

**SALIENT FEATURES OF QUALITY CONTROL ACTIVITIES WHICH SHALL BE PART & PARCEL OF TERMS & CONDITIONS OF CONTRACT.**

**1. PRE-STORAGE STEPS:**

A well-planned work is necessary in order to avoid haphazard handling of stocks and ensure proper accounting and preservation of custom. Therefore, before fresh custom is received in the warehouses, the Warehouse Service Provider should be fully prepared to receive it. In this connection, the Warehouse Service Provider should attend to the following points.

- i. Check up the warehouses to ensure that there is no leakage and drainage is in perfect condition.
- ii. Cleanliness and disinfestation of warehouses.
- iii. Estimation of capacity.
- iv. Drawing up of stack plan.
- v. Dunnage.

**2. CARE OF GRAIN DURING STORAGE:**

**A. CLEANLINESS:**

The warehouses should be swept regularly at least twice in a week and kept in neat, tidy and hygienic condition. All webs on the wall roof, alley way & bags should be removed regularly and bags should be properly brushed and cleaned. No loose grains should lie on naked floor.

**B. PROVISION OF SAMPLE BAGS:**

Adequate number of sample bags should be provided in each warehouse. All the samples drawn from the stacks for the purpose of inspection should also be kept in these sample bags after thorough cleaning.

**C. AERATION:**

Doors, Windows and ventilators of the warehouses should be kept open on clear/dry/sunny days for aeration.

**D. SPRAYING:**

As soon as the stack is complete, it should be sprayed as per following norms:

<b>Name of Insecticides</b>	<b>Nature of insecticides</b>	<b>Dosages</b>	<b>Remarks</b>
Deltamethrin 2.5 % WP with dilution 40 grams per litre.	Contact Poison	Sprayed @3 litres solution per 100 square meter	Once in 90 days.

#### **E. DETERMINATION OF SURFACE:**

The surface area of a stack should be calculated for its five sides by applying the formula  $2h(L+B) + (LXB) + 10\%$  of there on should be added as an allowance for inter bag space.

#### **F. FORTNIGHTLY INSPECTION:**

Warehouses and stocks should be thoroughly inspected at least once a fortnight. During rains the inspection should be frequent. Inspection should consist of:-

- i. Check up warehouse walls, roof and floor.
- ii. Check up peripheral, top and bottom layer bags in case of bag storage.
- iii. Check up of representative sample of each stack.
- iv. Check up of stocks of different depths/sides in case of bulk storage.

#### **G. DURING INSPECTION, FOLLOWING SHALL BE ASCERTAINED AS TO WHETHER:-**

- 1) Proper standard of warehouse hygienic and cleanliness is being maintained.
- 2) There are any leakage/cracks and warehouses and in need of any repairs.
- 3) There is any likelihood of damage to stocks due to warehouse leakage.
- 4) The floor is free from seepage or not, if not, whether the stocks are likely to get damaged due to seepage.
- 5) There is any heating etc. in the stocks.
- 6) The stocks require turnover owing to heating.
- 7) There is any cake formation along walls in case of bulk storage.
- 8) The grain of bottom layer bags and other bags is dry, if not whether there is any likelihood of damage to stocks on account of excessive moisture.
- 9) The stocks are free from infestation. If not, what is the kind and magnitude of infestation and whether spraying /fumigation of the stocks is warranted?
- 10) There is any damage to stocks due to infestation and, if yes, to what extent.
- 11) There are any stocks warranting immediate disposal for reasons of deterioration.
- 12) The fumigation has been done in time.
- 13) The stocks have been dusted on due dates.
- 14) There is any rat trouble in the warehouse.
- 15) There is any damage to stocks caused by rats.

The observations made during inspection should be recorded in the stack wise inspection register and stack cards. Whatever action is required on above points as a result of inspection should be taken at once. A detailed report about the action taken and required to be taken should be sent to Divisional Manager of PUNGRAIN.

**H. FUMIGATION:**

In case of infestation, the stocks should be fumigated with Al. Phosphide under leak Proof covers as per following norms:-

Dosage-3 tablets or 9 grams per MT of stocks Exposure period:1week

Dosage	Remarks
Fumigation under Gasproof cover: 3 Tablets or 9 gram per MT of stocks	Immediate fumigation, resorted to as and when infestation of pest is noticed, fumigation is to be imparted as per advice of Quality Control officers/officials

After fumigation is carried out, it should be noticed if there are any crawling insects on the top of stacks or on sides, if fumigated, under gas proof cover it should be presumed that the fumigation operation has not been successful. The cause should be looked into and avoided for future operations & stocks should be fumigated again and after exposure period of fumigation the bags and the stacks should be cleaned and brushed thoroughly to remove as hand dead pest & stocks should be sprayed with Deltamethrin to eliminate the chances of any living pest.

The Warehouse Service provider shall purchase all insecticides required for maintaining the health of stocks well in advance. However, Warehouse service provider shall be responsible for disposal of empty insecticide containers as per the procedure laid down in THE INSECTICIDES ACT, 1968 and the Rules framed thereunder.

**3. PROVIDING OF NECESSARY INFRASTRUCTURE FOR PROPER UPKEEP OF HEALTH OF FOODGRAIN STOCKS IN WAREHOUSES BY THE INVESTERS AT WAREHOUSES:**

THE FOLLOWING ITEMS ARE REQUIRED TO BE PROVIDED BY THE WAREHOUSE SERVICE PROVIDER IN THE WAREHOUSES-10,000 MT CAPACITY AS A UNIT OR FRACTION/MULTIPLE THEREOF: