केन्द्रीय भंडारण निगम

(भारत सरकार का उपक्रम)

Central Warehousing Corporation

(A Government of India Undertaking)

संख्या
No. _____

दिनांक
Date _____

TQC/Policy/98-99/30

4.1.99

Shri
Regional Manager,
Central Warehousing Corporation,
Regional Office,

Sub- Guidelines for calculation of Chemical/Dunnage/Equipments requirements.

Sir,

It has been observed many a times that there are erroneous and exagerated indents from the ROs / field units for supply of chemicals/equipments etc. which lead to shortage/excessive inventory of these items.

We have attempted to formulate guidelines/thumb rules which can be utilised while placing indents or monitoring the supply/consumption pattern of these items. These guidelines are enclosed herewith which may be brought to the notice of all officers and technical staff etc. in the field units also.

We welcome any suggestion from your end to improve the working with a view to achieve higher efficiency at field units.

Yours faithfully,

P.S.JOSHI
FOR MANAGER[TECH.]

J.P.S.

COPY TO-G.F.

/nps/ EC - Equipment seat

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GUIDELINES FOR CALCULATION OF REQUIREMENT OF CHEMICALS, DUNNAGE AND EQUIPMENTS.

A) CALCULATION OF STOCK HOLDING -

i) Closing balance of fumigable	As on 31st March or Maximum holding in a particular month of the financial year (April to March)
ii) Turn over of stock	40% of (i) above
iii)DESS (if any)	10% of (i) above

TOTAL stock holding = (i) + (ii) =(iii) = X MT

B) CALCULATION OF CHEMICAL REQUIREMENT -

The calculation shall be on 18 months basis i.e. from April to September of succeeding year. Indent to be placed on 6 months basis.

i) Aluminium Phosphide : (Each tablet = 3 g.
(Each tube = 20 tab =
= 60 g.
(each tin =16 tubes=
960 g.

1/3 phosphine release

a) PERIODICITY OF FUMIGATION -

ZONE-I In dry, cold climate (winter) infestation is very low.	Punjab, Haryana UP, MP, HP, Rajsthan, Delhi & Bihar.	3 fumigation per year + one fumigation need based
ZONE-II The climate is hot & humid favourable for for insect multiplication	South India, Coastal belts, North-East States and West Zone(Mumbai Ahmedabad, Calcutta, Kochi Chennai, Bangalore, Bhubaneswar, Hyderabad & Guwhati Region.	4 fumigations per year

b) CHEMICAL REQUIREMENT

STOCK HOLDING	CHEMICAL QUANTITY
5,000 MT	45 KG.
1,700 MT(One compartment	15 KG.
1 MT	9 GRAM
1 BAG	0.9 GRAM OR SAY ONE GRAM

So thumb Rule is one bag requires one gram ALP.

ii) MALATHION (50 EC) - Available in one litre or 5 litre tins.

STOCK HOLDING	CHEMICAL QUANTITY
5,000 MT	3 Litre
1,700 MT(one compartment)	1 Litre

iii)DDVP (76 EC) - Available in one litre PVC bottles

STOCK HOLDING	CHEMICAL QUANTITY
5,000 MT	1 Litre
1,700 MT(one compartment)	0.3 Litre

iv) DELTAMETHRIN (2.5% WP) - Available in Pouches of 1 kg. packed in cartons of 6 kg. each

STOCK HOLDING	CHEMICAL QUANTITY
5,000 MT	12 KG. (2 Cartons or 12 pouches
1,700 MT(one compartment)	4 kg.(4 pouches)

PERIODICITY OF SPRAY -

i) Malathion - 2 Sprays in a month if deltamethrin not sprayed.

ii) DDVP - As and when flying infestation is noticed(need based)

iii) Deltamethrin Once in 3 months (no malathion spray to be done for 3 months)

NOTE: Even if stock holding is less than one compartment, the entire compartment is to be sprayed so minimum quantity for one compartment shall be taken for calculation.

C. DUNNAGE

i) Wooden Crates (5'x2' = 10 sq. ft. area)

CAPACITY(STOCK HOLDING)	CRATES REQUIRED
5,000 MT	2000 Crates

Thumb Rule : 2.5 MT requires one crate

ii) Polythene film 4.5 to 5.0 kg per stack of 30'x20'

iii) Bamboo Mats (5' x 3' = 15 sq. ft. area)

1 stack (30' x 20')	80 mats (40 mats per layer)
12 stacks(one compartment)	960 mats or 1000 i.e. 100 bundles

D. FUMIGATION COVERS - (Black Polythene Covers : Effective life one year)

i) Effective use of cover 20 days in a month or 4 fumigations (@ 5 days exposure in each fumigation)

or 45 fumigations per year.

NORMS

STOCK HOLDING	NUMBER OF COVERS
i) 5,000 MT to 10,000 MT	6 Covers for fumigations to cover half compartment at a time. + 5 covers for DESS(if any)
ii) Above 10,000 MT	3 covers per 5000 MT + 25% covers extra for warehouses of Zone-II to cover Four fumigations in a year + 5 covers for DESS (if any)

NOTE:

For warehouses storing foodgrains, fertilisers and other commodities, minimum 50% of the capacity to be considered for calculation of Technical requirements.

EXAMPLE A warehouse of 10,000 MT capacity stored 5,000 MT foodgrains in November and closing balance on 31st March was 3500 MT. It also stored 1500 MT fertiliser and other general items. Calculate the chemicals required.

i) STOCK HOLDING SHALL BE: 5000 MT (due to maximum holding in November. Also 50% of capacity to be considered if other commodities also stored.)

ii) Aluminium Phosphide 5000 MT X 4 fumigations = 20,000 MT per year.

As a thumb rule 20,000 MT (or 2.00,000 bags) requires 2,00,000 g. i.e. 200 kg. per year.

+ 40% towards turnover i.e. 80 kg.
+ 10% towards DESS i.e. 20 kg.

TOTAL 300 kg. per year
or 450 kg. for 18 months

iii)Malathion 5,000 MT requires 3 litres for one spray. For 18 months period half may be covered by Deltamethrin sprays. So there may be 18 sprays in 9 months i.e. 54 litres or say 60 litres malathion required if Deltamethrin also to be used. Otherwise it will be 120 litres.

iv) Deltamethrin 5,000 MT require 12 kg. for one spray. If half of 18 months to be covered by malathrion. There will be 3 sprays at every 3 months interval. So requirement will be 36 kg. if malathion also to be used; otherwise it will be 72 kg.

v)	DDVP	5,000 MT require 1 litre for one spray. It is to be sprayed as nd when needed. Generally one spray per month is required in Zone-I and 15 - 18 sprays in a year in Zone-II. So taking 15 sprays on an average 15 litres per year is required. For 18 months it will be - Approx.20 litres in Zone - I and 30litres in Zone-II.

We may circulate to all RMs for implementation.

(P.S.JOSHI) 4/1/99
JMT- 4.1.1999