Standard Operating Procedures

(Minimum requirement for warehouses registered with WDRA)

Warehousing Development and Regulatory Authority,
Government of India

Background

Need for Standard Operating Procedures (SOPs) for operation of warehouses

The purpose of this document is to provide guidance for operation of a warehouse and to promote efficiency in conduct of warehousing business, with an objective to promote professional organisations connected with the warehousing business, negotiability of warehouse receipts and to prescribe standard operating procedures to ensure effective and credible warehousing of food grains / agricultural/ horticultural commodities and non-agricultural commodities/ goods.

Requirement of Standard Operating Procedures under the Warehousing (Development and Regulation) Registration of Warehouses Rules 2017

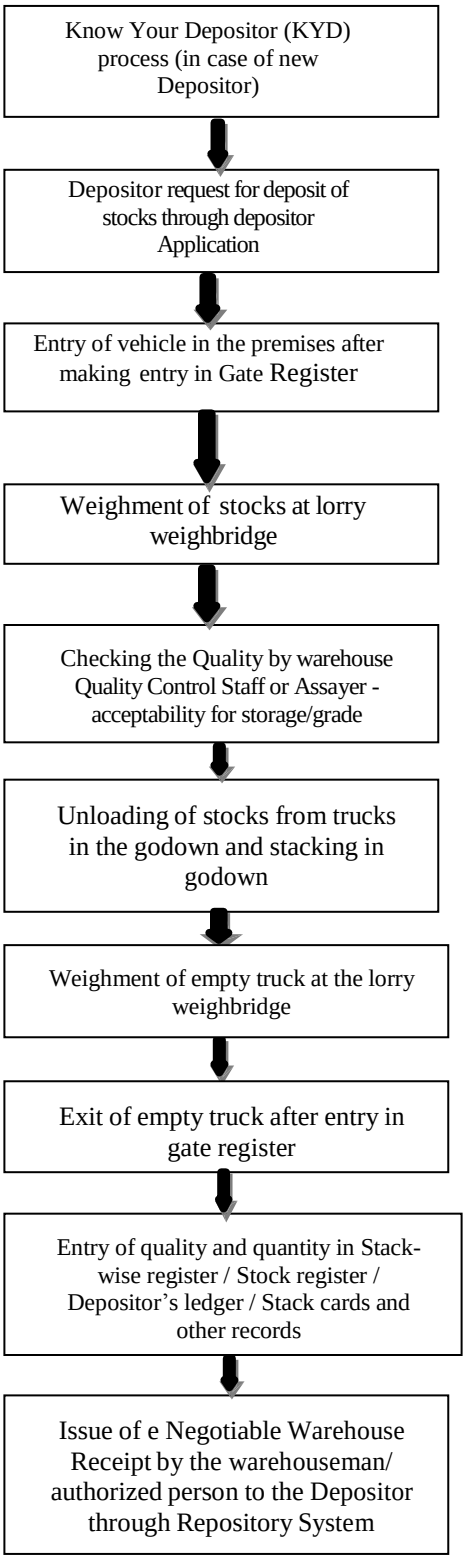
This document prescribes the minimum Standard Operating Procedures for conducting warehousing activities by the warehouses registered under the Warehousing (Development and Regulation) Act, 2007 (37 of 2007) and the Warehousing (Development and regulation) Registration of Warehouses Rules, 2017 and further amendments. However, the WSPs / warehouses are free to adopt better / improved SOPs for effective and efficient operation of their warehouses.

NOTE 1: This document has been prepared for the warehouses handling and storing the agri and non agri commodities separately. In cases where a particular warehouse is registered for storing both agri and non agri commodities i.e. Combined warehouse, all the relevant clauses for both agri and non agri commodities shall be followed.

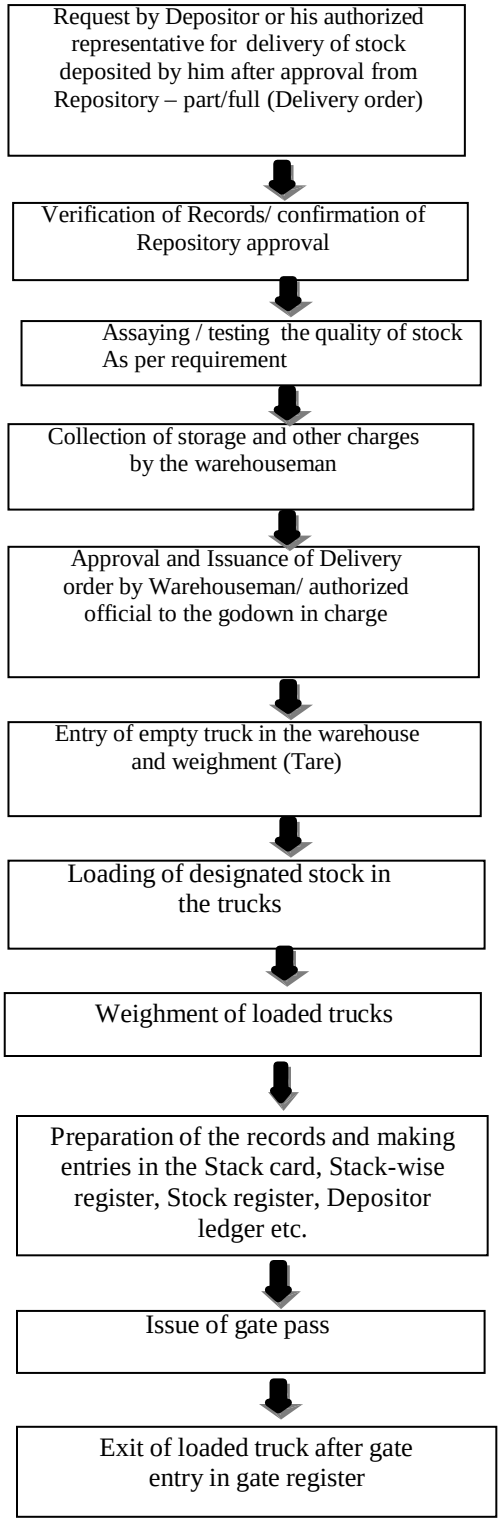
NOTE 2: Where ever requirements are not specified separately for non agri and agri commodities, the requirement of the particular clause shall be applicable to both non agri and agri commodities.

Indicative Flow Chart for Deposit and Delivery of Stock in/from a Warehouse

Deposit of Stock



Delivery of Stock



1. Procedure for deposit of goods

1.1. Maintenance of Know Your Depositor (KYD) records

A warehouseman must adopt processes to ensure the identity of the depositor and ownership of the goods to be deposited in registered warehouses, and obtain documents from depositor to verify the identity of the depositor, the ownership of the commodity (in case the depositor is an agent of the actual owner), the beneficiary (in case the depositor and the beneficiary are different). Relevant documents for establishing identity and address proof as described under Schedule 7 (Rule 24) of the Warehousing (Development and Regulation) Registration of Warehouses Rules, 2017 are also to be obtained. Specimen signature of depositor/ his authorised representative shall also be maintained for signing various records in the warehouse, wherever required. Additional records that establish the status of the depositor (being a farmer/ trader and other entity) as well as specimen signature of depositor / his authorised representative for signing various records in the warehouse shall also be maintained.

1.2. Deposit of Goods

1.2.1 Agri Commodities

On arrival of goods in a warehouse, the following steps shall be taken:

i. Submission of Deposit Application.

ii. Entry of loaded vehicles in the premises after making entries in gate Register.

iii. Weighment of the stocks.

iv. Assaying the quality of the stocks.

v. Unloading of stocks from the transport vehicle into the godown.

vi. Stacking of stocks in the godown.

vii. Preparation of the necessary records.

viii. Issuance of e-negotiable warehouse receipt through Repository platform.

ix. Completion of the entries in the Office Record.

1.2.2 Non Agri Commodities

i. Submission of Deposit Application.

ii. Submission of the following documents:

a. Copy of the Certificate of Analysis issued by the manufacturer for each Heat/Cast supplied (Technical specification reference, chemical Analysis) including applicable details of Brand Name/ Trade Mark, manufacturer's name, item nomenclature, size, grade, Cast/Heat/lot no., and Certificate of Analysis date with stamp/signature of the manufacturer's representative.

b. Copy of invoice with all deposits/eWay Bill.

c. Certificate of Origin, and any custom clearing documents in case of imported goods.

d. Packing List containing unique Identification name / code of the commodity, Net Weight, Gross Weight, Heat/Cast No., and No. of units/bundles.

iii. Entry of loaded vehicles in the premises after making entries in gate Register.

iv. Weighment of the stocks.

v. Visual inspection of the commodity and supporting documentation.

vi. Unloading of stocks from the transport vehicle into the godown.

vii. Assaying the quality of the stocks, as specified.

viii. Stacking of stocks in the godown.

ix. Identification of the storage location/ bay, Preparation of the necessary records and, if required, securing the commodity under lock & key, as per applicable guidelines.

x. Issuance of e-negotiable warehouse receipt through Repository platform.

xi. Completion of the entries in the Office Record.

1.3. General precautions during deposit

1.3.1 Agri Commodities

Following general precautions shall be taken during receipt of stocks:

i. General condition of stock shall be verified before its entry in to the warehouse.

ii. In case received in such conditions, slack bags shall be filled to standard weight, torn bags stitched or replaced and damp or wet bags cut opened and the grain salvaged, dried and rebagged.

iii. Infested stocks shall be subjected to immediate fumigation.

iv. Reconditioned stocks shall be accepted only for short period of storage and shall be stacked to admissible stack height.

v. Before accepting the stocks, the relevant code of storage practice and specific precautions required to be taken, if any, shall be adhered to ensure its safe storage.

1.3.2 Non Agri Commodities

Following general precautions shall be taken during receipt of stocks/ commodities:

i. General condition of stock/commodity shall be verified before its entry into the warehouse.

ii. Stock shall be visually inspected for corrosion of metal/ packaging/ strapping, contamination, physical damage, damaged identification marking/ stickers, inconsistent branding and any other anomaly.

iii. The supporting document shall be inspected and all details regarding branding, heat/cast number, grade, size, quantity, Certificate of Analysis and the like shall be verified with respect to the stock to be received.

iv. If there is any inconsistency between documentation and actual metal stock, the stock may not be accepted until such inconsistency has been rectified by the depositor.

v. Before accepting the stocks, the relevant code of storage practice and specific precautions required to be taken, if any, shall be adhered to ensure its safe storage.

vi. Consignments containing mixed metals or metals of different grades (heats/ grades mixed together) shall not be accepted in a single receipt. The metals need to be separated into groups of uniform quality (size, grade/ heat/cast) before stacking or weighment.

vii. Manufacturer's sticker/ tag/ embossed or engraved markings should be available on each ingot/bundle giving the details like:

a. Producer/manufacturer
b. Item nomenclature/ specification/ grade
c. Heat/ cast / lot number
d. Net weight
e. Gross weight
f. Purity
g. Date of Manufacture
h. Number of pieces of Ingots/sheets/units in bundle

1.4. Weighment of the goods deposited

1.4.1 Agri Commodities

The warehouseman (WHM) shall adopt the practices to ensure that the electronic Negotiable Warehouse receipts are issued accurately stating the quantity and quality of the deposited goods. Following procedure shall be adopted:

i. The entire lot of the goods to be stored shall be weighed before being stored inside a registered warehouse.

ii. The warehouseman shall ensure that the record of the weighment of the goods to be stored cannot be tampered with or altered.

iii. If the goods are brought in a transport vehicle, the registration number of the vehicle must be recorded.

iv. In case where the warehouse does not have its own lorry weighbridge, it should have Platform scales of requisite capacity and in sufficient numbers.

v. If the registered warehouse does not have its own lorry weighbridge, and the weighment is taken at an external weighbridge, the warehouseman or its employee or authorized official must supervise the weighment of the goods at such location as well as during transportation to the warehouse.

vi. The recorded weight of the goods during deposit shall be communicated to and got authenticated by the depositor or its authorised representative, if stationed at the warehouse.

vii. 100% weighment of the goods deposited shall be taken in all the cases. However, if a consignment is of packages having uniform/ standard weight, ten percent of packages selected at random may be test weighed and average weight per package arrived at as agreed between the warehouseman and the depositor of goods.

viii. Standard Weights, weighing scales or weighbridge available in the warehouse or the external lorry weighbridge used for weighment of goods shall be periodically stamped/ verified by Department of weights and Measures.

1.4.2 Non Agri Commodities

i. 100% weighment of the deposited goods should be carried out by the warehouseman. Base metals should be weighed on platform scale. In case the weight or size of the goods

does not allow weighment on platform scale, the goods must be weighed on Lorry weighbridge.

ii. In case of warehouses storing base metals, platform scales of minimum 3 MT capacity must be available.

iii. If the metal items are brought in a transport vehicle, the registration number of the vehicle must be recorded.

iv. If the registered warehouse does not have its own lorry weighbridge, and the weighment is taken at an external weighbridge, the warehouseman or its employee or authorized official must supervise the weighment of the metal items at such location and ensure no change of status during transportation from the weighbridge to the warehouse.

v. The recorded weight of the goods during deposit shall be communicated to and got authenticated by the depositor or its authorized representative, if stationed at the warehouse.

vi. Standard Weights, weighing scales or weighbridge available in the warehouse or the external lorry weighbridge used for weighment of goods shall be periodically stamped/ verified by Department of weights and Measures preferably quarterly.

vii. The warehouseman shall ensure that the record of the weighment of the metal items to be stored cannot be tampered with or altered.

1.5. Assaying the quality of goods

1.5.1.1. Agri Commodities

i. The warehouseman shall have processes to ascertain the quality of the goods before accepting for deposit.

ii. The warehouseman shall assay the quality of the representative sample of goods proposed to be deposited.

iii. Assaying of the quality of deposited agricultural goods shall be conducted strictly conforming to the quality/ grade designations as notified under the Central Government under the Agricultural Produce (Grading and Marking) Act, 1937 (AGMARK Grade) /Government of India's uniform specifications of food grains applicable for the respective marketing season or any other law for the time being in force.

iv. The AGMARK quality/ grade Specifications of commodities stored shall be

available and displayed at an appropriate place in the warehouse.

v. The warehouseman may either have its own employee assayer duly licensed as per the local laws in force or have arrangements with an external assayer who are licensed or NABL accredited for carrying out assaying/ laboratory testing as the case may be.

1.5.1.2. Non Agri Commodities

i. Quality as specified in the refiner's/ manufacturer's Certificate of Analysis (CoA) of the particular heat/ cast shall be taken as the quality of the particular lot, provided that the lot is received in tamper proof packaging and is traceable to the refiner/ manufacturer. Additional assaying / testing of the goods before accepting for deposit shall not be required except for Steel products for which independent testing by a NABL accredited lab & compliance of the test results of the items to be deposited as per the declared grade is a mandatory requirement.

ii. If at the time of deposit, the traceability of the goods is established but the Certificate of Analysis is not available, testing/assaying of such goods per heat/ cast/ grade wise should be carried out through NABL accredited labs as per the relevant product/testing/assaying standards specified by the Authority, by the warehouseman at the cost of the depositor. Thereafter, goods can carry the accredited lab's certificate for further trade. In case of such deposits, the warehouseman shall be responsible for the quality of the goods so deposited after assaying in case of any future dispute arising w.r.t. quality.

iii. In case of certificate based deposit of goods, (where goods could be traced back to refiner/manufacturer at the time of deposit), if traceability to the manufacturer/ refiner or original certificate of analysis of the goods is lost after deposit in warehouse due to any reason (as breakage of manufacturer's seal, worn out identification numbers on the goods/ packages etc.), warehouseman shall be responsible with respect to the quality of the goods deposited in case of any future dispute arising w.r.t. quality of the goods. In such a case, the testing will have to be carried out by the warehouseman at his cost in an NABL accredited lab. Thereafter, goods can carry the accredited lab's certificate for further trade.

NOTE: Assaying/ chemical analysis can be carried out by wet or gravimetric or instrument methods as specified in the relevant assaying/ test standards of BIS.

1.5.2. Sampling of goods

1.5.2.1. Agri Commodities

For determining the quality/ grade of the goods representative samples shall be drawn. Following care shall be taken during sampling of goods deposited in the warehouse:

i. The sampling procedure as indicated in BIS code IS 2814-1978 shall be followed.

ii. Samples shall be taken jointly by authorized representatives of the depositor, if available at the warehouse, and warehouseman or his representative.

iii. Samples shall be as representative as possible of the lots from which they are taken. Sufficient number of increments shall be taken out of a lot and carefully mixed to obtain a bulk/composite sample representing the lot.

iv. Stocks received in damaged or substandard condition shall be kept separate from the sound stocks and sampled separately. Samples of unsound material shall not be mixed with samples of sound material and shall be identified and quantified.

v. It shall be ensured that all sampling apparatus are clean, dry and free from foreign matter.

vi. Sampling shall be carried out in such a manner as to protect the samples, sampling instruments and containers in which the samples are placed, from contamination from rain, dust, etc.

1.5.2.1.1 Sampling from Bags

i. Samples shall be drawn using a parkhi/ bag trier/ slotted tube sampler from bags selected at random from the peripheral bags in zig zag manner and from different positions and sides of the bags.

ii. Samples from a few bags from various depths shall also be drawn additionally by cutting open the seams as described for bulk warehouses.

iii. Samples so drawn from different bags shall be visually examined separately to see that their quality is fairly uniform.

iv. All these samples/increments shall then be thoroughly mixed to prepare a bulk/composite sample which shall be further reduced to a convenient weight. The number of bags to be sampled shall depend upon the number of bags in lot

as given below:

Number of bags in consignment	Number of bags to be sampled.
10 to 100	10, taken at random
More than 100	Square root (approx.) of total number, taken according to a suitable sampling scheme.

v. In case of commodities like turmeric, chillies, jaggery, tamarind etc., samples shall be drawn by hand only by cutting open the seams of bags. While drawing samples by hand, care shall be taken to draw samples from different depths of the bags to obtain a representative sample.

1.5.2.1.2 Sampling from silos, bins or bulk warehouses

i. A preliminary survey of the lots shall be made to see that the grain is of fairly uniform quality.

ii. In case the bulk is small, sample shall be drawn by hand by inserting the arm into the bulk to the point of elbow and withdrawing a handful of commodity with fingers held tightly together so as not to stain out any dirt.

iii. In case the heap is very large, sampling from various depths beyond the reach of the hand shall be done by a probe specially designed for this purpose.

iv. Such samples shall be collected at random from different sides, points and depths and visually examined to see that the quality is fairly uniform.

v. These samples shall then be thoroughly mixed for making a bulk/composite sample which can be further divided to convenient weight.

vi. The number of increments to be taken shall be determined as follows:

> "Take the square root of the tonnage in the static bulk. Divide by two and round up to the next whole number. This is the minimum number of increments that is to be obtained."

1.5.2.1.3 Types of samples

i. **Bulk/composite Sample**: -The bulk sample or composite sample shall be formed by combining the increments and mixing them thoroughly. The total quantity of composite samples drawn shall be about 2 kgs.

ii. **Laboratory sample or test sample: -** Laboratory/test sample shall be standard

quantity of sample formed after dividing the bulk/composite sample in the manner that it truly represents the lot and is used for testing the quality of the lot or keeping as a reference sample for future test purposes.

iii. Laboratory/test sample shall be derived as under:

a. Bulk/composite sample shall be divided to obtain the required number of laboratory/test samples by coning and quartering or by using one of the sample dividers. The composite sample shall be generally divided into 4 parts of 500 grams each representing laboratory/test sample.

b. The size of the laboratory/test samples will be determined by the type and requirements of the tests to be undertaken.

iv. Out of the 4 laboratory/test samples, one shall be analyzed and the other three filled in sample bags. These shall be sealed in the presence of depositor after keeping inside a sample slip giving relevant information, duly filled and signed by the depositor and the warehouseman or his authorized representative.

v. One of the sealed samples shall be given to the depositor and the other two retained in the warehouse.

vi. Out of the remaining 2 samples kept at the warehouse, one shall be kept for comparison purpose and the other shall serve as referral sample.

vii. These samples shall be returned to the depositor under proper acknowledgement at the time of final release of stocks.

viii. The details of samples shall be entered in the sample records maintained at the warehouse and the sample bags shall also bear the serial numbers as entered in the relevant records.

ix. The samples shall be fumigated as and when required to preserve the condition of the grains.

1.5.2.1.4 Dispatch of samples

If required to be tested in a different location/laboratory, the laboratory samples shall be dispatched as soon as possible.

1.5.2.1.5 Lot size to be adopted for sampling of goods

i. A lot shall represent the total quantity of goods pertaining to one variety/grade of a single

commodity deposited by a depositor in a single day.

ii. The warehouseman may consider smaller lot sizes pertaining to the Quantity of goods pertaining to one depositor, having one variety/ grade of a single commodity as per the request of the depositor/ conditions of the contract

1.5.2.2. Non Agri Commodities

For determining the quality/grade of the goods, representative samples shall be drawn. Following care shall be taken during sampling of goods deposited in the warehouse:

i. The sampling procedure & no. of test samples required as indicated in BIS specification for the particular commodity shall be followed.

ii. Samples should be randomly drawn and guidance may be taken from IS 4905: 2015 on Random Sampling and Randomization Procedures.

iii. Wherever possible, samples shall be taken by the representative of the NABL Lab where testing is to be carried out, in the presence of the authorized representatives of the depositor, if available at the warehouse, and warehouseman or his representative.

iv. Stocks/commodities, if found to be without tamper proof packing or with damaged packing and received in damaged or substandard condition, shall be kept separate from the sound stocks and sampled separately, if required for determining of grade as per clause 1.5.5 b. Samples of unsound material shall not be mixed with samples of sound material and shall be identified and quantified separately.

v. It shall be ensured that all sampling apparatus are clean, dry and free from foreign matter.

vi. Sampling shall be carried out in such a manner so as to protect the samples, sampling instruments and containers in which the samples are placed, from contamination from rain, dust, etc.

vii. Required quantity of the sample for testing/ analysis shall be drawn as per the relevant product/ test standard of BIS. A total of four samples per heat/ cast shall be drawn for distribution in a sealed cover as under:

a. One sample to Depositor

b. One sample to Warehouseman

c. One sample for Analysis by assayer/ NABL accredited Test Lab

d. One sample for record/ reference to be stored with assayer / NABL accredited Test Lab.

1.5.3 Procedure for verification of quality of goods

1.5.3.1. Agri Commodities

i. As per the statutory regulations under Food Safety and Standards Act, the contaminated, damaged or infested stock requires to be checked before acceptance for storage.

ii. The warehouses shall have all the equipment prescribed as per infrastructure requirements under WDRA registration rules.

iii. The goods deposited shall be graded as per the Agricultural Produce (Grading and Marking) Act, 1937 (AGMARK Grade) standards.

iv. However goods for which AGMARK grade standards are not available, the same shall be graded as per any other law for the time being in force.

1.5.3.2. Non Agri Commodities

i. If goods are received in tamper proof packing from Exchange approved brands with certificate of analysis issued by refiner/ manufacturer then there is no requirement of verification of quality of goods. This is also applicable for non-exchange based deposits except for Steel products whose heat/cast wise testing by a NABL accredited laboratory is a mandatory requirement before the acceptance of lot.

ii. In any other case, quality may be verified by chemical / mechanical (as per requirement) testing /assaying as per BIS specifications, from an NABL accredited lab.

iii. Test labs may be advised to retain sufficient remnant portion from the test sample so that in case of dispute, the retesting for re-confirmation of the test results may be carried out by the same or another approved laboratory.

1.5.4. Method of analysis:

Analysis of agri and non agri commodities shall be done in accordance with the methods prescribed in the relevant product & test standard of Bureau of Indian Standards, FSSAI, concerned Boards etc.

1.5.5. Determination of Grade

1.5.5.1. Agri Commodities

The grade of the lot shall be assigned based on the percentage of various refractions and matching it with the specifications prescribed under the Agricultural Produce (Grading and Marking) Act, 1937(AGMARK specifications) or any other law for the time being in force.

1.5.5.2. Non Agri commodities

i.a. Grade as provided by the Exchange approved refiner/ manufacturer shall be accepted if the ferrous & non-ferrous goods can be traced back to the refiner/ manufacturer and the lot/heat/cast number is traceable through the markings/ sticker/ engraving/ embossing/ tag on the product/package; goods are received in tamper proof packing and their quality can be ascertained by way of verification of the goods against the accompanied refiner's/ manufacturer's Certificate of Analysis. Additional assaying / testing of the goods before accepting for deposit shall not be required.

For steel commodities (like ingots, blooms, billets & other semis/ shapes) both for the exchange/ non-exchange based deposits, the CoA issued by the manufacturer (Mill Test Certificate) shall be available with the lot to be deposited. In addition, sample (in four parts- first for the assaying lab, second for the depositor, third for the warehouseman and fourth for the reference of the assaying lab) shall be drawn for each heat/ cast by the assayer/ warehouse in-charge in the presence of depositor, which shall be got tested in the NABL accredited lab (which may also be approved by the exchange). Initially, a e-NNWR may be issued which, on availability of the conforming test results (conformance to the declared grade of the BIS/ exchange specification), may be converted to the e-NWR.

i.b. For any reason, if at the time of accepting goods for deposit, the Certificate of Analysis of the Exchange approved refiner/ manufacturer is not available or the packaging is damaged/ tampered or the traceability to the manufacturer/ Heat/ Cast is not established, the goods shall not be accepted for deposit.

ii.a. In all other cases (non-exchange), goods shall be accepted in the warehouse when their CoA is available and their traceability to the manufacturer & heat/cast/lot is established. Grade shall be as per Certificate of Analysis (CoA) provided by manufacturer

heat/cast/lot/grade wise as per relevant specifications specified by the Authority, for the applicable tests included in the product standard.

ii.b. In case of non-exchange goods that cannot be traced back to the refiner/manufacturer & their heat/ cast/lot no. for any reason (like broken manufacturer's seal, worn out identification marks like markings/tags/stickers/engraving/embossing/tag on the goods/packages etc.) at the time of deposit of goods, the goods shall not be accepted for deposit (even if the CoA is available).

ii.c. If at the time of deposit, the traceability of the goods is established but the CoA is not available, testing/assaying of such goods per heat/ cast/ grade wise should be carried out through NABL accredited labs, as per the relevant product/testing/assaying standards as specified by the Authority, by the warehouseman at the cost of the depositor. Thereafter, goods can carry the accredited lab's certificate for further trade. In case of such deposits, the warehouseman shall be responsible for the quality of the goods so deposited after assaying in case of any future dispute arising w.r.t. quality.

iii. In case of certificate based deposit of goods for exchange approved brands, (where goods could be traced back to refiner/manufacturer at the time of deposit), if traceability of the goods back to refiner/manufacturer is lost after deposit in warehouse due to any reason (as loss of refiner/manufacturer's certificate of analysis, breakage of manufacturer's seal, worn out identification numbers on the goods/ packages etc.), warehouseman shall be responsible with respect to the quality of the goods deposited in case of any future dispute arising w.r.t. quality of the goods. In such a case, the testing will have to be carried out by the warehouseman at his cost in an NABL accredited lab. Thereafter, goods can carry the accredited lab's certificate for further trade.

iv. For the product & testing specifications, following reference IS specifications shall be referred for the non agri commodities:

Commodity	**Product Standards**		**Assaying/ Testing standards**	
	Code	**Particulars**	**Code**	**Particulars**

Aluminium	IS 21	Wrought Aluminium and Aluminium Alloys for Manufacture of Utensils	IS 504	Methods of Chemical Analysis of Aluminium and its Alloys (Standard is in Several Parts)
	IS 617	Aluminium and its alloy ingots and castings for general engineering purposes		
	IS 733	Wrought Aluminium and Aluminium Alloy Bars, Rods and Sections (for General Engineering Purposes)		
	IS 737	Wrought aluminium and aluminium alloy sheet and strip for general engineering purposes		
	IS 2590	Primary aluminium ingots for remelting for general engineering purposes		
Brass	IS 292	Leaded Brass Ingots and Castings	IS 3685	Methods of chemical analysis of brasses
	IS 304	High Tensile Brass Ingots and Castings		
Copper	IS 191	Copper	IS 440	Methods Of Chemical Analysis Of Copper
Lead	IS 27	Pig Lead	IS 403	Methods of chemical analysis of lead and antimonial lead

Nickel	IS 2782	Primary nickel	IS 2766	Methods of Chemical Analysis of Primary Nickel
			IS 1952	Methods of Chemical Analysis of Nickel Anodes
Zinc	IS 209	Zinc Ingot	IS 2600	Methods of chemical analysis of zinc and zinc base alloys for die castings
	IS 4699	Refined Secondary Zinc	IS 2599	Methods for spectrographic analysis of high purity zinc and zinc base alloys for die casting
	IS 13229	Zinc for Galvanizing	IS 406	Methods of chemical analysis of slab zinc (Spelter)
Tin	IS 26	Tin Ingot	IS 1940	Methods of chemical analysis of tin ingot
	IS 4280	Refined Secondary Tin - Ingot	IS 6516	Methods for chemical analysis of tin in secondary tin and lead
Iron Ore	IS 5442	Haematite Iron ore- Classification	IS 1493	Methods of Chemical Analysis of Iron Ores
	IS 11894	Classification of Magnetite Iron ore		
Steel	IS	Carbon steel cast billet	ISS	Methods for Chemical

	2830	ingots, billets, blooms and slabs for rerolling into steel for general structural purposes	228	Analysis of Steels (in various parts)
	IS 1786	High strength deformed steel bars and wires for concrete reinforcement		
	IS 2062	Hot Rolled Medium and High Tensile Structural Steel		
	IS 2831	Carbon Steel Cast Billet Ingots, Billets, Blooms And Slabs For Re-Rolling Into Structural Steel (Ordinary Quality)		

1.5.6 Documentation of Analysis reports

1.5.6.1. Agri commodities

The results of analysis shall be documented in the analysis records maintained in the warehouse and shall be got duly verified/ authenticated by the depositor or his representative.

1.5.6.2. Non Agri Commodities:

i. The certificate of analysis issued by the manufacturer/ NABL accredited test lab containing the chemical analysis to establish compliance to the specified requirements for the relevant grade, shall be safely retained & the results shall be recorded in the test result register.

ii. The certificates of analysis should be available for each cast/heat.

iii. The chemical analysis & other test result values (complying to the requirements) shall be duly verified / authenticated against the applicable standard by the depositor or his representative.

1.6. Issue of eNWR to depositor

i. A warehouseman must ensure that all electronic warehouse receipts issued by it, negotiable warehouse receipts or otherwise, comply with the requirements of section 11 of the Act, and any rules, regulations, notifications made as guidelines issued there under.

ii. From a date to be specified by the Authority, the warehouseman shall issue only electronic Negotiable Warehouse Receipts (eNWRs) by registering with one or more repositories registered with the Authority for issuing negotiable warehouse receipts in electronic form.

iii. He shall ensure compliance with all of the following:

a. eNWR must be issued for all notified goods accepted for storage in a registered warehouse. No paper based warehouse receipt shall be issued by any registered warehouse.

b. If the warehouseman issues an electronic- Non-NWR, it must clearly mark on it as such.

c. eNWR must be filled in with all the information as required in the Act.

d. Warehouseman should ensure that adequate Insurance cover as prescribed under the Rules has been obtained for the deposited goods.

e. Rules, regulations and guidelines issued by the Authority regulating electronic negotiable warehouse receipts shall be followed by the registered warehouses issuing electronic NWRs.

f. If a depositor requests, an acknowledgement of the eNWR may be issued.

g. The warehouseman shall issue separate eNWRs for each lot /heat/ grade.

1.6.1. Persons authorised to issue eNWR

i. The eNWRs shall either be created by the warehouseman or his authorized official in electronic form on repository platform.

ii. In case of any authorization, a proper order shall be issued by the warehouseman to this

effect and a copy of such order shall invariably be sent to the Authority for its records.

iii. The Authority shall also be notified of any change in the authorization for issue of the eNWRs.

iv. In case any unauthorized person issues eNWRs with respect to a warehouse, the warehouseman shall be solely responsible for the consequences.

1.6.2. eNWR issue record

The warehouseman will maintain a daily record of eNWR issued in his warehouses in electronic form as and when notified by the Authority.

1.7. Records to be maintained, in physical or electronic form, during deposit of goods:

i. Gate Register

ii. Deposit Application Register

iii. Weighment records

iv. Stack wise Register

v. Stack/ Lot Card

vi. Daily Transaction Report

vii. Stock Register

viii. Depositor's Ledger

ix. Certificates of analysis /Analysis records

1.8. Identification and traceability of goods deposited in a warehouse

i. For sake of identity, each lot (as stored in the warehouse) shall be provided with a lot number as per the scheme designed by the warehouseman in consultation with the depositor.

ii. Lot number shall be reflected in warehouse records both in physical and electronic form.

iii. The warehouseman must maintain a system of issuing a unique identification for every deposited good, based on the physical location of the deposited goods within the registered warehouse.

iv. The unique identification must be mentioned in the electronic Negotiable Warehouse Receipt issued in respect of the deposited good.

v. The warehouseman shall maintain a mechanism for identification, traceability and test

status of goods stored in the warehouse through “Stack/Lot card” attached to each stack.

vi. It shall be ensured that no stocks are allowed to get mixed or left un-identified in the warehouse.

vii. In case any depositor has any specific requirement for identification and traceability, the warehouseman shall maintain the same as per the contractual agreement.

viii. The warehouseman must have a system to keep a check on un-authorised access to the storage area.

ix. The warehouseman must ensure that all goods are properly stored as per stack plan.

x. Exchange related goods must be clearly identified and stored separately from all other deposited goods. The warehouseman must have processes to ensure that these comply with the storage plan requirements of exchanges.

xi. Intermixing of commodities of different type/grade/ heat/ cast/quality standard should not occur within a single lot/stack.

2. Procedure for scientific storage of goods including stacking

2.1. General Precautions

2.1.1. Agri Commodities

i. The warehouseman shall conduct fortnightly inspection of all the deposited goods to ensure the hygienic condition of the registered warehouses and keep the stocks clean and free from insects, pests and rodents so that quality of the goods is maintained.

ii. The stored goods shall be physically counted or tested periodically, and quantities as per records should be physically verified by an employee independent of the storage.

iii. The warehouseman shall have adequate facilities for undertaking periodic disinfestations/ treatments and to perform fumigation of the commodities.

iv. The warehouseman shall have adequate number of "equipment & accessories", personal protective equipment and recommended "pesticides, rodenticides & fumigants" for insect and rodent control in warehouse premises.

v. The warehouseman shall have detailed documented processes & periodicity for the fumigation of goods that require fumigation.

vi. The warehouseman shall have detailed processes for aeration of goods that will require aeration.

vii. The warehouseman shall have a system of regular inspection to ensure compliance with its storage related processes.

viii. For commodity exchange related goods, the warehouseman shall have internal processes that allow the exchange to physically verify itself or through any agencies / experts, at any time, the goods deposited and/or warehouse facilities in general or for compliance of the warehousing norms stipulated by the exchange for the specific commodities.

2.1.2: Non Agri Commodities:

i. Goods should be stored in well-lit bounded areas well secured & locked. The stored goods shall be physically counted periodically and quantities agreed to the records should be physically verified by an employee independent of the storage. Commodities should be stacked grade/ heat wise in identifiable stacks.

ii. The floor/ storage area of the warehouse should be designed so as to prevent stagnation of water/ water logging and should have suitable drainage system.

iii. The warehouseman shall have a system of regular inspection to ensure compliance with its storage related processes.

iv. Doors shall be opened only during warehousing operations and on need basis. At all other times, these should be closed & locked.

v. Entry and Exit to be controlled and only authorized persons should be allowed. There should be a system in place to check this aspect regularly.

vi. CCTV to be deployed for monitoring purpose in and outside the warehouse.

2.2. Stacking and space utilization

2.2.1. Agri Commodities

Only Block system of stacking shall be resorted to in the warehouse. The warehouseman shall maintain and follow an internal layout (stack plan) for the storage of goods and for every physical facility within a registered warehouse.

2.2.2. Non Agri Commodities

i. Floor space to be divided into convenient blocks of specified dimensions with minimum specified space between the adjacent stacks to serve as alleyways to facilitate inspection and to provide space for cargo movement operations. Further, stack space is also determined so as to ensure that each lot, in case of ferrous and non-ferrous metals, is accessible and retrievable.

ii. Another aspect of stack plan is deciding maximum stack height. Stack height is decided taking into account the following –

a. Load bearing capacity of the warehouse floor

b. Crushing weight bearing capacity of material at the bottom

c. Stability of the stack

d. Density of material

iii. Alternately, storage in racks can also be resorted to.

iv. In all cases, ventilation between the stored metal items-interlayer & intra layer- should be maintained to ensure passage of air, control the accumulation of moisture/ water puddle

and to facilitate better visual inspection. Dunnage should be used so as to control corrosion & damage to material.

v. In case of ferrous metals, the stack height should be in accordance with the capacity of the material handling equipment as well as the load bearing strength limitation of the floor.

vi. Bulk ferrous materials may be stored in open sheds (without side walls) with floor & ensuring minimum exposure to rain water, dust, oil. Stacking of plates & very heavy materials with low corrosion potential may be done in open concreted spaces of high strength floors ensuring placement on dunnage materials.

vii. Handling & lifting equipment should be periodically tested for safety as per norms & connected records/ certificates should be maintained.

2.3. Stack planning

2.3.1. Size of stacks

i. Convenient sizes of stacks shall be made for better circulation of air and to keep a close watch on the condition of stock and incidence of infestation.

ii. Bigger size of stacks can be built in case of commodities like sugar which are hygroscopic in nature and do not require fumigation. Similarly, for commodities like iron ore which need huge storage spaces and need to be processed further for enrichment/ palletization etc. bigger stack sizes can be built.

2.3.2. Drawing up of stack plan

2.3.2.1. Agri commodities

i. The floor space shall be divided into convenient blocks of rectangles or squares, each forming a stack base. The standard size recommended for a stack is 9.144 m x 6.090 m (30ft x 20 ft).

ii. There shall be a minimum of 75 cm (2 ft 6 inches) wide space between stacks to serve as alleyways to facilitate inspections, aeration and disinfestations.

iii. In addition, depending on the dimensions of the godowns haulage alleyways at the door points, 120 cm (4 ft) wide shall be provided for operation purpose. The total space left for alleyways etc. may not, however, normally exceed 27% of the total floor area of the

godown.

iv. While drawing the stack plan, the standard sizes of the gas proof fumigation covers shall also be kept in view.

v. Stack plan shall be prepared in such a manner that the stack shall not obstruct light and free flow of air into the godown.

vi. Some of the standard sizes of stacks shall be as under:

a) 9.144 m x 6.090 m (30 ft x 20 ft)

b) 6.400 m x 5.486 m (21 ft x 18 ft)

c) 5.486 m x 5.486 m (18 ft x 18 ft)

d) 3.657 m x 5.486 m (12 ft x 18 ft)

2.3.2.2. Non-Agri commodities

i. Warehouses generally maintain and follow a stack plan for storage of goods in the warehouse. This involves division of the floor space into convenient blocks of specified dimensions with minimum specified space between the adjacent stacks to serve as alleyways to facilitate inspection and to provide space for cargo movement operations.

ii. Stack sizes should be compatible with the capacities of the handling equipment and appropriately sized to facilitate smooth inspection. To the extent possible, the stacking should be done in such a fashion so as to ensure that the unique identification marks on the item or bundle are easily seen.

iii. Different colour coding of either the areas or stack lines or stack cards may be resorted to for storage of different metals.

2.3.3. Stack lines

i. The stack lines shall be 5 cms broad and painted with white or yellow paint. Each stack shall have a number which shall form the basis for reporting and recording of godown transactions.

ii. Stack number shall also be painted neatly in bold figures on the floor, walls or pillars near each stack.

2.3.4. Stack heights

2.3.4.1. Agri Commodities

i. The height of the stack shall be decided on the basis of goods, size, weight, shape, strength of the packing to stand the height of the stack as well as to ensure that the grains in the lower layer bags do not get damaged.

ii. Commodity-wise maximum stacking height in respect of some of the commodities often received at the warehouse for storage is mentioned below:

Sl. No	**Commodity**	**Maximum Stack**	
		In meters	**In feet**
CEREALS			
1.	Wheat, Barley, Paddy, Jowar, Wheat Bran	4.6	15
2.	Whole Pulses, Maize, Rice	3	10
3.	Rice Bran (In dry condition)	3.0 – 3.7	10-12
MILLED PRODUCTS			
4.	Milled Pulses, Sooji, Maida, Besan, Wheat Atta	4.3	14
OILS & OILSEEDS			
5.	Oils tins (4 gallon tin)	2.4	8
6.	Oil drums	2.1	7
7.	Cumin seed	4.6	15
8.	Oil seeds & oil cakes, Arecanut, Cashew nut pods, Coffee pods	3.7-4.3	12-14
9.	Groundnut kernels, cashew nut Kernels	3-3.7	10-12
MISCELLANEOUS			
10.	Jute bales	3.0-3.7	10-12
11.	Sugar	3.0	10
12.	Cotton bales	3.0-3.7	10-12
13.	Chillies in bags	3.7	12
14.	Copra	1.8	6
15.	Tamarind	1.5	5
16.	Jaggery lumps	1.8	6

2.3.4.2. Non agri commodities

i. The maximum stack height based on the crushing load [may please refer **IS 875 (Part 1)]** in the concreted &covered warehouses may not exceed the following limits:

a. Stack height for storage of base metals is upto 15ft maximum.

b. Steel products (hot rolled, cold rolled, coils, plates etc.): suitable height as per feasibility.

ii. Stack height is also decided based on the height limitations of the material handling equipment (crane, hydra, fork lift etc) and stability of stack.

iii. In case of iron ore, heap height is restricted based on pollution considerations. Stacking plan and gaps are decided based on access requirements between the heaps.

2.3.5. Stack/ lot card and stack/ lot wise register

i. Each stack shall have a separate stack/ lot card or bin card.

ii. Account of receipt and delivery of stocks is given on one side of the card while on the other side the condition of the commodity and the disinfestations, treatments (if any) given to the stocks from time to time are recorded.

iii. The stack card shall be tagged on the front side of the stack/ lot at a height convenient for making proper entries, by keeping in a polythene jacket so as to prevent its damage during prophylactic operations.

iv. The stack/ lot card shall be preserved till stack account is settled or till the period prescribed for its preservation, whichever is later.

v. Corresponding entries shall also be made in the stack/ lot-wise Register.

2.4. Mixed storage

i. There shall be no mixed storage of incompatible commodities under any circumstance;

ii. Some of the examples of incompatible commodities are:

a. Sugar and Jaggery with other fumigable commodities in the same compartment.

b. Fertilizers with foodgrains / sugar / cotton.

c. Hazardous and extra hazardous goods with non- hazardous goods in the same godown.

d. Fumigable stocks with non- fumigable stocks in the same stack base.

e. Spices with other commodities in the same stack.

f. Milled products like Atta, Maida, Suji, Rawa, etc. with commodities like spices, chillies and other odour emitting commodities.

g. Fertilizers and cement in the same stack.

h. Items belonging to different insurance categories attracting different rates of premium in the same compartment.

iii. Agri and Non-Agri commodities can't be stored together, as the chemicals used in preservation of agri commodities may corrode non agri commodities like metals and alloys. Separate compartments/warehouses should be used for storing Agri and Non Agri Commodities

iv. Iron and steel can be stored in open yards or covered yards, depending on the product. However, it should be ensured that it is stored at a height and in such a manner so as to prevent damage/corrosion due to water inundation.

2.5. Procedure for use of Dunnage

2.5.1. Agri Commodities:

i. The ideal dunnage shall be well fabricated wooden or poly crates.

ii. In case of sugar and fertilizers, dunnage of a polythene film sandwiched with two layers of mats shall be provided.

iii. In the absence of wooden crates, a black polythene film of 100 micron sandwiched between two layers of bamboo / patera / Khajur mats shall be provided in the food grain stock.

iv. For oil/ liquid stored in containers, metal trays shall be used.

v. In the absence of the above, other types of dunnage viz. poly pallets/crates, multi-laminated sheets/ flooring materials etc. can also be used.

2.5.2. Non-Agri Commodities:

i. Suitable dunnage, facilitating ease of handling and storage with sufficient load bearing capacity, is required in all cases to protect the goods from coming in contact with ground moisture.

ii. Open shed should have elevated floors to prevent the goods from water inundation.

2.6. Quarantine fumigation for Agri Commodities

i. Receipt of infested stock in the warehouse shall be avoided

ii. In case not possible to avoid receipt of infested stocks, it shall be subjected to quarantine fumigation at the request of the depositor immediately, preferably in separate empty compartment after collecting any charge due for it.

iii. Such quarantine fumigated stock shall be accepted and stacked in the godowns only after it is rendered pest free.

iv. Quarantine fumigation shall be carried in an isolated area / compartment in the warehouse.

2.7. Preservation of stocks

2.7.1 Agri Commodities

2.7.1.1 Hygiene and Sanitation:

i. Good Hygiene and Sanitation shall be maintained in and around the warehouse.

ii. The warehouseman shall check the godowns regularly for any leakages in the roof, gaps in the walls/ window/ventilator panes allowing entry of rain water or entry of birds.

iii. The floor/ walls shall also be checked for cracks/crevices. Necessary repairs shall be carried out before accepting stocks in the godowns.

iv. Spraying of insecticides/fumigation at prescribed dose shall be conducted to prevent any residual infestation in Agri Stocks.

v. Godowns earlier used for fertilizers, oils, chemicals etc. shall be thoroughly cleaned / de-nitrogenised, washed & dried before storing edible goods in these godowns.

vi. Thorough cleaning of the godowns shall be undertaken before receiving fresh stock.

vii. Vegetative growth in the warehouse premises shall be removed at periodical intervals and the premises should be kept free from reptiles, bird nests, rat burrows etc.

2.7.1.2. Aeration

i. Stocks requiring aeration shall be given aeration during dry and cool days.

ii. This shall be accomplished by keeping doors and ventilators open for natural flow of air through the godowns or by using exhaust fans.

2.7.2. Procedure for internal verification of stocks

i. The warehouseman shall assess the health of stocks during storage once in a fortnight or earlier by drawing the representative sample from each stack and analyzing the physical quality parameters including degree of infestation.

ii. These parameters shall be recorded in the stack card as well as in the fortnightly inspection report.

iii. Prophylactic treatment shall be carried at prescribed intervals to prevent any cross infestation of stocks.

iv. In case of detection of infestation, the stocks shall be immediately fumigated as and when required for the control of stored grain insects.

v. In case the moisture content is found higher than the normal moisture content, the stock shall be properly aerated so that the moisture may be reduced.

vi. Periodic inspection shall also check physical conditions of the godowns in terms of any deterioration of walls, floors, windows, openings, doors or presence of any birds, rodents etc. Warehouseman shall take immediate remedial actions for fixing the same to bring it back to normal state.

vii. All the sweepings and spillages from the godown shall be collected, cleaned and stored in the Palla bags free from infestation / contamination. Such Palla bags shall be released with the main stock at the time of delivery but after proper cleaning and testing.

2.7.2.1. Physical verification of stocks

i. The warehouseman shall undertake physical verification of the quantity of stocks as per the records of the warehouse at frequent intervals but at least once at the end of the month.

ii. Any shortage/excess in the quantity shall be investigated and reasons established to ensure the trust of depositors and other agencies engaged in trading and pledging.

2.7.2.2. Classification of stocks applicable for Agri Commodities

i. For determination of insect infestation, classification of stocks shall be done by drawing a representative sample of 500 gm from each lot / stack, sieving the sample vigorously and by assessing the type and intensity of insect infestations.

ii. The stocks shall be classified as under:-

S. No.	Class	Particulars
1.	Clear	When there is no live infestation at all in 500 gm representative sample.
2.	Few	When there are up to 2 live insects per 500 gm representative sample
3.	Heavy	When there are more than two live insects per 500 gm representative sample.

2.7.2.3. Storage Pest Management applicable for Agri Commodities

The warehouseman shall adopt recommended methods for keeping the warehouse free from insects and rodent pests. He shall use only the recommended insecticides and rodenticides for controlling insect pests and rodents respectively.

A. Insect pest Control: Prophylactic Treatment and curative treatment shall be resorted to.

i. **Prophylactic Treatment-** The warehouseman shall undertake prophylactic treatment periodically. Following schedule of treatments shall be followed:

Sl. No.	**Name of the Insecticide**	**Dilution in**	**Spray quantity**	**Frequency**
1	Malathion 50%	1:100	3 litre/100 Sq mtr.	Fortnightly
2	Deltamethrin 2.5% WP	120 gm in	3 litre/100 Sq mtr	Quarterly
3	DDVP (Dichlorvos) 76% EC	1:150	3 litre/100 Sq mtr.	Air charging of vacant space and spraying on floor and wall as and when required

a. Only Malathion and Deltamethrin shall be directly sprayed on the foodgrain bags and walls/floors

b. DDVP (Dichlorvos) 76% EC shall be used for spraying walls/floors and vacant spaces apart from air charging. It shall never be sprayed directly on grain filled bags.

ii. **Curative Treatment**- The warehouseman shall undertake fumigation of stocks with Aluminium Phosphide in accordance with the National Standards for Phytosanitary Measures for fumigating the commodities with Aluminium Phosphide (NSPM 22) prescribed by the Directorate of Plant protection, Quarantine and Storage under Ministry of Agriculture and Farmers Welfare and available on the website:

http://plantquarantineindia.nic.in/PQISPub/pdffiles/NSPM_22_Guidelines_for_Accreditation_of_FA.pdf

B. **Rodent pest Control:**

i. The warehouseman shall make all out efforts to keep the warehouses free from rodent pests. He shall make use of rat barriers, trapping through rat cages and rodenticides. Single dose acute rat poisons like Zinc phosphide, Barium carbonate, Red squill, ANTU etc and Single dose anti- coagulants like Bromadiolone and Brodifacoum may be used in the dosage as prescribed for the control of rats in warehouses.

ii. Rat burrow fumigation using 0.6 gm Aluminium Phosphide pellets may be done for rat control in nearby fields and open areas. 10 gm sachets of Aluminium Phosphide may also be used for burrow fumigation.

2.7.2.4. Spillage and sweepings applicable for Agri Commodities

i. All the sweepings and spillages from the godown shall be collected, cleaned and stored in a palla bag in such a way that they shall be protected from infestation and contamination. Such sweepings shall be released with the main stock at the time of delivery but after proper cleaning and testing.

2.7.2.5. Sub-standard stocks applicable for Agri Commodities

i. Stocks containing excessive refractions, beyond prescribed standards, affecting their quality shall be designated as substandard.

ii. Such stock shall be kept separated from sound stock and shall be disposed of as early possible.

2.7.2.6. Turnover of stocks for Agri Commodities

i. Goods shall be accepted for storage within the prescribed shelf life depending upon the commodity to be stored and condition of stocks at the time of receipt.

ii. The storage period shall be extended after re-assaying if the quality of goods is found within prescribed standards.

iii. In case any heating or infestation is noticed in goods during storage, it shall be immediately released to the depositor.

iv. In case of heating due to heavy infestation, the goods shall be issued only after fumigation and making it pest free.

2.7.3. Extension of storage period

2.7.3.1. Agri Commodities

i. If a depositor desires to extend the storage period beyond the initial storage period mentioned in the eNWR, he shall be required to submit a request for extension of storage period to the Repository ahead of expiry of such initial storage period as specified by the Authority.

ii. On confirmation from Repository, the warehouseman shall get the quality of the goods evaluated to determine the storage worthiness for the term requested by the depositor by drawing samples as per prescribed sampling plan from the goods under storage.

iii. In addition, the condition of the goods for any infestation shall also be evaluated to determine storage worthiness in the extended period.

iv. The samples shall be stored and relevant records shall be maintained.

v. If suitability of goods is established, valuation of the goods shall be done and goods shall be insured for the extended period.

2.7.3.2. Non agri commodities

i. If a depositor desires to extend the storage period beyond the initial storage period of three years mentioned in the eNWR, he shall be required to submit a request for extension

of storage period to the Repository ahead of expiry of such initial storage period as specified by the Authority.

ii. On confirmation from Repository, the warehouseman shall certify the following:

a. There are no visible signs of damage/ deterioration of quality of the commodity i.e. corrosion, deformation, colour change.

b. There is no damage to the original packaging in which the goods were received.

c. The lot is not mixed.

d. The identification tags/ stickers on the bundles are still present and legible.

iii. If suitability of goods is established, valuation of the goods shall be done and goods shall be insured for the extended period.

3. Procedure for delivery of goods

3.1. General requirements

i. The warehouseman must have processes to ensure that goods against which a warehouse receipt has been issued be released only to the valid holder of the warehouse receipt or its authorised representative.

ii. The warehouseman must have systems to collect such information from the warehouse receipt holder or its authorised representative, as would be necessary to meet its requirement of diligence.

iii. The warehouseman must have processes to ensure that deposited goods be released only after the surrender/extinguishment of the Warehouse Receipt.

iv. If a bank or lender has a charge/ lien over the electronic Negotiable Warehouse Receipt, the warehouseman must have processes to ensure that the bank or lender communicates its approval of the delivery of the deposited good to the electronic Negotiable Warehouse Receipt holder.

v. If the deposited good was not weighed at the registered warehouse, the warehouseman must have processes to ensure that the person taking delivery is informed of the location where the weight of the deposited goods was recorded.

vi. The warehouseman must have systems and processes to ensure that the quality and quantity of goods is checked at the time of delivery of such goods.

3.2. Delivery of Goods

i. The stocks shall be delivered to the depositors or his authorized representatives on his request as per the following procedure:

a. Depositor/ eNWR holder requests for delivery of stock to Repository Participant who authorized delivery of the stock after due verification.

b. Verification of documents/ records.

c. Inspection of the quality of the stocks.

d. Collection of storage, insurance and other charges.

e. Issuance of the delivery order to the Godown in charge.

f. Entry of the empty vehicles in the warehouse premises.

g. Weighment of the stock.

h. Preparation of the gate pass.

i. Exit of the loaded vehicles, after weighment, if required.

j. Preparation of the records and making entries in the Godown/office registers.

ii. Transfer of stocks from one depositor to the other by endorsement shall require the consent from both the parties.

iii. Re-assaying of the quality of the stocks shall be carried out if so desired by the endorsee.

3.3. Weighment during delivery

Same mode of weighment shall be resorted to, both during deposit and delivery of goods in a warehouse.

3.4. Quality assessment during delivery

3.4.1. Agri Commodities

i. Before delivery of deposited goods to the depositor or its authorised representative the representative sample of stocks shall be drawn and tested for its quality, moisture, infestation, if any, and grade.

ii. The procedure described in section 1.5 for assaying of goods shall be followed.

iii. The observations shall be recorded in relevant records and got authenticated by the depositor, its authorised representative or the electronic negotiable warehouse receipt holder.

3.4.2. Non Agri Commodities

i. In case the e-NWR holder desires to retest the sample before delivery, the cost of testing shall be borne by the e-NWR holder.

ii. The procedure described in section 1.5 for assaying of goods shall be followed.

3.4.3. Documentation (physical or electronic form) during delivery of goods

a. Gate Register

b. Delivery Order

c. Weighment record

d. Lorry Weighbridge Register (Issue)

e. Insurance Register along with valid Insurance Policy

f. Stack wise Register

g. Stack Card/ Lot Card

h. Daily Transaction Diary

i. Warehouse Receipt/ Issued & Cancelled Register

j. Stock Register

k. Depositor’s Ledger

l. Daily Transaction Register

m. Warehouse Receipt Bank Lien Register

n. Gate Pass

4. Procedure for ensuring the safety of the goods from fire, burglary etc.

4.1. Procedure for risk management in the warehouse

i. The warehouseman must have processes to periodically inspect the physical integrity of its registered warehouses with a view to the safe preservation of goods against which it has issued an electronic Negotiable Warehouse Receipt.

ii. Inspection staff must be independent of the employees/ staff deputed at the registered warehouse.

iii. The warehouseman must have a system of computing its insurance requirements on a monthly basis.

iv. A warehouseman must ensure that all deposited goods in registered warehouses shall be fully insured against fire, flood, earthquake, burglary, frauds/misappropriation, riots, strikes and terrorism (if applicable), even if the depositor has insured the goods.

v. A warehouseman shall ensure to maintain records of all persons entering a registered warehouse.

vi. There must be a central system of recording the names of employees and staff in whose custody the locks and keys of registered warehouses are kept.

vii. The warehouseman must have processes to ensure that the goods against which a live electronic Negotiable Warehouse Receipt exists, shall never be moved out of the premises of the registered warehouse.

viii. If the depositor or any person with a lien over the commodity (bank or financial institution) wishes to move a deposited good from the custody of the warehouseman, the electronic Negotiable Warehouse Receipt issued against the deposited good must be cancelled and a record of such cancellation must be maintained.

4.2. Warehouse Security Management

i. The warehouseman must have adequate security personnel for every registered warehouse.

ii. The warehouseman must maintain a roster of security personnel deputed at its registered warehouses.

iii. The warehouseman must clearly lay down the responsibilities of the security personnel deputed at its registered warehouses.

iv. The warehouseman must clearly lay down processes that security personnel must follow in the event of any unlawful entry, burglary, theft or damage or potential loss to the deposited goods and must also provide necessary facilities for discharging these functions.

v. The warehouseman must have processes to ensure that the security guard reports the status of the registered warehouse on a daily basis.

vi. The warehouseman must ensure that its security personnel have the required facilities to communicate immediately any unlawful entry, burglary, theft or damage or potential loss to the deposited goods to the warehouseman.

4.3. Procedure for fire control

i. The warehouseman shall ensure that the facilities and the stocks stored therein are well protected from losses due to fire hazards.

ii. The warehouseman shall ensure that addresses and telephone numbers of fire station, police station and warehouse official shall be displayed at conspicuous places so that in case of emergency, the authorities may be contacted without any delay.

iii. Warehouse official shall take precautions to avoid any outbreak of fire in the premises.

iv. Smoking or lighting match-stick inside the Warehouses shall be strictly prohibited. 'NO SMOKING' boards shall be prominently displayed.

v. Warehouse security shall ensure that no person entering in its premises carry any match box, gas lighter, chemicals and inflammable items which can cause fire. Use of naked light shall not be allowed in godown. No electrical points shall be provided inside the godowns.

vi. Waste paper, tom pieces of gunny bags, old mats, paddy husk, straw, twines etc. shall not be left scattered in godowns.

vii. The lighting and other arrangements in the warehouse premises shall be satisfactory and arrangements for periodical check-up shall be made to ensure that no line is defective.

viii. No big hole/openings in walls, doors and roofs shall be allowed to remain unattended, to ensure against throwing of a burning ball from outside by a miscreant.

ix. While locking the godown, the warehouse in charge or Shed In charge shall personally check each and every godown/ open shed to ensure that no cigarette

butts or burning matches are lying in godowns.

x. Water and sand shall be kept at such open places near the warehouse that these are readily available in any emergency for dealing with and out-break of fire. The fire buckets shall be painted red and marked (FIRE) in block letters. All fire buckets shall be refilled at least once a week and these shall not be used for purposes other than that of firefighting.

xi. Fire extinguisher shall be allotted a serial number by which it shall be referred to in the records. The following details shall be painted with white paint or written on a slip of paper and pasted on the body of the extinguishers:

a. Serial Number

b. Date of Purchase

c. Date of last refilling

d. Due date of refilling

The details shall be repainted or fresh slip of paper with the details pasted each time the extinguisher is refilled or inspected.

xii. All persons employed in warehouse shall be familiar with the elementary principles of firefighting and know the location of firefighting equipment required in an emergency.

xiii. For a 10,000 MTs for Agri & combined warehouse, a water storage tank of 1 lakh litre capacity with 24 hrs availability along with fire jet pumps throwing water upto 30 to 40 meters with a speed of 300 to 700 litre water per minute may be provided.

xiv. Warehouse official from time to time shall ensure that all the firefighting equipment and devices installed in the premises are in working condition.

xv. Apart from this, some staff should be specially trained to operate firefighting equipment. The effectiveness of the equipment will depend upon the promptness and ability with which it is handled. Speed is the first essential in dealing with an outbreak of fire.

4.4. Procedure to be adopted in the event of fire

i. Fire alarm shall be given by shouting ‘Fire’ to warn others.

ii. In case of a fire, the warehouseman must have processes whereby, in addition to the other requirements in this schedule, immediate intimation is given to the nearest Fire Brigade office.

iii. The Fire Brigade office services shall be informed over phone (Telephone Number of Fire Service Station shall be hung near the telephone) in a clear manner to make sure that

they have correctly understood the location.

iv. Any person in danger shall first be secured and injured persons sent to hospital immediately.

v. Efforts shall be made to put out the fire with appliances available at the warehouse.

vi. Side by side with this, the fire shall be localized by removing other inflammable articles and by closing doors and windows.

vii. Aimless running and unnecessary shouting shall be avoided as this leads to confusion.

4.5. Procedure to be adopted in the event of theft/ burglary in a warehouse

i. The warehouseman must have processes for actions to be taken by it or its employees in the event of burglary, theft, break-ins, fire, etc.

ii. The warehouseman must have processes whereby its employees/ staff intimate the local police, warehouseman's designated officials and the Authority immediately (if initial intimation is by phone, there must be a process for follow-up written intimation/FIR to the police within twenty-four hours) of the incident.

iii. A copy of the FIR shall be obtained on prescribed format of Police Department.

iv. The warehouseman shall inform the details of the incident to the Insurer (In cases where the goods are insured by more than one Insurance company, to the Lead Insurer) and also to the Authority.

v. The warehouseman shall communicate following to Insurance Companies / their surveyor to claim for the loss on prescribed Claim Form:

a. Copy of initial intimation

b. Copy of FIR

c. Brief Incident Record

d. Location of the Godown / Site

e. Details of loss (This shall be based on valuation of the Goods as per records of the warehouse minus disposal of damaged goods and expenses of salvaging with necessary evidences)

f. Copy of the insurance policy

g. Photographs of the incident

h. Newspaper cutting, if any

i. Certification of Fire Brigade, Police, other local authorities, as applicable

j. Relevant extracts of stock ledger, insurance register

vi. The warehouseman shall put in place procedure for determining losses caused due to fire, flood, burglary, misappropriation, fraud, negligence and force majeure events.

vii. Losses sustained by the Depositor due to insurable risks shall be compensated based on valuation within one week of receipt of claim from Insurance Company.

viii. The warehouseman shall submit a report about the extent of damage to the depositor & Authority and shall maintain the record of such losses.

5. Procedure for Grievance Redressal

Following procedure shall be adopted for facilitating public and other stakeholders to register grievances before the Authority:

i. The warehouseman shall put in place a system for registration of public grievances.

ii. Any person aggrieved with the functioning of the warehouse may register a grievance along with supporting evidence to the warehousemen or his authorised representative in the warehouse.

iii. Any eNWR holder who wishes to file a delivery-related grievance against a warehouseman must do so before taking delivery or within 30 days of taking delivery under protest.

iv. An acknowledgment of receipt of the grievance shall be sent to the aggrieved party within one day of the receipt of the grievance. This acknowledgment will include:

a. date of registration of grievance;
b. unique reference number;
c. the category of grievance

v. The grievance shall be redressed and the warehouseman shall communicate the same to the aggrieved party within 15 days of receipt of the grievance.

vi. The communication of redressal issued by the warehouseman as above shall include the following:

a. action taken by the warehouseman to redress grievance;
b. if the grievance is rejected, detailed reasons for doing so.

vii. Where the aggrieved party is not satisfied with the redressal provided by the warehouseman as above, it shall communicate its response to the warehouseman within 10 days of receipt of communication from the respondent.

viii. The aggrieved party's response made as above must clearly state the reasons for which the aggrieved party is not satisfied.

ix. The warehouseman shall respond to the aggrieved party's response within 10 days of its receipt.

x. Where the aggrieved party is still not satisfied with the response provided by the warehouseman as above, it may escalate the grievance to the Authority for its resolution.

xi. A grievance shall be considered as closed when:

a. the aggrieved party has accepted the response given by the warehouseman.

b. the aggrieved party has not communicated a response to the warehouseman within eight weeks of the issuance of the warehouseman's response; or

c. the aggrieved party withdraws its grievance through a written or electronic communication.

5.1. Grievance Redress Policy

i. Every warehouseman shall have a Grievance Redress Policy which shall be filed with the Authority and shall also be adequately publicized. This policy shall include:

a. The grievance redress process followed by the warehouseman;

b. The time-lines for resolution, which will be in compliance with the stipulations given in sub section 1. above; and

c. The procedure for escalation of grievances.

ii. The warehouseman must maintain a record of all grievances that it may receive, and related information thereof and make such information available to the Authority as and when required.

5.2. Grievance Redress Officer

Each registered warehouse of a warehouseman must have a designated grievance officer.

5.3. Publicizing Grievance Redress Procedure

Grievance redress procedure of the warehouseman shall be prominently displayed in the warehouse for information of the public, giving contact details of the designated Grievance Officer.

5.4. Dispute resolution process

The warehouses registered with the WDRA shall follow the dispute resolution process notified by the Authority from time to time.

6. Roles and responsibilities of employees (including outsourced employees)

6.1. Record of manpower

i. The warehouseman shall maintain a record of manpower deployed in the warehouse for effective management of the same.

ii. Manpower requirement will be based on the operational considerations.

iii. Normative requirement of manpower based on the capacity of the warehouse could be as under:

Storage Capacity of Warehouse (in MTs for Agri Warehouse and Sq Mts for Non Agi Waregouses)	**Upto 5000 MT**	**5001-10,000 MT**	**10001-25000 MT**	**Above 25000 MT**
Warehouse Manager	1	1	1	1
QC Inspector (Technical Asst.)/ Jr. QC Inspector (Jr. Technical Asst.)/Assayer(applicable only for agri warehouses or common agri-non agri warehouses) *	1	1	2	2
Godown Assistant	1	2	3	4
Security Guards	4	4	6	8

** In case these tasks are outsourced, details of the outsourcing agency shall be maintained by the Warehouse Manager.*

** For both agri and non agri (covered and open) warehouses, 1MT will be equal to 0.557 sqm.*

iv. It shall be ensured that personnel deployed at the warehouse are competent to handle responsibilities assigned to them.

v. The warehouseman and other Quality Control (QC) personnel should have adequate knowledge and expertise in the scientific storage of goods/agricultural commodities to be stored in the warehouse.

vi. It is desirable that they are trained in warehouse management from an institution of repute

6.2. Duties and Responsibilities of Warehouse employees

i. Warehouse Manager

a. To act as in charge of the warehouse and to ensure adequate supervision over the operations undertaken at the warehouse by the concerned staff.

b. To ensure the safety & security of the stocks and scientific preservation of stocks, proper and up to date maintenance of records, insurance of stocks, judicious use of the equipment, fumigants and other property of the warehouse.

c. To effectively liaise with various stakeholders of the warehouse such as Depositors, Banks, Repositories, Banks etc.

d. To exercise supervision over the staff so as to maintain proper discipline and to ensure that there is complete cohesion and harmony among the staff as also to inculcate team spirit, cooperation and sense of participation amongst the staff working at the warehouse.

e. To exercise overall vigil and exhibit due presence of mind in case of any emergency and to act according to the situation on the spot.

f. To exercise administrative and financial powers as may be delegated to him by the Warehouseman.

ii. QC Inspector (Technical Asst.)/ Jr. QC Inspector (Jr. Technical Asst.) /Assayer (for agri and combined warehouses)

a. To draw samples for analysis of stocks received in the warehouse and ensure proper storage and maintenance of reference samples and related records.

b. To carry out analysis and grading of stock received in the warehouse. Check for any violation of the FSSAI Standards.

c. To undertake regular stock health inspection at least once in a fortnight.

d. Undertaking regular prophylactic treatment through appropriate chemicals at desired dosage and frequency.

e. To undertake curative treatment (fumigation) of stocks for effective control of insect infestation.

f. To ensure maintenance of proper godown hygiene and sanitation at all times.

g. To undertake physical verification of stocks with respect to quantity stored in the warehouse.

h. To check quality of stock at the time of issue vis a vis the reference sample.

iii. Godown Assistant

a. To supervise loading and unloading stocks from the trucks/ carrying vehicles after checking that the correct quantity and type of goods have been received/ delivered.

b. To sign the delivery form, once satisfied that the stocks are complete.

c. To supervise movement and stacking the stocks to the correct area in the warehouse as per the approved stack plan.

d. To keep records of stocks received, delivered and in storage with respect to their location and quantity.

e. To arrange movement and de-stacking of goods, for effecting delivery.

f. To keep record of internal shifting of stocks as and when carried out.

g. To prepare daily transaction report with respect to godowns under his charge.

h. To assist in assessing the storage charges due and collection of the same from the depositor.

iv. Security Guards

a. To watch over and protect the warehouse against various threats, including vandalism, theft, illegal activity and terrorism.

b. To thoroughly check the transport vehicle for presence of any extraneous material such as stones etc. which may be used for manipulating the quantity of stock deposited in the warehouse.

c. To check the condition of locks in the godowns and take note of/report any damages to the same.

d. To survey various locations in the warehouse premises (use closed-circuit TV monitors if available in the warehouse), take note of risk based happenings and report to the Warehouse Manager/ designated officials.

e. While handing over charge, to next security guard a mention of security conditions including any security risk/ incident shall be properly recorded in handing over reports.

f. To familiarise with operation of different types of firefighting equipment deployed in the warehouse.

6.3. Outsourcing tasks to service providers

i. The warehouseman shall maintain a list of service providers to the warehouse in the field of handling, transportation, weighing, insect/pest control, assaying/testing of the quality of goods deposited, security and other services.

ii. The evaluation of performance of service providers shall be based on documentary evidence for the following:

a. Capability of the service provider with reference to his possession of required operational equipment, trained manpower and financial capability

b. In case the services of some outside weighbridges are utilized, these should be duly stamped and licensed by the State Weights and Measures Department.

6.4. Evaluation of Service Providers

The warehouseman shall evaluate the service provider at least once in a year depending upon the nature of services availed keeping in view the following parameters:

i. Availability of suitable handling and transportation equipment.

ii. Performance during period under review for timely completion of jobs.

iii. Instances of payments of demurrage / wharf age.

iv. Instances of labour problem.

v. Continued availability of trained manpower.

vi. Regular compliance with applicable legal requirements.

vii. Instances of shortages during transit, as applicable.

The warehouseman shall maintain records of periodic evaluation and depending upon the results of evaluations will decide necessary corrective actions to ensure that the services are rendered efficiently.