

Government of West Bengal
Food & Supplies Department
11a, Mirza Ghalib Street Kolkata-700087

Memo No. 01-FS/Seect./Food/4P-12/2021(Pt.I)

Dated:03/01/2022

ORDER

With a view to ensure that food grains of proper quality & quantity are received in all godowns and that received stocks of food grains are stored appropriately in all godowns prior to delivery of such stocks, the Governor has been pleased to order that the following Standard Operating Procedure (SOP) is to be maintained, without any exception, in all godowns which are utilised by the F&S Deptt. in the State.

Godown Inspectors i.e. Godown-in-Charge and Quality Control Inspector must ensure that the following Standard Operating Procedure(SOP) is maintained correctly and without any exception in each and every godown that is under their supervision.

1. REGARDING MAINTENANCE OF GODOWN :

- 1.1. Initiative must be taken to ensure cleanliness of the surrounding areas of the godown and to see that there is no issue of water logging around the godown.
- 1.2. Unwanted and broken furniture, old bags etc. should be removed from the godown as these things invite dust and web and also form a source of insect infestations of food grains and give shelter to rats/mice where they can breed profusely.
- 1.3. Proper lighting arrangement should be maintained in godown.
- 1.4. Proper security arrangement has to be maintained to avoid theft etc. All shutters are to be mandatorily repaired on urgent basis.
- 1.5. The godown inspectors should check the godown regularly to identify any leakage in the roof, gaps in the walls/window/ventilation pans in order to disallow entry of rain water or entry of birds.
- 1.6. Periodic inspection of the godown must be done to ascertain the physical condition of the godown, in terms of any deterioration/physical damage of wall, floors, windows, opening in doors and presence of any insects, termites, birds and rodents.
- 1.7. The floor and walls should also be checked for cracks/crevices and necessary repairs must be carried out before accepting fresh stocks of food grains in the godown.
- 1.8. Rat burrows should be closed with stones, mud and cement after fumigation with Aluminum Phosphide tablets.
- 1.9. Godown Inspectors must take pro-active role in case of requirement of any type of repair, minor or major, and they should bring up the issue with the

higher authority on urgent basis. WBSWC/ Dte.of Storage/DCF&S should take immediate steps for repair of the godown on urgent basis as per Govt. norm.

- 1.10. Efforts should be undertaken to maintain proper road condition inside the godown area so that the vehicles can move smoothly.
- 1.11. It is important to maintain the physical structure of the godown in proper condition and to keep it storage-worthy. Godown roof, floor, ventilators, walls should be in good and dry condition so that the food grains are not spoiled due to moisture.

2. REGARDING MAINTENANCE OF NECESSARY EQUIPMENTS :

- 2.1. Fire fighting arrangements are to be maintained at the depots in workable conditions & to be renewed periodically before expiry date.
- 2.2. All equipments like Moisture meter, Weighing Devices, etc. are to be used properly and maintained as per norm. In case of any defect or shortage of such equipments, the matter must be brought to the notice of the higher authority immediately by the Godown-in-Charges. At the same time, Quality Control Equipment and Pesticide Registers are to be maintained properly by the Quality Control Inspector.
- 2.3. The weighbridge should be checked every day. At the same time, faulty weighbridges are to be repaired immediately and in this regard Annual Maintenance Contract may be signed with reputed and competent companies.
- 2.4. **The Godown in Charge shall ensure that the computer of the godown is functional and kept in a safe and secure place. It must be connected to internet with adequate speed.**

3. REGARDING PREPARATION OF GODOWN BEFORE RECEIVING OF STOCKS :

- 3.1. Thorough cleaning of the godown should be undertaken before receiving of fresh stock.
- 3.2. Before receiving of stock:- Vacant godowns are to be cleaned.
(As DDVP 76% EC was banned by the Govt. of India since December 2020, combination of Ethylene Dichloride +Carbon Tetrachloride (3:1) was suggested as an alternative chemical. However method of application, concentration and frequency of application of the said combination has not been provided by the Central Govt., till date. However, CWC and FCI is using the combination of Malathion 50%EC+Deltamethrin 2.5% W.P. (1:1) on a trial basis and the same may be followed here till all the details of the combination of Ethylene Dichloride + Carbon Tetrachloride (3:1) is received.)
- 3.3. Proper dunnage material should be used to ensure storage of stock in proper condition, particularly to maintain the lowest layer of stack in proper condition. Polythene Sheets (100 micron/300 gauge in two layer) may be

used as dunnage. In case the floor is uneven, then double layered polythene sheets are to be used.

- 3.4. **The Godown in Charge shall ensure that his user id is functional and his password is well protected and kept confidential.**

4. STIPULATIONS PERTAINING TO RECEIVING OF STOCKS :

- 4.1. Stocks are to be received from the authorised representative of the rice miller and as per the delivery order (Rice Receipt Order or R.R.O.) and after satisfaction regarding quality of the rice to be received. The quantity is also to be verified accordingly. Stocks are to be received only from the authorised representatives of the Rice Millers and as per the terms of the R.R.O. Joint sampling of stocks by the authorised representative of the Rice Miller and the Godown Inspector is to be done when the stocks are received. The receipt records are to be entered online and WQSC (Weight Quality & Stock Certificate) to be generated accordingly.
- 4.2. Sampling of rice should be done carefully and the sample drawn must be a "Representative Sample" ***including a minimum 500 gm of stock per sample, clean plastic transparent bag, proper sealing etc.***
- 4.3. **Parboiled rice can be procured from the Rice Millers with moisture content upto a maximum limit of 14.50% with value cut. There will be no value cut upto 14%. Between 14.00% to 14.50% moisture, value cut will be applicable at the rate of full value. Raw rice can be procured with moisture content upto a maximum limit of 12.50% with value cut and there will be no value cut upto 12.00%. Between 12.00% to 12.50% moisture, value cut will be applicable at the rate of full value for raw rice.** (As amended vide G.O. No. 4737 FS/P/Sectt./GE&EM/4M-22/2018 Dated: 05.12.2019.)
- 4.4. **The quantity of broken rice percentage should not exceed 10% under any condition in case of parboiled rice and 12% in case of raw rice as the rice milled in a modern Rice Mill has very little presence of broken grains.**
- 4.5. All specifications including **moisture** must be checked and under no condition rice with moisture level above the specified limit may be accepted.
- 4.6. Gunny Bags are to be accepted only as per norm and the stenciling is to be checked before receiving of rice. Gunny Bag Register to be maintained.
- 4.7. In case of non-merchantable rice/rice with obnoxious smell/ rice which does not conform to the Govt. specifications, the concerned Godown Inspectors have every right to reject the rice after observing due formalities. In case of rejection of rice for quality issue, Rejection Register has to be maintained and joint samples are to be kept separately for future reference, if any.
- 4.8. Stock Registers, Delivery register, Central Registers are to be maintained properly and on regular basis.

4.9. In peak procurement period, 20% more than the normal storage capacity of the godown may be received by the godown inspectors strictly after obtaining necessary permission for the same from the district authority. But, even in these days, the quality of stored stock should be maintained in proper condition by taking necessary special care.

4.10. **Each and every receipt of stock must be entered online, beside offline entries in the relevant registers, at time of receiving of the stock in terms of the Order No. 885-FS dated 03.02.2020.**

4.11. **Standard Operating Procedure of Mixed Indicator Method for determining the age of raw rice(CMR):**

The Standard Operating Procedure (SOP) Of Mixed Indicator Method(MIM) that should be followed for determining the age of milled rice stocks during acceptance of CMR Mill Raw Rice for procurement is detailed hereunder.

This method is helpful for the procuring agencies to put a check on possibility of acceptance of old rice, along with the various parameters of the Uniform Specifications. SOP of Mixed Indicator Method should also be implemented for determining the age of milled rice stocks during acceptance of CMR Milled Raw Rice for procurement.

Implementation:

Henceforth, all the raw rice consignments shall be subjected to another test i.e. Mixed Indicator Method for determination of age of milled raw rice stocks. As per instructions in vogue, a sample shall be drawn from the offered consignment and analysed in terms of FAQ specifications of GOL. If it is found confirming to the prescribed specifications, the samples would be tested through Mixed Indicator Method. In case the color of the reagent comes out to be green/avocado green, the consignment would be accepted and any other color like yellow, yellow orange & orange would be rejected terming the stock as 'Not freshly Milled'.

Method of analysis:

Materials & Equipment:

(A) Glass Ware :

1. Volumetric flasks, amber colored, 2 no's of 250ml each & 100ml,
2. Graduated measuring Cylinder (100ml), Glass Made A-Grade,
3. Beaker(100 ml & 250 ml),
4. Test tube with stopper (5 no. of 25 ml),
5. Glass stirrer,
6. Measuring pipette (2ml).

(B) Equipment :

1. Balance (with 0.01 gram accuracy).

(C) Consumables :

1. Test tube racks (plastic made),
2. Distilled Water Bottle plastic (500ml),
3. Pipette Sucker (made of rubber),
4. Amber Coloured Glass reagent Bottles (250ml).

(D) Chemical Reagents

1. Methyl red, analytic reagent (0.05 gram/depot),
2. Bromothymol blue, analytic reagent (0.15 gram/depot),
3. Ethyl alcohol, Absolute Grade (75 ml/depot),
4. Distilled water (10.00 litres).

Preparation of stock solution

1. Weigh 0.05 gram of methyl red and 0.15 gram of bromothymol blue.
2. Dissolve the above indicators in 75 ml ethyl alcohol and add distilled water to made 100 ml.
3. Store in a cool and dark place and in an amber colored flask.

Preparation of working solution

Take an aliquot of stock solution and dilute with distilled water in the volume ratio 2:98. The prepared solution preferably be consumed in same or next day. Accordingly, working solution is to be prepared keeping in view of number of raw rice samples to be tested.

Procedure for staining method using pH indicators (working solution)

1. Weigh 5 grams of the raw rice sample.
2. Place the sample in the test tube.
3. Add 10ml of pH indicator (working solution) and shake well for one minute.
4. Note the resulting color of solution (whether green/avocado green/yellow/yellow orange/orange).

Interpretation of Test Results:

	Color Change	As standards per	Results
Samples subjected to mixed indicator method	Green	Freshly milled stock	Accepted
	Avocado Green		
	Yellow	Old Stock	Not to be accepted
Yellow Orange			
	Orange		

Precaution:

1. Keep away the chemicals from face due to volatile nature of alcohol.
2. Avoid contact of the chemicals from eye, nose and skin.

Appeal Procedure:

Normal appeal procedure would be followed in case of rejection of consignment through this method.

Color Coding for different age groups of rice:

Age of Rice in Months	Resulting color of solution
0 Month	GREEN
1 Month	AVOCADO GREEN
2 Months	AVOCADO GREEN
3 Months	YELLOW
4 Months	YELLOW ORANGE
5 Months	ORANGE
6 Months	ORANGE

5. REGARDING MAINTENANCE OF STACK :

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

- 5.1. A Stack Plan should be prepared and Stack numbers should be painted neatly in bold figure on the floor and also outside wall of the godown.
- 5.2. A model stack area should be marked neatly in bold on the floor and godown inspectors are to follow such plan while stock formation. This would definitely ease the job of gunny bag counting.
- 5.3. Uniform and standard stack (30'X20') with maximum 20 layers of bags in each stack are to be maintained although the size (30' X 20') may be altered considering the shape and capacity of the godown. A standard stack is to have maximum 3000 bags, i.e. 150 MT rice.
- 5.4. **Stacking should be done rice mill wise as far as practicable.**
- 5.5. Proper alleyways (2.5') and gangways (5') are also to be maintained.
- 5.6. Considering the size of godown, some other standard size stack may be formed which are (1) 21' X 18', (2) 18' X 18', (3) 12' X 18'. The floor space shall be divided into convenient blocks of rectangle or square.
- 5.7. Up to date and correct entries on Stack Cards are to be maintained. Each stack should have a separate stack card and quantity of receipt and delivery (date-wise) is to be noted on one side of the card. On the reverse side of the existing Stack Cards, QC Treatment records are to be maintained properly. The card should be placed at a convenient height for making regular entries and should be kept under a polythene jacket. The Stack Card should be preserved till the end of KMS and till the physical verification of the said godown.
- 5.8. Stack Registers are to be maintained properly and on regular basis.
- 5.9. **Besides offline stack cards, each and every quality control treatment must be entered online in the portal which should**

be reflected in the MIS report, stack wise, and visible at the end of the DCF&S.

6. REGARDING GENERAL PRESERVATION PROCEDURES, QUALITY CONTROL TREATMENT PROCEDURES AND RODENT CONTROL MEASURES :

It is extremely important to keep the food grains clean, dry and free from insects for long storage. In order to do so, regular maintenance and monitoring activity is needed.

CLEAR food grains means the lot is free from any living insects of 500 gm representative sample. FEW food grains means the lot is having two living insects of 500 gm representative sample. HEAVY food grains means the lot is having more than two living insects of 500 gm representative sample.

The stored food grains must be clean, dry and CLEAR, i.e. completely free from insects. All godown inspectors need to undergo Quality Control Training in the interest of proper preservation and quality control treatment of stocks.

6.1. GENERAL PRESERVATION PROCEDURES

- 6.1.1. Godowns are to be opened on regular basis for aeration and all stocks to be brushed properly, preferably in every alternative day, *except in rainy and highly moist days.*
- 6.1.2. If the moisture content of stored stocks is found to be higher than the normal/acceptable moisture content, the stock should be preferably aerated so that the moisture may be reduced *except in rainy and high moist days.* This is to be done by keeping doors and ventilators open and also using exhaust fan.
- 6.1.3. The surface of bags in stacks should be brushed gently to remove dust, powders of food grains formed as a result of infestation, dead and living insects and webs. Dead insects and uric acid content should not exceed FSSAI limits (i.e., not more than 100 ppm).
- 6.1.4. Brushing of bags after fumigation is a must.
- 6.1.5. The QC Treatment/Pesticides registers are to be maintained on regular basis.
- 6.1.6. The insect-affected (Few or Heavy) stock should be separated from the Clear stock to check cross infestation.
- 6.1.7. The stacks should be cleared properly after disinfestations.
- 6.1.8. Quality Control Inspectors must ensure that the godown is equipped with necessary quality control treatment chemicals, fumigation cover and rodent control chemicals. In case of unavailability of quality control treatment chemicals/ fumigation cover/rodent control chemicals, he must take up the matter with the higher authority on urgent basis.
- 6.1.9. Schedule of chemical treatment should be chalked out by the Dte. of I&QC for prophylactic treatment as preventive measure for each godown in consultation with the DCF&S concerned in order to safeguard the quality of stock in godowns. At the same time, godowns Inspectors have to check the quality of received stock after 15 days of receiving and decide its quality by proper sampling

and checking of a given stack. Accordingly, Categorisation Registers are to be prepared.

6.1.10. The physical condition of the godown along with moisture content, degree of infestation are to be measured.

6.1.11. Categorisation of stocks as per G.O. No. 8697-FS Dt. 28.11.96. is detailed below:

Commodity (Rice)	Category	Percentage of damaged grains	Percentage of Discoloured Grains	Remarks
Parboiled/Raw	A	Upto 3%	Upto 3%	Issuable stock for Delivery
Parboiled/Raw	B	Above 3% up to 4%	Above 3% up to 5%	Issuable stock for Delivery
Parboiled/Raw	C	Above 4% up to 5%	Above 5% up to 7%	Issuable stock for Delivery
Parboiled/Raw	D	Appreciable quantity of loose bran (more than 5%) or giving obnoxious smell		Non-Issuable for Delivery

6.1.12. Based on category of stock, Priority Registers are to be made and maintained on regular basis.

6.2. QUALITY CONTROL TREATMENT PROCEDURES

6.2.1. **During storing period:-** Prophylactic Treatment: This is periodical, preventive and regular in nature.

i) Malathion 50% EC (dilution 1:100)- To be treated once in every fortnight. Dosage- 3 litre solution per 100 square meter.

ii) Deltamethrin 2.5% w.p. (dilution 40 gms/lit)- Once in 90 days. Dosage- 3 litre solution per 100 square meter.

6.3. CURATIVE CONTROL MEASURES

6.3.1. In case of heavy infestation like khapra, fumigation by using Aluminum Phosphide is to be used by covering the stacks with polythene covers. After polythene covering, the stacks are to be made air tight by mud plastering and the cover should be kept for at least 5/7 days.

6.3.2. In case of infestation, the insect affected (Heavy/Few) stock should be separated from clear stock to prevent cross infestation and immediate fumigation is to be undertaken. After chemical treatment, the bags of rice should be brushed properly. In case of treatment with deltamethrin 2.5% w.p. the stock should be brushed only before delivery. Dosage- 9 gms(3 tabs

each of 3 gms) per MT and for chamber fumigation the dosage is 63 gms/28 cmt.

- 6.3.3. The entire fumigation should be done properly and the entire stocks should become CLEAR as per classification after the fumigation.
- 6.3.4. Rodent Control Measures should be taken, as and when required, by using rodenticides like Zinc Phosphide, Barium Carbonate, Red squill, ANTU etc.

7. REGARDING DELIVERY OF RICE :

- 7.1. FIFO (First In First Out) has to be maintained strictly. All mandatory Registers are to be maintained accordingly.
- 7.2. After killing the stack, all spillages should be collected and cleaned up to FAQ level before issuing them to PDS. These cleaned spillages are then to be kept in palla bags. These palla bags should be accounted for in the weight of the stocks in the stack.
- 7.3. Additional gunny bags to be requisitioned in advance which are to be used as Palla bags.
- 7.4. Stocks are to be delivered only to the authorised representatives of MR Distributors and as per the terms of the Delivery Order (D.O.), joint sampling by the authorised representative of the MR Distributor/lifting Agent and the Godown Inspector is to be done when the stocks are issued.
- 7.5. Delivery Registers must be maintained properly.

8. REGARDING INSPECTION OF GODOWN AND PHYSICAL VERIFICATION OF STOCKS :

8.1. **At the time of procurement/storage of foodgrains (CMR, Fortified Rice Kernel – FRK) :**

8.1.1. **Periodic inspection:**

8.1.1.1. It shall be carried out on monthly basis. All Sub-divisional Controller, F&S, and Assistant District Controller, F&S, shall visit at least one godown within his jurisdiction and/or other godowns as per order of the authority concerned. Similarly, all District Controller, F&S, shall visit at least one godown in each fortnight. All inspections shall be carried out in such a way so that all godowns must be covered at least once in a month.

8.1.1.2. Inspections shall be done with noting in the inspection book as well as online godown reporting system.

8.1.1.3. Periodic inspection may be carried out with the officials of Government of India/FCI on giving prior intimation to the concerned authorities of the State Government at least one week before inspection.

8.1.2. **Surprise inspection:**

8.1.2.1. It can be carried out by the team of DCF&S/DDP&S/Director of Storage/WBSWC or by the joint team of State Government and Government of India, four times in a year.

8.1.2.2. All such reports of surprise inspection shall be submitted in writing to the State Government within 15 days of such inspection.

8.1.3. **Disposal of stock beyond FSSAI standard:** In the event of detection of any stock, detected and analysed as beyond FSSAI standard (unfit for

human consumption), such stock shall be disposed off strictly in accordance with the guidelines of disposal issued by the State Government.

8.1.3.1. All stocks shall be categorized primarily in two categories:-

- a) Issuable stocks: Fit for human consumption,
- b) Non-issuable stocks: Unfit for human consumption.

8.1.3.2. Issuable stocks shall also be categorized in two heads:

- a) Issuable ready stocks: These stocks may be issued under PDS and other welfare schemes(OWS) of the Government. Stocks conforming to PFA (Prevention of Food Adulteration) standards and free from insects infestation may be issued in PDS & OWS, provided the refraction are upto 20% of the Uniform Specification of the relevant marketing season(with amendments, if any) in respect of broken grains, chalky grains, red grains, dehusked grains and the incidence of foreign matter does not exceed 1% including rice bran. Inorganic matter should not exceed 0.5%.
- b) Upgradable stocks: All stocks of rice other than ready stocks but containing damaged grains within PFA standards shall form part of upgradable stocks. These stocks shall be thoroughly examined by a Committee comprising of officers from Directorate of Inspection & Quality Control(I&QC), Finance, DDP&S and Storage at appropriate levels to certify that these stocks are not conforming to ready stocks and not falling in the category of non-issuable stocks. These stocks shall be, wherever possible, be upgraded by manual methods i.e. cleaning, reconditioning etc. under the supervision of the I&QC officials. Such upgraded stocks after due certification of the I&QC officials regarding its fitness may be issued in PDS & OWS. In case further upgradation of such stocks is found not economically feasible, which is certified by the Committee, such stocks may be disposed off by Tenders, at the rate not below Central Issue Price(CIP) under NFSA.

8.1.3.3. Non-issuable stocks/ damaged stocks: The stock containing damaged grains above 5% in case of rice and 6% in case of wheat shall be treated as non-issuable stocks, unfit for human consumption. (Category D in point no. 6.1.11. may be referred also)

These stocks shall be further categorized as:

Sl. No.	Particular of wheat/ rice	Percentage of sound grains other than foreign and damaged foodgrains
1.	Feed – I	(i) Sound grains 85% to less than 95% in case of rice and 94% in case of wheat, (ii) Weevilled grains alone exceeding 10% by count, (iii) Uric Acid content alone found exceeded 100 mg per kg.
2.	Feed – II	Sound grains 70 to less than 85%
3.	Feed – III	Sound grains 55 to less than 70%
4.	Industrial use	(i) Sound grains 30 to less than 55% (ii) Contaminated with poisonous chemicals and fertilizers

5.	Manure use	Sound grains 10 to less than 30%
6.	Dumping	Sound grains less than 10% (to be offered as manure once before dumping)

8.2. At the time of distribution of foodgrains (CMR/ FRK):

- 8.2.1. Inspection team formed by DCF&Ss shall visit the FPSs, different clusters of FPSs, godowns of the Distributors and Flour Mills at a regular interval once in each week. Inspections are to be carried out keeping in view the following points:
- 8.2.1.1. Updated information as required to be displayed at prominent places as per WBPDS(M&C) and WBUPDS(M&C) Orders, 2013, WBCMR(O&C) Order, 2015 and other Control Orders, as amended time to time, on daily basis regarding: (i) entitlement of foodgrains, (ii) scale of foodgrains, (iii) retail issue price, (iv) timings of opening and closing, (v) stocks received during the month, (vi) opening and closing stock of foodgrains etc.
- 8.2.1.2. Maintenance of complaint books, hygienic condition of the shop/godown/factory etc., countable position of stocks, dunnage in use, stacking, insect infestation etc.
- 8.2.1.3. Action taken report shall be reviewed in the meetings of the District Level Monitoring Committees and the issues that may need intervention at the State Level, shall be forwarded within one month of such meetings.

This order will take immediate effect.



Secretary to the Government of West Bengal
Food & Supplies Department

1. The Additional Chief Secretary, Finance Department, Govt. of West Bengal.
2. The Additional Chief Secretary, Co-operation Department, Govt. of West Bengal.
3. The Managing Director, BENFED.
4. The Managing Director. WBECSC Ltd.
5. The Managing Director. WBSWC.
6. The Additional Secretary (IT & Reforms Cell), F&S Department.
7. The Director, Directorate of DDP&S, F&S Department.
8. The Director of Finance, F&S Department.
9. The Director, Directorate of I&QC, F&S Department.
10. The Additional Secretary (Budget), F&S Department.
11. The District Magistrate (All except Kalimpong).
12. The General Manager, FCI, WB Region.
13. The CEO, CONFED.
14. The Managing Director, PAMCL.
15. The Branch Manager, NAFED, W.B Circle.
16. The Branch Manager, NACOF, W.B Circle.
17. The Regional Manager, NCCF, Bengal Region.
18. The District Controller, F&S (All except Kalimpong).
19. The P.S. to the Hon'ble MIC, Food & Supplies Department.
20. The P.A. to the Hon'ble MoS to the Govt. of West Bengal, Food & Supplies Department.
21. The P.A. to the Secretary to the Govt. of West Bengal, Food & Supplies Department.
22. The President, Bengal Rice Mills Association.



Additional Secretary to the Government of West Bengal
Food & Supplies Department