



Accelerated Warehousing Development in India

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Background

Warehousing Industry in India: Key Features



- Warehousing is a key requirement for any business that is engaged in manufacture, trade or export / import of goods
 - In India, warehousing accounts for ~25% of overall logistics costs



- India has a warehousing capacity of 108.75 million metric tonne (MMT)
 - Bulk of the capacity is owned by the public sector - Food Corporation of India (FCI), Central Warehousing Corporation (CWC) and State Warehousing Corporations (SWCs)



- Warehousing sector in India characterised by:
 - Highly fragmented and unorganized players - 90% of warehouses have size <10,000 sq.ft. and are operated by unorganised players
 - Lack of standardization
 - Low levels of automation and underdeveloped material handling infrastructure



- Presently, greater participation of organized sector players has been observed on account of several Government interventions like Make in India, Digital India, GST Implementation, Award of infrastructure status to the logistics sector etc.

Category of Warehouses

Warehouses are any premise for storing and/or accumulation of goods under controlled conditions, equipped for providing handling, transportation and value added services, typically characterised as:



Warehouses categorised by **Ownership**

Warehouses can be owned and managed entirely by public sector, private sector through joint ventures / public private partnerships. Basis ownership, India has three categories of warehouses

- Public Warehouses
- Private Warehouses
- Cooperative Warehouses



Warehouses categorised by **Products**

Warehouses can be categorised basis products stored in them, fulfilling specific requirements

- Warehouses to store General Merchandise
- Warehouses to store Perishable or Temperature Sensitive Product
- Warehouses to store Farm Products
- Warehouses to store Hazardous or Dangerous Products



Warehouses categorised by **End-Use**

Addressing specific use and value addition, warehouses can be categorised as

- Bonded Warehouses
- Free Trade and Warehousing Zones
- Temperature / Climate Controlled Warehouses
- Fulfilment Centers
- Distribution Centers
- Retail Warehouses

Key Benefits realised from Warehouses

1

Price Stabilization

- Reduce volatile fluctuations in prices by storing:
 - raw materials in anticipation of price rise
 - finished goods in anticipation of price drops
- Ensure regular supply of goods in anticipation of future demand, which aids to stabilize prices

2

Financing

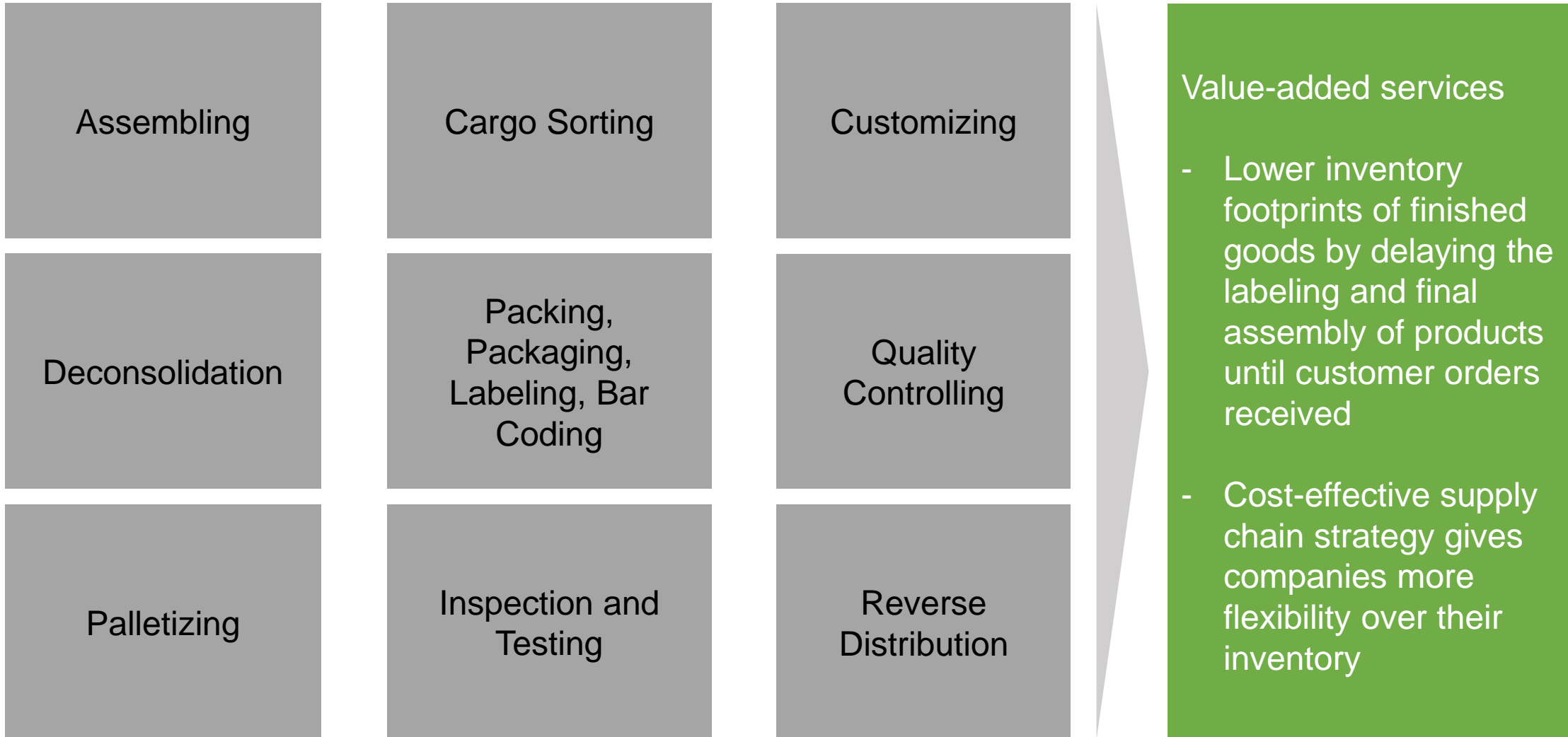
- Warehouses can issue a document in favour of the owner of the goods, called “warehouse-keeper’s warrant”
 - Therefore, while the goods are in custody of the warehouse-keeper, the businesses can obtain loans from banks and other financial institutions keeping this warrant as security
 - In some cases, warehouses also give advances of money to the depositors for a short period keeping their goods as security

3

Risk Sharing

- Warehouses take over the risks incidental to storage of goods, once goods are handed over for storage
- Since it is bound to return the cargo in good condition, the warehouse becomes responsible for any loss, theft or damage, etc. thereby taking all precautions to prevent the same, including taking requisite insurance

Value Added Services of Warehouses



Development of Competitive Modern Warehouse

Framework for Development of Modern Warehouse

Addressing the following key aspects:

- Planning and allocating suitable land for development of warehousing zones
- Standards (both mandatory and voluntary) including building codes and models for various types of warehouses
- Adoption of warehouse management system and other technology enabled solutions - block-chain, AI, automatic identification, data capture, QR codes and RFID systems

Key Parameter	Sub-parameter	Grade C	Grade B	Grade A
Location-based	Size of warehouse	Most basic warehouse aligned to the minimum thresholds and standards	Intermediate warehouses which meets all minimum thresholds and standards, in addition to select additional voluntary interventions to reach higher thresholds / standards	Most advanced warehouse aligned to the highest thresholds and standards, including voluntary adoption
	Permitted end-use			
Building standards-based	Building – internal infrastructure			
	Building – external infrastructure			
	Building – safety and security norms			
	Building – environment sustainability			
Warehouse automation and value-added services	Extent of value-addition			
	Technology - Core processes			
	Technology - Support processes			

Warehouses will be ranked and benchmarked basis the quality of services provided. A gradation mechanism is proposed outlining the minimum requirements

Licensing and Approval Mechanism for Warehouses (1/2)

Government Permissions for setting up Warehouses

Establishment of Warehouses requires multiple interfaces with the Government to secure applicable licenses, approvals and clearances, with regard to planning, construction, operationalization, along with ensuring structural safety, building quality, safety and well-being of workers, adoption of standards for ensuring quality and safety of goods stored etc.

These approvals are required from different levels of Government

- Central Government agencies like Bureau of Indian Standards, Airport Authority of India, National Monuments Authority, National Highway Authority etc.;
- State Government departments like Forest Department, Town and Country Planning Department, Food and Drug Administration etc.;
- District / Local Government agencies like Urban Local Bodies, Local Military Authority (LMA), etc. with most approvals required from State / Local Government

<u>Pre-Establishment Stage</u>	<u>Pre-Operation Stage</u>	<u>Operation Stage</u>
Includes the required registrations, licenses/clearances and department level no-objection certificates to be attained prior to initiating construction of the warehouse	Defines the required registrations, licenses to be obtained, standards to be met at the construction stage and prior to commercial usage of warehouses	Details the compliances, licenses and statutory insurance to be obtained for commercial usage of warehouses

Detail mapping of the approvals and clearances have been given in [Annexure 1](#) and [Annexure 2](#)

Licensing and Approval Mechanism for Warehouses (2/2)

Streamlining Licenses and Approvals

- As part of interventions aimed at enhancing ease of doing business at the national and sub-national level, Department for Promotion of Industry and Internal Trade (DPIIT) has been guiding State / Local Governments in conducting reforms (business reform action plan (BRAP) and district-level reform action plan (DRAP)), to provide regulatory ease and conducive business climate for investors across all sectors
- Logistics Division will work with DPIIT to review the BRAP and DRAP and suggest additional measures that may be required to address the specific requirements for the warehouse sector

Review of BRAP and DRAP by Logistics Division

Inclusion of specific clearances required at the State / District / Local Government level for purposes of the warehousing sector which may not be included in the existing specifications of BRAP / DRAP

Would address underlying policies / regulations, integration with single window systems, defining service levels for provision of such services, inclusion of concerned State / District / Local Governments etc.

Adoption of best practices associated with deemed approvals based on self-certification, increasing reliance on self / third party certifications vis-à-vis mandatory certifications, parallel processing of clearances to reduce turnaround times, grievance redress, etc.

Warehouse on the Cloud



The Logistics Division will develop a National Warehousing Geospatial Register called “Warehouse on the Cloud”



National Warehousing Geospatial Register will ensure compilation of warehouses by their location with their basic characteristics in terms of type of warehouse, product stored, available storage space and other facility related attributes



This data shall be made integral to apps and digitalization initiatives being developed by the Logistics Division, including the iLog platform



The Logistics Division will work with the respective Central / State Government agencies, to create geospatial identification and inclusion of basic facility information in this register as a part of the formal warehouse registration process going forward

Key Strategies - Development of large warehousing clusters and optimize existing assets (1/3)

Facilitation in land acquisition and simplified allotment process

- Development of appropriate policies / guidelines to support State Government facilitate land acquisition - using innovative land pooling / aggregation mechanisms,
- Support in design of guidelines for transparent allotment procedures

- State Governments would be encouraged to develop an inventory of earmarked land, to provide feasible contiguous land parcels for compliant applicants for setting up warehouse.
- All such lands would be mapped via Geographic Information System (GIS) to create such an inventory and the information would be made available in the public domain in real time basis.
- Key details and parameters about land parcels (e.g. soil type, distance from sea-ports, airports, railway stations etc., distance from human habitation and residential area etc.) will also be mapped via GIS.

Allocation of exclusive warehousing zones within Industrial Parks

- Adequate storage facilities for raw materials and finished goods are not available within industrial parks, unless manufacturers create these facilities on their own within their own premises.
- National and state level logistic master plans will identify the need for designating specific zones exclusively for warehousing, preferably within the existing and planned industrial areas.
- In cases where the same may not be possible and warehouses need to be established in geographic proximity of industrial areas, specific focus would be given to ensure fast-tracking the receipt of Change of Land Use and other clearances, provided the warehouse developer meets the requisite design and operational guidelines specified by the State Government policies.

Key Strategies - Development of large warehousing clusters and optimize existing assets (2/3)

Facilitating Zoning and Floor Space Index relaxations

- Specific policies on facilitating relaxation of Floor Space Index for Warehouses will be developed by State Government to permit optimum utilization of land.
- Relaxations to be given on project basis, based on the provisions of the state in which the warehouse is located.
- Further, enabling zoning regulations would be developed as model regulations, to guide permissible activities around warehouse zones in order to permit requisite access width and clearances.

Redevelopment of public sector warehouses

- Central agencies have a substantial share of warehousing space at the national level. Many of these facilities, while being well located, are under-utilized or sub-optimally utilized in terms of their commercialization. Private sector operators would be more than willing to leverage these locations. In this regard, there is a need for:
 - Developing a proper inventory of such warehouses by location, size, and facility design, as detailed earlier under the National Warehousing Geospatial Register.
 - Development of innovative PPP model for facilities of interest, to be facilitated by the Logistics Division.

Industry status to Warehousing Sector

- States will be encouraged to accord status of industry to warehousing units. With grant of industry status, all warehousing units in the state shall be eligible for the following:
 - Financial assistance under the State Industrial Policy, as applicable
 - Power tariff rates as applicable for industrial units across the states
 - All warehousing related units shall fall under the purview of Shops and Establishments Act

Key Strategies - Development of large warehousing clusters and optimize existing assets (3/3)

Multi-Storey Warehouses - Urban Logistics

Challenges

In urban areas, availability of large portions of land and its associated cost, makes warehousing operations prohibitively expensive

Solution

- Optimization of available land by developing multi-storey warehouses, increasing the available warehousing space
- The concept helps in bringing down the average cost of storage space

Added Operational Cost

- Require ramp-access for trucks and commercial vehicles at different floor levels, heavy-duty lifts for inter-floor movement of stackers, trolleys, and forklifts
- Needs a robust and uniform set of standards governing the construction and operating aspects

Way-forward

- Consultative mechanism for development of standards for multi-storey warehouses involving
- Bureau of Indian Standards (for the National Building Code)
 - Ministry of Housing & Urban Affairs
 - State Governments
 - Municipal and Local Bodies

Skill Development



Comprehensive training and certification regime for warehouse related job roles shall be developed in conjunction with Logistics Sector Skill Council ~ Industrial Training Institutes (ITI), and State government supported Apprentice system – integrating them into PMKVY program



Specific modules for managerial roles in warehousing for management of hazardous materials and dangerous goods, food, pharmaceuticals, and agro products to be developed in partnership between leading institutes designated as Logistics Centres for Excellence and Logistics Sector Skill Council



Initiation of a mechanism for helping select ITIs (at least one in each state) to emerge as ‘Centre for Excellence’ in warehouse operation job-role training



Funding for additional equipment, training of trainers, and online training module development shall be part of this mechanism



A mechanism to provide low-cost housing in major industrial or logistics clusters, wherever this is feasible, to trainees participating in such training programs shall be considered, in partnership with state governments and ensuring convergence of potential Government schemes and programs (like Pradhan Mantri Awas Yojana)

Thank You

Annexure 1 - Sector Agnostic Requirements applicable to all Warehouses (1/3)



Sector Agnostic Requirements applicable to all warehouses		
All Warehouses		
	Details of Registration / Approval / Compliance	Competent Authority
Stage 1: Pre-Establishment		
A. Registration	Goods and Service Tax	State Commercial Tax Department
	Registration under Employee State Insurance Act, 1948	Employees State Insurance Corporation
	Registration under Contract Labour (Regulation and Abolition) Act, 1970	State Labour Department
	Registration under The Employees Provident Funds and Miscellaneous Provisions Act, 1952	Employees Provident Fund Organisation
	Registration under Shops and Establishment Act	State Labour Department
	Sale Deed (if land is purchased for establishment of warehouse) or Lease Deed or Rental Agreement (if land is obtained on lease/ rental basis)	State Registration Department
B. Licenses/Clearances/ Approvals / NOCs	Consent to Establish	State Pollution Control Board
	Building Plan Approval	Local Body (Municipal Corporation / Municipality / Village Panchayat, as the case may be)
	No Objection Certificate	State Fire Department

Annexure 1 - Sector Agnostic Requirements applicable to all Warehouses (2/3)



Sector Agnostic Requirements applicable to all warehouses		
All Warehouses		
	Details of Registration / Approval / Compliance	Competent Authority
Stage 2: Pre-Operation		
A. Certification	Certificate from Bureau of Indian Standards (BIS/CWC/FCI Standards)	Bureau of Indian Standards/ Central Water Commission / Food Corporation of India
C. Licenses/Clearances/ Approvals / NOCs	Consent to Operate	State Pollution Control Board
	Completion Certificate for Building Construction	Local Body (Municipal Corporation / Municipality / Village Panchayat, as the case may be)
	Trade License	
	Fire License	State Fire Department
	Approval for Power Connection	State Power Distribution Company
	Approval for Water Connection	State Water Resources Department/ Local Body (Municipal Corporation / Municipality / Village Panchayat, as applicable)

Annexure 1 - Sector Agnostic Requirements applicable to all Warehouses (3/3)



Sector Agnostic Requirements applicable to all warehouses		
	All Warehouses	
	Details of Registration / Approval / Compliance	Competent Authority
Stage 3: Operations		
A. Statutory Compliances	Special Fire Perils Policy	Not applicable
	Maintaining Net-Worth: The minimum Net-worth applies to the warehouse on the basis of total storage capacity of goods in tonnes.	
C. Statutory Insurance	Inventory and Goods Insurance (Rule 3(8), Warehouse Regulations, 2011)	
	Fire Insurance (Rule 3(8), Warehouse Regulations, 2011)	
	Workmen's Compensation Insurance/Employee's Liability Insurance	

Annexure 2 - Additional Approvals for Specific Type of Warehouse/ Storage (1/6)



Additional Approvals for Specific Type of Warehouse/ Storage			
	Warehouse Type/ Sector	Details of Registration / Approval / Compliance	Competent Authority
Stage 1: Pre-Establishment			
A. Registration	Alcohol and Narcotics storage	Excise Registration	State Excise
B. Licenses/Clearances/ Approvals / NOC	Based on size and scale	Statutory Approval of Electrical Drawings (if building height is >15 meters and voltage exceed 650 volts)*	State Electrical Inspectorate
	Based on Location	Forest Clearance, if warehouse is located near forest	State Forest Department
		Permission for cutting specific types of Trees (differs from state-to-state)	State Forest Department
		NOC required if the warehouse area falls within the Air Funnel Zone / Vicinity of the Airport	Airports Authority of India, Ministry of Civil Aviation (Aircraft Act, 1934)
	NOC required if the warehouse area falls under the regulated areas of protected monument/site	National Monuments Authority, Ministry of Culture (Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, 2010)	

* Thresholds may vary across the states

Annexure 2 - Additional Approvals for Specific Type of Warehouse/ Storage (2/6)



Additional Approvals for Specific Type of Warehouse/ Storage			
	Warehouse Type/ Sector	Details of Registration / Approval / Compliance	Competent Authority
Stage 1: Pre-Establishment			
A. Registration	Alcohol and Narcotics storage	NOC required if the warehouse area is in and around Defence Establishments as identified by Ministry of Defence	Local Military Authority (LMA) (Works of Defence Act, 1903)
B. Licenses/Clearances/ Approvals / NOC	Based on size and scale	NOC required if the warehouse area as identified in Coastal Regulation Zone regulations	Coastal Zone Management Authority, Ministry of Environment, Forest and Climate Change (The Environment (Protection) Act, 1986)
	Based on Location	NOC required if the warehouse area is adjoining to the Railway Property as prescribed by Railway Authority	Indian Railways (Head Quarters) (Indian Railways Act, 1989)
		NOC required if the warehouse area is in Buffer zones as prescribed by NHAI along National Highways	National Highway Authority, Ministry of Road Transport and Highways (Indian Railways Act, 1989)
		NOC required if warehouse is planned on land that is assigned/alienated for landless poor persons	District Magistrate of the concerned District, State Law Department
		NOCs required if warehouse is abutting/near to Water Bodies, Water Courses and Nalas	State Irrigation Department / Revenue Department / Public Works Department (as the case may be)
		NOC required if High Tension line is passing through the proposed warehouse	State Electricity Board

Annexure 2 - Additional Approvals for Specific Type of Warehouse/ Storage (3/6)



Additional Approvals for Specific Type of Warehouse/ Storage			
	Warehouse Type/ Sector	Details of Registration / Approval / Compliance	Competent Authority
Stage 1: Pre-Establishment			
B. Licenses/Clearances/ Approvals / NOC	Based on size and scale	Statutory Approval of Electrical Drawings (if building height is >15 meters and voltage exceed 650 volts)*	State Electrical Inspectorate
	Based on Use	Change of Land Use (CLU), in case change in land use required (agricultural land or non-commercial use land in urban area. Also, industrial zone land is reserved for manufacturing activity, while warehousing is considered a commercial activity, and there is need for conversion).	State Town and Country Planning Department
		For all common hazardous waste treatment, storage and disposal facilities (TSDFs) (integrated facilities having incineration & landfill or incineration alone)	State Environment Impact Assessment Authority (SEIAA)

* Thresholds may vary across the states

Annexure 2 - Additional Approvals for Specific Type of Warehouse/ Storage (4/6)



Additional Approvals for Specific Type of Warehouse/ Storage			
	Warehouse Type/ Sector	Details of Registration / Approval / Compliance	Competent Authority
Stage 1: Pre-Establishment			
B. Licenses/Clearances/ Approvals / NOC	Explosives	License for Storage of Explosives (<i>required for dangerous/HAZMAT handling</i>)	Office of the District Authority/Magistrate / Chief Controller of Explosives / Controller of Explosives – Petroleum and Explosives Safety Organisation (PESO) as per Explosive Rules, 2008 – Chapter IV, list is provided in Schedule IV-Part 1
	Hazardous Materials	Approval for Storage of Hazardous materials (<i>required for dangerous/HAZMAT handling</i>)	Chief Controller of Explosives / Controller of Explosives –PESO, as per Manufacture, Storage, and Import of Hazardous Chemicals Rules, 1989.
	Petroleum	For storage of Petroleum	District Authority/Magistrate, Chief Controller of Explosives / Controller of Explosives – PESO as per Petroleum Rules, 2002

Annexure 2 - Additional Approvals for Specific Type of Warehouse/ Storage (5/6)



Additional Approvals for Specific Type of Warehouse/ Storage			
	Warehouse Type/ Sector	Details of Registration / Approval / Compliance	Competent Authority
Stage 2: Pre-Operation			
A. Standards	Pharmaceutical related	Warehouse layout standards to be met as specified in Section 2 of the Act	State Food and Drug Administration (FDA) (Drugs and Cosmetics Rules, 1945)
B. Registrations	Transaction based	Registration of Warehouse (if the warehouse issues negotiable warehouse receipt)	Warehousing Development and Regulatory Authority
C. Licenses/Clearances/ Approvals / NOCs	In case of packaging labelling activities	Registration of Manufactures/ Packers / Importers of Packaged Commodities	State Controller of Legal Metrology (Legal Metrology (Packaged Commodities) Rules, 2011)
	Based on size and scale	Final Safety Certificate (if building height is >15 meters and voltage exceed 650 volts)*	State Electrical Inspectorate

*Thresholds may vary across the states

Annexure 2 - Additional Approvals for Specific Type of Warehouse/ Storage (6/6)



Additional Approvals for Specific Type of Warehouse/ Storage			
	Warehouse Type/ Sector	Details of Registration / Approval / Compliance	Competent Authority
Stage 3: Operations			
A. Registration	Bonded Warehouse	Customs Registration <i>[required for dealing in EXIM products]</i>	Central Board of Indirect Taxes and Customs
	Cold Storage	Cold Storage License	Food Safety and Standards Authority of India (FSSAI)
B. Licenses/Clearances/ Approvals	Food Product Storage	License for food business (Form B)	Food Safety and Standards Authority of India (FSSAI)
	Commodities identified under Essential Commodities Act	Clearance under Essential Commodities Act	State Consumer Affairs Department
	Warehouses handling e-waste	Approval for disposal of E-Waste	State Pollution Control Board (E-Waste Management Amendment Rules, 2018)