological agents, the permitted dosage in case of chemicals agents, the schedule, responsibilities etc. This shall include use of insectocutors, traps and baits as appropriate. Rodent traps, when used shall be in adequate number and mapped. Insectocutors, when used shall be functional and the collection tray cleaned at regular intervals.

3.3.2 The pest control activities including pest infestations shall be performed by trained and authorized personnel. These shall be continuously monitored for their effectiveness to ensure that there are no signs of pest infestation. Updated records of pest control measures taken and pest control contracts shall be available. It shall be ensured that pest control chemicals or activity does not contaminate food.

3.3.3 Animals, birds and pets shall be excluded from the food premises.

## 3.4 Waste disposal Management

3.4.1 Accumulation of food waste, non-edible by products and other refuse shall not be allowed in food handling or storage areas. Waste shall be segregated into wet and dry garbage. Arrangements shall be made to prevent cross contamination like removal of waste after each cycle of meal preparation to prevent microbial degradation Waste stores, if existing must be kept appropriately clean and free of pests.

3.4.2 Disposal of waste shall be done in a hygienic way in accordance with local rules which are enforced from time to time.

## IV. ESTABLISHMENT – PERSONAL HYGIENE

### 4.1 Health Status

4.1.1 Food handlers and employees of the food establishment shall undergo a medical examination by a registered medical practitioner annually to ensure that they are free from any infectious and other communicable diseases. A record of these examinations shall be maintained.

4.1.2 The employees in the food premises shall be inoculated against the enteric group of diseases as per recommended schedule of the vaccine and a record shall be maintained.

### 4.2 Illness and injuries

4.2.1 Personnel known, or, suspected to be suffering from, or to be a carrier of a disease or illness likely to be transmitted through food, shall be prevented from handling food or materials which come in contact with food.

4.2.2 Employees shall report the following conditions to the management/supervisor for possible exclusion from food handling areas – jaundice, diarrhoea, vomiting, fever, sore throat with fever, visibly infected lesions, (boils, cuts or sores) and discharges from ear, eye or nose. Medical examination of a food handler shall be carried out apart from the periodic medical examination, if clinically or epidemiologically indicated.

4.2.3 In food-handling areas, personnel with open cuts, wounds or burns shall be required to cover them with suitable water-proof dressings before starting operations. Any lost dressing must be reported to supervision immediately. The dressings should preferably be brightly coloured and metal detectable.

### 4.3 Personal Cleanliness

4.3.1 Food handlers shall maintain a high degree of personal cleanliness and shall wear work clothing, head covering, and footwear that is fit for purpose, clean and in good condition (eg. free from tears, rips or fraying material). Work wear shall provide adequate coverage to ensure that hair, beards, moustaches, perspiration, etc. cannot contaminate the product.

4.3.2 Where gloves are used for food contact, they shall be clean and in good condition.

4.3.3 Protective clothing mandated for food production/preparation areas or hygiene purposes shall not be used for any other purposes.

4.3.4 All people entering food processing, storage, distribution and handling areas shall wash their hands with soap and potable water, followed by drying and sanitizing, where required:

- before starting work;
- after handling chemicals;
- after handling incompatible food products (for example, raw versus cooked or ready-to eat) or contaminated materials;
- after breaks;
- after coughing or sneezing or blowing their nose; and
- after using toilet facilities.

- after using telephone / cell phones,
- after smoking in designated areas etc.
- After handling currency

Personnel hygiene practices in simple local language or a language understood by personnel or a pictorial should be suitably displayed in appropriate places.

4.3.5 Fingernails shall be kept clean without nail polish and trimmed.

#### 4.4 Personal Behaviour

4.4.1 The FBO shall implement an effective personal hygiene programme that identifies hygienic behaviour and habits to be followed by personnel to prevent contamination of food.

4.4.2 Any behaviour or unhygienic practices which could result in contamination of food shall be prohibited in food production, distribution, storage and handling areas. This includes smoking, chewing or eating, sneezing or coughing over unprotected food, spitting.

4.4.3 Personal effects such as jewellery, watches, pins or other items should not be worn or brought into food handling areas if they pose a threat to the safety and suitability of food.

4.4.4 Food contact tools and equipment shall not be kept in personal lockers.

#### 4.5 Visitors

The Food Business shall ensure that visitors to its food preparation or handling areas must wherever appropriate, wear protective clothing, footwear and adhere to the all the personal hygiene provisions envisaged in this section.

### V. ESTABLISHMENT – PRODUCT INFORMATION AND CONSUMER AWARENESS

#### 5.1 Product information

There shall be a clear indication in every food displayed or packed regarding vegetarian or non-vegetarian logo and handling instructions (where applicable). In case of ready-to-eat food that is served, appropriate directions can be given through menu cards, boards etc. Information should also be suitably given to consumers regarding contact details of person to be contacted in case of allergy.

#### 5.2 Consumer awareness and complaint handling

The Food Business shall have a system to handle product complaints with identified person or people responsible for receiving, analysing and addressing complaints. Based on the nature of the complaint, necessary corrective actions including a review of the GHP/GMP system may need to be taken to prevent the occurrence of the complaints

### VI. ESTABLISHMENT – TRAINING AND MANAGEMENT

## 6.1 Training

6.1.1 The Food Business shall ensure that all the food handlers are instructed and trained in food hygiene and food safety aspects along with personal hygiene requirements commensurate with their work activities, the nature of food, its handling, processing, preparation, packaging, storage, service and distribution.

6.1.2 Trainings shall be periodic, recorded and its effectiveness measures by evaluation or other suitable methods. Routine supervision and checks shall be done to ensure that food hygiene and food safety procedures are being carried out effectively.

6.1.3 Training programmes shall be routinely reviewed and updated wherever necessary.

## 6.2 Instruction and Supervision

The type of supervision needed will depend on the size of the business, the nature of its activities and the types of food involved. Managers and supervisors with the necessary knowledge and skills of food hygiene principles and practices shall supervise and monitor all operations appropriately to be able to judge potential hazards and take the necessary preventive and corrective action to remedy deficiencies.

## VII. ESTABLISHMENT – AUDIT, DOCUMENTATION AND RECORD KEEPING

7.1 The FBO shall conduct a self-evaluation of the process to verify the effectiveness of the implemented food safety system at periodic intervals through internal / external audits or other mechanisms, but at least once in a year. Necessary corrective actions based on self-evaluation results shall be taken.

7.2 The important records that shall be maintained and kept for an appropriate time include incoming material checks, inspection and testing, cleaning and sanitation, as appropriate, calibration, water testing, operational controls (such as temperature, pressure, time etc.), storage, cleaning and sanitation, pest control, medical examination and health status of food handlers, training etc.