

## **Good Warehousing Practices**

### **A. Premises**

1. The food storage facilities should be located away from objectionable odours, smoke, dust and other contaminants.
2. The warehouse should be of sufficient size to allow handling and storage of food products in a manner that does not result in product contamination.
3. The warehouse should be properly ventilated to prevent condensation.
4. Openings leading to exterior should be meshed to prevent the entry of pests. Windows should be kept closed or in some instances, installed with insect-mesh screens.
5. Floors should be non-slip, evenly graded to prevent water stagnation and drained off to trapped outlets protected by a grille.
6. Floors are to be constructed using impervious, non-toxic, non-absorbent and crack-resistant materials.
7. Walls should be made of smooth, durable, impervious, crack-resistant materials that can be cleaned easily.
8. All ceilings are to be constructed and finished so as to prevent condensation, leakage, formation of mould and be easily cleaned.
9. Doors are to be constructed of smooth and readily cleanable surfaces.
10. Doorway through which food products are conveyed, should be sufficiently wide and constructed to be tight fitting and self-closing to prevent pest entry.
11. Proper signage should be provided for all storage and non-storage-rooms.
12. Adequate lightings have to be provided to permit effective cleaning and to ensure that the storage operations can be carried out in a hygienic manner.
13. Lightings are to be enclosed with shatterproof covers so as to ensure that food or food package surfaces are not contaminated by breakages.
14. No processing of food should be carried out in the warehouse.
15. Good housekeeping practices should be observed at all times.

## **B. Toilets**

1. Toilets must not open directly into any place where food products are stored.
2. Hand wash basins equipped with liquid detergent and disposable paper hand towels are to be provided adjacent to the toilets.

## **C. Chillers & Freezers**

1. The recommended temperature of the chillers is 4°C and below, and that of freezers is -18°C or below.
2. Chillers & freezers must not be overloaded beyond their designated capacity.
3. Adequate racks should be erected inside chillers & freezers to allow proper storage of food products.
4. Chillers and freezers are to be maintained in a sanitary condition at all times.
5. Temperature recording equipment with suitable alarms should be fitted to all storage facilities or there should be a system of recorded manual temperature checks.

## **D. Storage Condition**

1. Food products are stored separately from non food products.
2. Stocks are rotated according to the 'First In First Out, FIFO system' or 'First Expire First Out, FEFO system' and adequate records for the system must be kept.
3. The food products, if stacked up, should be of a reasonable height for ease of handling and to prevent falling.
4. The food products should be stored off the floor and away from the walls.
5. Pallets used for the storage of food products are in good usable condition and free from damages such as cracks, protrusion of nails and wooden splinters.
6. Cleaning materials or any other hazardous chemicals should not be stored in the warehouse, but in designated areas with proper labelling.

## **E. Transport**

1. The cold chain of a chilled or frozen food should not be interrupted during the storage of such food.
  - For chilled food products, the temperature is maintained at 4°C or below and with a core temperature not exceeding 7°C during transportation.
  - For frozen food products, the temperature is maintained at -18°C or below and with a core temperature not exceeding -12°C during transportation.

- 2 Non-refrigerated food products are to be delivered in covered vehicles.

**F. Personnel Hygiene**

1. Eating, drinking, smoking, chewing of gum or tobacco, littering and other undesirable behavior at designated areas in the premises is prohibited.
2. Any person who has or appears to have an infectious disease, open lesion, including boils, sores, or infected wounds, or any other abnormal source of microbial contamination must be excluded from any operations.

**G. Pest Control**

1. There should be pest management practices in place to prevent the harborage and breeding of pests on the grounds and within the warehouse facility.
2. No pets including birds and animals are to be kept within or around the warehouse premises.

*Updated on 26 September 2011*