WAREHOUSE MANAGEMENT POLICY 2017



CATHOLIC CHARITIES

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1. Introduction

Warehouses, defined here, are facilities that provide a proper environment for the purpose of storing goods and materials that require protection from the elements. Warehouses must be designed to accommodate the loads of the materials to be stored, the associated handling equipment, the receiving and shipping operations and associated trucking, and the needs of the operating personnel. The design of the warehouse space should be planned to best accommodate business service requirements and the products to be stored/handled. The economics of modern commercial warehouses dictate that goods are processed in minimal turnaround time.

Any damage or theft to the materials is going to increase cost to the organization. So it becomes important for organization to have a robust and effective warehouse as well as material's management.

Warehouse Management for Catholic Charities

The place where raw material and/or finished goods are stored is referred to as warehouse or store. Generally, warehouse is structure or building design keeping in mind raw material and finished goods it is going to store. Therefore, warehouse management should be able to:

- Receive the purchase goods and entered upon the stock register.
- Inventory Accounting of raw material, work-in-progress or finished goods.
- Preservation of the inventory
- Ability to access goods whenever called upon.
- Appropriate record keeping through coding as to preserve goods and reduce obsolescence.
- Proper stocking of goods as ensure smooth handling.

Functions of Warehouse

The Catholic Charities lays down the following functions for Warehouse.

- To acquire and build godowns and warehouses at such places in the operational areas, as it may, after consultation with the Board of the organisation determine;
- To run warehouses in the State for the storage of relief and notified commodities;
- To arrange facilities for transport of relief and notified commodities to and from warehouses;

- To act as an agent of the Warehousing or of the organisation for the purpose of the purchase, storage and distribution of relief and notified commodities;
- To carry out such other functions as may be prescribed.

2. STAFFING NEEDS

Catholic Charities require one professional and experienced store keeper who has the following skills and meeting TOR's

2.1 JOB DESCRIPTION:

Under direction, performs a variety of shipping/receiving, stocking activities; stores and distributes supplies and equipment; maintains inventory and stock records; may serve as a lead worker to other classified staff in the area; and perform related work as required.

2.2 SCOPE:

The Storekeeper is responsible for all warehouse operations activities including shipping and receiving, deliveries, coordinating stock, documenting warehouse transactions, maintaining records, and overseeing storage of surplus inventory and property for the District.

2.3 KEY DUTIES AND RESPONSIBILITIES:

- Receives and inspects all incoming materials and reconciles with purchase orders; processes and distributes documentation with purchase orders; reports, documents and tracks damages and discrepancies on orders received.
- 2. Makes intra- and inter-campus deliveries of requested surplus office furniture and merchandise; Maintains records of all deliveries.
- 3. Fills supply requisitions; assists buyer to order adequate merchandise and supplies; delivers orders to faculty and staff.
- 4. Receives, stores, tags and tracks surplus property; prepares property lists for items to be sold at auction.
- 5. Receives and stores documents and confidential files; maintains record of approved document and confidential file destruction.
- 6. Ships canceled and damaged items back to vendors as appropriate.
- 7. Delivers and sets up furniture for various campus events as requested.
- 8. Handles and documents storage and transportation of hazardous materials.
- 9. Maintains the warehouse, records area and stores area in a neat and orderly manner.
- 10. Answers questions regarding procedures and resolves discrepancies regarding receipts, deliveries, Warranties, repairs and surplus property.

- 11. Trains and directs the work of student assistants.
- 12. May serve as a lead worker to other classified staff in the area.

2.4 EMPLOYMENT STANDARDS

ABILITY TO:

Perform general storekeeping and warehouse duties; maintain accurate manual and computer records; perform physical labor; understand and carry out oral and written instructions; drive a forklift; maintain cooperative working relationships; demonstrate sensitivity to, and respect for, a diverse population.

KNOWLEDGE OF:

Modern warehouse procedures, including methods of proper and orderly storage and issuance of materials; basic stock inventory procedures; requisitions, purchase orders, invoices, packing slips, bills of lading, freight tags, and the use and meaning of each; computerized warehouse record keeping systems.

MINIMUM QUALIFICATIONS:

Graduation from high school.

EXPERIENCE:

Two years increasingly responsible experience working in warehouse and storage operations.

SPECIAL REQUIREMENTS:

Must be able to perform physical activities

3. STORAGE FACILITIES

CAPACITY AND DIMENSIONS

The Catholic Charities Warehouse will be Medium sized godowns: Capacity above 1000 MT and upto 5000 MT. The height of a road fed godown is 5.6m and that of a rail fed godown is 6.35m. The stack size for both 2500 MT and 5000 MT godown is 9.15m X 6.1m X 4.57m.

As per the Indian Standard code of practice for bagged food grain storage structures (IS: 607-1971), the passage between the two stacks is 1.56m, parallel to the width of the building, and 0.76 m in the longitudinal directions and around the stacks at the periphery.

LOCATION

The structure shall be located on a raised well-drained site, not liable to flooding or inundation and it shall be away from a place likely to be affected by seepage water.

The construction of godowns in the residential areas should be avoided. In selecting the location, maximum attention should be paid to the hygienic and sanitary conditions of the area and the following minimum distances should be maintained.

There shall be no trees near the structure, the roots of which affect the foundation. The structure should be at least 3 m away from any branches of trees, poles etc. so as to avoid the access by rodents.

The structure should preferably be situated near a transport head or a main road. If the structure is located in the interior, an approach road suitable for the movement of trucks and trollies shall be provided.

At the site of the structure, there shall be sufficient parking and maneuvering space for vehicle. If the structure is situated at a ferry head, railway station, airport, etc. sufficient berthing, loading and unloading facilities shall be made available.

FLOORING

The flooring in the godown should be damp proof, rigid, durable and free from any cracks and crevices. The flooring will comprise of the following layers:

- 1. Selected earth filling well consolidated and stabilized to avoid possibility of settlements and cracks,
- 2. A layer of sand filling 23 cm thick thoroughly watered and well consolidated,
- 3. A layer of cement concrete (1:5:10) 7.5 cm thick,
- 4. A layer of bitumen maxphalt 80/100 or equivalent spread uniformly at the rate of 1.7 kg/ m² or a layer of 700 gauge polythene sheet,
- 5. A further layer of cement concrete (1:5:10) 7.5 cm thick over the waterproofing layer of bitumen,
- 6. A top wearing coat of 5 cm thick cement concrete (1:2:4) finished with a floating coat of neat cement shall be provided.

The cement concrete flooring shall be laid in panels not exceeding 3.5 m² in area and a length of 2.5 m in any one of the directions. Such panels shall be suitably adjusted so as to avoid transfer of any uneven load at the joints under the stacking bays and alleyways. Where stone slabs are available at a cheaper rate, the flooring may be of this material.

<u>WALLS</u>

The design of the walls shall be in accordance with the general constructional practices (IS: 1905-1969) and care shall be taken that the tensile stresses do not exceed the cracking limit.

The longitudinal walls shall be of brick or stone masonry in cement mortar (1:6) and shall be atleast 5.60 m high for road-fed and 6.35 m for rail-fed godowns from the floor level. The walls shall be atleast 34 cm thick with RCC columns at a spacing of 4.65 m centre to centre in order to provided support for trusses. For gable walls and partition walls also, RCC columns shall be provided at a distance of 4.9 m centre to centre. The gable wall shall be preferably of brick or stone masonry in cement mortar (1:4) upto a suitable height, and at least 46 cm in thickness. The walls shall be plastered with cement mortar (1:6) and shall be rendered smooth both on the outer and inner surfaces. In seismic areas, criteria for earthquake resistant designs of structures shall be followed.

ROOF

Roof shall be of single span structural steel or tubular trusses. These trusses shall be fixed on RCC or stone masonry or brick masonry pillars at a height of 5.60 m for the road-fed and 6.35 m for the rail-fed godown from the floor level to the tie level at the column ends. The roof of the platforms shall be of a cantilever structural steel or tubular trusses fixed on to the RCC columns at a height of 3.35m for road-fed godowns and those fed by meter-gauge railway, and 4.35 m for those fed by broad gauge line. The height shall be measured from the floor level of the godown to the bottom tie of the truss. The design of the trusses shall be in accordance with the general constructional practices and relevant Indian Standards.

The roofing material may be corrugated asbestos sheets or galvanized corrugated sheets, steel sheets or corrugated aluminium sheets. The sheets shall project atleast 46 cm from the outer surface of the longitudinal walls. The sheets shall be fixed on the tubular trusses with 'J' hooks.

DOORS

A door shall be provided preferably opposite each alleyway. The doors shall normally be steel rolling shutters. The doors shall be not less than 2.45 m X 1.83 m.

VENTILATORS

In longitudinal walls two steel ventilators of opening not less than 1.494 m X 0.594 m shall be provided in each bay between RCC columns spaced 4.50 m centre to centre. The ventilators shall be fixed 15 cm below the top edge of the wall measured from inside the godown. They shall be provided with glazed centre-hung with fixed wire

mesh (3.28 cm X 6.56 cm) shutters. In between these ventilators, air inlets of 0.62 m X 0.62 m glazed openable outside double hung in each bay shall also be provided at 60 cm from the floor level of the godown except in those bays in which a rolling shutter is provided.

FINISHING

The internal surfaces of the walls of godown shall be cement plastered and external faces up to floor level shall be smooth plastered. The internal faces may be white washed and external faces provided with colourwash.

All steelwork and woodwork shall be provided with two coats of superior quality paint over a coat of primer so as to prevent against rusting and deterioration.

The paint to be used inside the godown for steelwork and steel/ aluminium sheets shall resist the adverse effects of fumigants.

DRAINAGE

Proper arrangement such as cast iron or asbestos cement pipes of diameter not less than 10 cm shall be provided to drain off the rain water from the roofs of main godown and platform. Their diameter shall also be adequate depending upon the intensity of rainfall of the place. Suitable drainage arrangements such as surface or underground drains to drain the rain water from the storage premises shall be made.

WATER SUPPLY

Water is required only for drinking, washing and toilet flushing purposes. Where municipal supply of water is not available, an independent source such as a tubewell is required. An elevated water tank of required capacity alongwith underground pipes for water supply distribution has to be provided.

ELECTRIC SUPPLY

Electric supply of 220/ 440 volts shall be arranged for water pumping, motors, ventilating fans lighting inside the building and premises lighting. The electric supply may either be taken from an existing LT line or if necessary transformers of adequate capacity shall be installed.

ROADS AND PARKING

10 m wide WBM roads shall be provided between the godowns and at the sides for movement and parking of trucks during loading and unloading. Sufficient parking areas have to be provided separately for trucks and other vehicles.

BOUNDARY WALL

Adequate height compound wall shall be provided along with a gate.

MISCELLANEOUS EQUIPMENT REQUIRED

Adequate office equipment, laboratory equipment (such as sampling and grading equipment, moisture meter, analytical balance, sieves etc.), communication equipment, weighing equipment and firefighting equipment should be provided depending upon the site conditions and specific requirements.

4. SOME IMPORTANT ASPECTS

DESIGN: While designing the foundations of the building, due consideration would have to be given to the safe bearing capacities of the soil. Trail pits and bores should be made before designing the foundation and even before preparing the estimates for the building. Wherever necessary, soil tests and soil load tests would have to be conducted.

For designing structures, the wind loads and earthquake (in earthquake zones) loads would have to be considered.

SUPERVISION: Proper supervision of the quality of construction materials and workmanship is a very important point. For cement concrete and reinforced cement concrete items, it is very necessary to test the cement for strength before commencement of the work, and periodically thereafter during construction. Proper precautions should be taken for good storage of cement in order to ensure that loss of strength of cement due to absorption of moisture is minimum. A long period of storage of cement should be avoided. Proper supervision of work by qualified and experienced engineers has to be arranged.

MAINTENANCE: After the construction is over the maintenance of buildings and roads is very important. All the steel components of the buildings should be periodically painted for increasing their life. Proper cleaning of walls, ceilings and periodical painting of wall surfaces, proper upkeep of the equipment are very essential.

INSURANCE

The structure as well as the stored produce should be insured.

PACKAGE OF PRACTICES

Various storage management practices to be followed are as:

DUNNAGE: The bags are not kept on the floor as it restricts the free movement of air and creates a fertile ground for the growth and development of insects and pests. Dunnage comprising either timber pallets, timber squares, mattings or a layer of polythene sheet sandwitched between two layers of mattings shall be laid on each stack space. As far as possible, locally available and cheaper materials should be used for dunnage.

RODENT/ RAT PROOFING: As a permanent solution, the horizontal projections at plinth level should be provided. Otherwise, any suitable chemical control should be adopted as and when there is infestation, <u>but the projection at plinth level is considered as the best</u>.

ANTI TERMITE TREATMENT: Where termite infestation is anticipated, proper pre-construction anti-termite treatment should be carried out. Where there is no such provision, anti-termite treatment should be done as and when infestation is noticed. The wooden logs used for dunnage should, however, be treated before stacking.

BIRD PROOFING: The ventilators should be fitted with 25 mm X 51 mm size iron mesh for restricting the birds from coming in.

FUMIGATION: Pre-monsoon and Post-monsoon fumigation should be essentially done. Also spraying of insecticides and pesticides should be done as and when any infestation is noticed.

5. REQUIREMENTS OF AN IDEAL STORAGE STRUCTURE

- The object of an ideal grain storage structure is to control and reduce the storage loses from rodents, insects and micro-organisms, birds, moisture and heat to a minimum. In designing and constructing a storage structure following points shall be borne in mind:
- 2. All holes, pipes and ducts and other openings shall be guarded by suitable means, such as gratings, etc., in order to prevent the entry of rats and other vermin.
- 3. The structure shall have smooth, crack free internal surfaces and shall have no unnecessary cavities and projections to prevent the lodgment from insects and vermin. Periodical fumigation and other treatments should be done to eliminate infestation of grains by insects, fungus etc. The structure shall be designed so as to

facilitate its sealing for fumigation or have facility to seal a portion where fumigation has to be carried out, or it may be made completely airtight if required.

- 4. Godowns should have good ventilation arrangement to prevent moisture accumulation in pockets.
- 5. The structure shall be designed to make it possible to control moisture. Moisture may be controlled by adopting methods of construction using non-hygroscopic material, by sound wall, roof and floor construction, by the use of vapour barriers, and by the use of aeration.
- 6. The structure shall be so oriented that it will receive the minimum solar radiation. Reflective external surfaces, insulating materials, sun shades, a minimum of glass surfaces, controlled ventilation and aeration, to reduce the internal temperature may be used.

DO'S AND DON'TS

DO'S

- 1. Locate a godown on a well raised drained site.
- 2. Locate it near transport head.
- 3. Locate it away from pollution sources such as dairy, poultry, slaughter houses etc.
- 4. Locate it away from sources of fire such as kilns, factories etc.
- 5. Provide suitable access, approach, internal roads and maneuvering and parking spaces for vehicles.
- 6. Provide ancillary structures such as office and chaukidar's quarters and services such as water supply, sanitary facilities and electricity.
- 7. Provide sufficient height of plinth to avoid flooding of stocks in times of heavy rains.
- 8. Provide good ventilation.
- 9. Provide damp proof floor.
- 10. Provide leak proof roofs and sufficient projection of roof all round.
- 11. Provide suitable projection at plinth level and use portable steps to enter godowns in order to avoid rats.
- 12. Provide the minimum fire fighting equipment.
- 13. Fumigate the stacks at the required intervals.
- 14. Maintain the buildings, roads and all equipment properly.
- 15. Maintain cleanliness.

DON'TS

- 1. Do not allow poor specification for construction.
- 2. Do not extend stacking beyond the stacking lines.
- 3. Do not exceed stacking of bags beyond the specified limit.
- 4. Do not exceed the dosages prescribed for fumigation.
- 5. Do not keep the infested grains along with good stock.

6. DATA MANAGEMENT / REPORTING

Catholic Charities maintains a copy of information from the source transaction systems. This architectural complexity provides the opportunity to:

- Congregate data from multiple sources into a single database so a single query engine can be used to present data.
- Mitigate the problem of database isolation level lock contention in transaction processing systems caused by attempts to run large, long running, analysis queries in transaction processing databases.
- Maintain data history, even if the source transaction systems do not.
- Integrate data from multiple source systems, enabling a central view across the enterprise. This benefit is always valuable, but particularly so when the organization has grown by merger.
- Improve data quality, by providing consistent codes and descriptions, flagging or even fixing bad data.
- Present the organization's information consistently.
- Provide a single common data model for all data of interest regardless of the data's source.
- Restructure the data so that it makes sense to the business users.
- Restructure the data so that it delivers excellent query performance, even for complex analytic queries, without impacting the operational systems.
- Make decision-support queries easier to write.