



CENTRAL WAREHOUSING CORPORATION

(A Government of India Undertaking)
WAREHOUSING FOR EVERYONE



No. TQC/Storage-Policy/2018-19

Dated : 13.09.2018

Regional Manager,
Central Warehousing Corporation,
Regional Office,
**AHMEDABAD, BANGALORE, BHOPAL, BHUBANESWAR,
CHANDIGARH, CHENNAI, DELHI, GUWAHATI,
HYDERABAD, JAIPUR, KOCHI, KOLKATA, LUCKNOW,
MUMBAI, PANCHKULA, PATNA, RAIPUR**

**SUB : Proper Equipping of Laboratory, Disinfestations, Fire Fighting, Safety, Weighing
and other Equipments at the Warehouses - Reg.**

Sir/Madam,

This is in continuation to this office letter of even number dated 07.09.2018 on the subject cited above. It has come to notice that the foodgrain warehouses are not having adequate equipments for the Quality Control /Pest Control operations. This has been viewed seriously by the Competent Authority.

In this regard, it is to inform that the details of the equipments required at the warehouses according to the storage of the commodities was sent to you vide this office letter no. TQC/WDRA Act/2008-09/17 dated 31.12.2008 on the implementation of WDRA Act came into force for proper grading and maintenance of the quality of the foodgrain stocks, preservation standards, etc. Similarly, for the preservation of the foodgrains at the warehouses of the bulk depositors we have to emphasized the better quality standards and preservation of foodgrain stocks should also have these equipments at all warehouses in the Region in order to minimize the losses and also to avoid quality disputes and claims/recoveries thereof.

A list of these equipments is once again enclosed herewith for ready reference. It is, therefore, to review the availability and arrange the supplies of these equipments to the warehouses on priority basis and also advise Inspecting Officers to review these aspects during inspections so that the Warehouses be equipped properly available and used in accordance with the commodities stored in the warehouse and also for the PCS work. A warehouse wise, item wise serviceable/useable availability of these equipments may be sent by return mail along with the action plan to supply these equipments in order to equipping all warehouses on immediate priority basis and apprising the Competent Authority.

Immediate compliance is requested.

Yours faithfully,

(Signature)
(A.K. Malhotra)
DGM(Tech)

13/09/2018

Encl. As above.

Copy to :-

1. GGM(Pur & Inspn)/GM (Comm.)/GM(Fin) [redacted] CWC, CO, New Delhi.
2. PPS to MD/ PS to Dir(MCP)/SAM to Dir(Fin), CWC, CO, New Delhi.

CENTRAL WAREHOUSING CORPORATION
(A GOVT. OF INDIA UNDERTAKING)

NORMS FOR EQUIPPING THE WAREHOUSES FOR SCIENTIFIC STORAGE & SELECTION OF APPROPRIATE EQUIPMENTS

S.No.	Description of Equipments	W.H. Below 3000 MT	3000 MT	5000 MT	10000 MT	15000 MT	25000 MT	50000 MT	75000 MT	1 Lac MT & above
A.	LABORATORY FIXTURES									
1.	Analysis Table (with drawers)	1	1	1	1	1	2	2	2	2
2.	Balance Table (with drawers)	1	1	1	1	1	2	2	2	2
3.	Wooden Almira (for keeping samples)	1	1	1	2	2	2	3	4	4
4.	Glass Slabs	2	2	2	2	2	4	4	4	4
5.	Laboratory Rack (Size 3'x6' with 6 slabs)	1	1	1	1	1	2	2	3	3
6.	Stools	2	2	2	2	2	4	4	4	4
7.	Chairs (Balance Table)	1	1	1	1	1	2	2	2	2
8.	Show case of Insects Pests	1	1	1	1	1	1	1	1	1
B.	LABORATORY EQUIPMENTS									
1.	Physical Balance	1	1	1	1	1	2	2	2	2
2.	Counter Balance (with two sets of 500gm wt.)	1	1	1	1	1	2	2	2	2
3.	Grading Set (with accessories like scoop, spoon, brushes)	1	1	1	1	1	3	3	4	4
4.	Enamel Plates 8", 11", 24"	6	9	12	18	24	30	36	40	48
5.	Sample Bags - Polythene	500	500	500	1000	1000	2000	2000	2000	2000
	- Cloth	500	500	500	1000	1000	2000	2000	2000	2000

6.	Parkhis	6	6	10	15	18	24	36	36	36
7.	Glass Jar (500 gms)	30	30	50	50	50	50	50	50	50
8.	Measuring Cylinder (200 ml. & 500 ml.)	1	1	1	2	3	4	4	6	6
9.	Measuring Cylinder (10ml. & 20 ml.)	1	1	1	2	3	4	4	5	6
10.	Funnel (2½" diameter)	2	2	2	2	4	4	4	6	6
11.	Magnifying Glass	1	1	2	3	4	4	5	6	6
12.	Hygrometer	1	1	1	1	1	2	3	3	3
13.	Max. Min. Thermometer	1	1	1	1	1	1	1	2	2
14.	Petri Dishes	6	6	10	12	16	20	20	24	24
15.	Bag Trier	1	1	2	3	3	4	5	5	5
16.	Moisture Meter	1	1	1	1	1	1	2	2	2
17.	Sample Divider	-	-	1	1	1	1	1	1	1
18.	Aluminium Phosphide Applicator	-	-	-	1	1	1	1	2	2
19.	Measuring Tape	1	1	1	1	1	1	2	2	2
20.	Micrometer	Need based.						1	1	1
21.	Vernier Calipers	Need based.						1	1	1
22.	Magnoscopes	Need based.						1	1	1
C	DISINFESTATION EQUIPMENTS									
1.	Respirator & Eye Shields	4	4	6	8	8	10	12	12	12
2.	Gas Mask with Canister	1	2	2	3	3	4	6	9	9
3.	Fumigation Cover (on fumigable stock basis)	<u>Stock holding</u>				<u>No. of covers</u>				
		5000 MTs – 10000 MTs				6 covers + covers for PCS work on need basis.				
		Above 10000 MTs				3 covers per 5000 MTs + covers for PCS work on need basis.				
4.	Fumigation Sheet	As per request on PCS / FESS Centres								
5.	Rat Cages	6	6	8	10	10	15	20	25	25
6.	Foot Sprayers	1	2	2	3	3	3	4	6	6
7.	Knap Sack Sprayers	As per requirement for PCS / FESS Work								
8.	Power Sprayers/Fogging Machine	-	-	-	1/-	1/-	1/1	1/1	2/1	3/1
9.	Sand Snakes	60	100	140	180	260	440	660	720	800

10.	Hand Gloves (Pairs)	2	4	4	6	6	8	10	12	14
11.	Air Gun/Bird Scarer	1	1	1	1	1	1	2	2	2
12.	Halide Lamp	1	1	1	1	2	2	2	3	3
D. OTHER EQUIPMENTS										
1.	Tarpaulin	4	6	8	12	18	24	36	48	48
2.	Wheel Barrow	1	1	3	5	7	10	15	20	25
3.	Trolley	1	1	1	2	2	3	5	5	6
4.	Wooden Planks	2	3	3	4	6	10	15	15	15
5.	Ladder	3	3	3	4	5	7	12	15	15
6.	Sample Sieves (for screening)	1	1	1	2	3	5	9	12	12
7.	First Aid Box	1	1	1	1	1	1	1	2	2
8.	Fire Extinguishers – Constructed - Hired	As per norms prescribed on page No.47 & 48 of Controlled Book No.1 relating to storage practices.								
9.	Fire Buckets – Constructed - Hired									
10.	Grain Cleaning Machine	As per requirement at each centre								
11.	Bag Stitching Machine	As per requirement at each centre								
12.	Nylon Door Nets	According to number of doors in the godowns only.								
13.	Platform Scales, 300 Kgs., 500 Kgs., 1000 Kgs., 3000 Kgs.	As per requirement depending upon the volume of work.								

E. SAFETY EQUIPMENT

S.No.	Equipment/Accessories	Specification including ISI if any	Minimum No. of Units	Purpose
1.	Gas Mask (Full vision Face Mask) fitted with canister or cartridge	As per IS:8523/1977 full vision face mask with corrugated tube, carrying strap and canisters	1 No.	To protect against inhalation of toxic fumigants such MB/ALP.
	Canisters for use with Methyl Bromide	--	2 Nos.	

	/ALP or Universal			
2.	Dust Masks	--	2 Nos.	To protect against Inhalation of chemical dust and aerosols etc.
3.	Portable Oxygen Cylinder nose and mouth cap	--	1 No.	Emergency supply of Oxygen
4.	First Aid Box	--	1 No.	To render first-aid measure
5.	Goggles	--	4 Nos.	To protect eyes while spraying pesticides etc.
6.	Gloves	Rubberized/PVC	4 Pairs	To protect hands from hazardous chemicals
7.	Resuscitator	--	--	To restore breathing in case of accidental exposure to fumigants
8.	Gum boots	--	2 Pairs	To protect feet from hazardous chemicals
9.	Phosphine Gas Detection Strips	Test Strips impregnated with chemicals for detection of Phosphine Gas	1 Box	To detect Phosphine Gas leakages
10.	Dragger Type multi gas detector tubes	Consist of carrying case spare parts set screw drivers gas pump Drager detector tubes Phosphine 25/a-8101621 or MBr S/a(s) 6728211 or both	1 Unit Tubes in pkts. of both	To detect Phosphine or Methyl Bromide gas leakages during fumigation
11.	Phosphine Alert Personal Monitor	--	1 No.	To warn the operator of Phosphine presence
12.	Fire Extinguisher (Chemical type)	--	1 No.	To protect against Fire hazards
13.	Magnifier (pocket type)	10x magnification	2 Nos.	To detect insect infestation by

14.	Specimen tubes	Homeopathic vials with cork or plastic cap (4cm length dia 1cm)	10 Nos.	surface examination of stores To collect pests
F. DUNNAGE MATERIALS				
1.	Polythene film	3.963 Kgs. (40.14 sq.mtrs.) per 100 MT's.		
2.	Bamboo Mats/Potera Mats	30 Mats/100 MT for use alongwith crates. 60 Mats/100 MT for sandwitching with polythene film.		
3.	Wooden crates Steel Crates Poly Crates	2000 crates for every 5000 MT's.		
4.	Metal Trays	One tray for every 25 tins of 16.5 Kgs.		
G. GAS MASK & CANISTER				
1.	The mask consists of 3 parts	(a) Face piece (b) Breathing tube (c) Canister		
2.	CANISTER -	(a) Canister contains absorbents like activated, charcoal, Soda lime, Alkaline Granule, Sodium Hydroxide, etc. (b) Canister never to be used after expiry date. (c) Canisters to be stored in cool and dry place free from contamination of any gases. (d) When a new canister is used a label should be attached to it to record the details/time of its usage. (e) Date of opening of top seal should be recorded properly. (f) After breaking the bottom seal even if there is no exposure to fumigant the canister should be replaced after six months. (g) Exhausted canister should be clearly marked and destroyed.		

H.	HALIDE DETECTOR	<p>➤ A halide Gas detector indicates the presence of approximate concentration of M.Br. The intensity of colour imparted to the flame indicates the % of concentration of Gas. The Halide detector not to be stored/kept in a frequently inhabited room, the fuel being a flammable gas under compression.</p>																											
		<p><u>Approximate M.Br concentration associated with colour intensity of the flame.</u></p> <table border="1" data-bbox="1626 565 2510 894"> <thead> <tr> <th>*PPM</th> <th>OZ/1000 ft.3**</th> <th>Flame Colour</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>No Colour.</td> </tr> <tr> <td>25</td> <td>0.1</td> <td>Faint fringe of green</td> </tr> <tr> <td>50</td> <td>0.2</td> <td>Moderate green</td> </tr> <tr> <td>125</td> <td>0.5</td> <td>Green</td> </tr> <tr> <td>250</td> <td>1.0</td> <td>Strong green</td> </tr> <tr> <td>500</td> <td>2.0</td> <td>Strong green-blue fringe</td> </tr> <tr> <td>800</td> <td>3.2</td> <td>Strong</td> </tr> <tr> <td>1000</td> <td>4.0</td> <td>Blue</td> </tr> </tbody> </table> <p>* Threshold limit value for MB for exposure for 8 hours is 20PPM. ** OZ/1000-ft. 3 mg./litre g/m3.</p>	*PPM	OZ/1000 ft.3**	Flame Colour	0	0	No Colour.	25	0.1	Faint fringe of green	50	0.2	Moderate green	125	0.5	Green	250	1.0	Strong green	500	2.0	Strong green-blue fringe	800	3.2	Strong	1000	4.0	Blue
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