महाराष्ट्र शासन

क्रमांक: अधापु-२०१६/प्र.क्र.१९०/नापु-२२, अन्न, नागरी पुरवठा व ग्राहक संरक्षण विभाग, हुतात्मा राजगुरू चौक, मादाम कामा मार्ग, मंत्रालय, मुंबई-४०० ०३२. दिनांक: ४ ऑगस्ट, २०१६.

प्रति.

- सर्व जिल्हाधिकारी
- २) नियंत्रक, शिधावाटप व संचालक नागरी पुरवठा, मुंबई
- ३) सर्व उपआयुक्त (पुरवडा)
- ४) सर्व जिल्हा पुरवठा अधिकारी
- ५) सर्व अन्नधान्य वितरण अधिकारी

विषय : लक्ष्य निर्धारीत सार्वजनिक वितरण व्यवस्थेअंतर्गत राज्यातील AAY व BPL मधील सर्व लाभार्थ्यांसाठी माहे ऑगस्ट, २०१६ करिता तूरडाळ वाटप करण्याबाबतची कार्यवाही.

संदर्भ: १) शासन निर्णय क्रमांकः अधापु-२०१६/प्र.क्र.६१/ना.पु.२२, दि. २१ जुलै, २०१६.

२) शासन पत्र क्र. अधापु-२०१६/प्र.क.११३/ना.पु. २२, दि. २९ जुलै, २०१६

संदर्भाधीन शासन निर्णयानुसार राज्यातील AAY व BPL मधील सर्व लाभार्थ्यांना लक्ष्य निर्धारीत सार्वजनिक वितरण व्यवस्थेअंतर्गत तूरडाळ वितरीत करण्याबाबत निर्णय घेण्यात आला आहे. माहे ऑगस्ट, २०१६ करिता उपलब्ध करुन घ्यावयाच्या तूरडाळीसाठी दि. २९.७.२०१६ व दि. ३०.७.२०१६ रोजी ई-लिलाव करण्यात आला आहे. माहे ऑगस्ट, २०१६ करिता जिल्हानिहाय नियतन दिल्यावाबतचे आदेश आपणास संदर्भाधीन दि. २९.७.२०१६ च्या पत्रान्वये देण्यात आले आहेत.

NCDEX e Markets Limited यांनी त्यांच्या दि. ४.८.२०१६ च्या पत्रान्यये सदर तूरडाळ पुरवठादाराकडून शासकीय गोदामात प्राप्त झाल्यानंतर करावयाच्या कार्यवाहीबाबतची माहिती सादर केली आहे. सदर पत्राची वं माहितीची प्रत सोबत जोडली आहे. त्याप्रमाणे तूरडाळीच्या दर्जाची निकषांनुसार तपासणी करुन तूरडाळ प्राप्त करुन घ्यावी व त्या तूरडाळीचे नियतन आदेशानुसार वाटप करावे. तसेच तूरडाळ प्राप्त झाल्याबाबतचा (उचलीचा), वाटपाबाबचा व शिल्लकीबाबतचा Progressive अहवालं दररोज शासनास napu??.mhpds@gov.in या ई-मेलवर सादर करावा.

सोबत :- वरीलप्रमाणे

(हेमंत वाडीकर) कक्ष अधिकारी

प्रत:- १) वित्तीय सल्लागार व उपसचिव, जि.टी. हॉस्पीटल, ८ वा मजला, मुंबई

- २) उपसंचालक नागरी पुरवठा, पुरवठा आयुक्तांचे कार्यालय, मुंबई ४०० ०२१
- 3) NCDEX e Markets Limited, Akruti Corporate Park, Kanjurmarg, Mumbai 800086





NATIONAL COLLATERAL MANAGEMENT SERVICES LIMITED

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SOP No.	TITLE	ISSUE No
SOP	PROCEDURE FOR INSPECTION, SAMPLING AND	01
	ANALYSIS OF TUR DAL -NeML	
COPY No.	EFFECTIVE DATE :	

NAME	Location / Region	FUNCTION	Cell No.
Mr.Vipul Patil	Maharashtra	Incharge	9322238540
Mr.Sitaram Vaidya	Aurangabad	Coordinator	9892341513
Mr.Vishal Devadiga	Amarawati & Nagpur	Coordinator	9821180977
Ms.Kirti Palekar	Konkan	Coordinator	9920188112
Ms.Neha Akula	Nashik	Coordinator	8237621225
Ms.Kanchan Palav	Pune	Coordinator	9594118034

REVISION HISTORY

REV No.	EFF.DATE	REVISION SUMMARY
00		Original document

DISTRIBUTION OF TH	IS CURRENT ISSUE	,		
1. Quality Manager	2. Head TOG	3.Head AlG	4. Work Place	

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1.0 PURPOSE

The purpose of this SOP is to provide guidelines to conduct Shipment Inspection; to draw representative samples for analysis and to analyze Tur dal delivered/to be delivered at the NeML designated warehouse.

2.0 SCOPE and APPLICATION

This SOP is applicable for conducting Inspection at Govt. of Maharashtra Civil supplies corporation designated warehouses across Maharashtra, drawing of representative samples while unloading from trucks, analysis of samples as per the quality specification provided by NeML. It also provides sampling plans and procedures for analysis. Acceptance Quality level (AQL) will be maintained as per the specific requirement of NeML protocols.

3.0 DEFINITIONS / ABBREVIATIONS

- 3.1 SOP: Standard Operating Procedure
- 3.2 QA: Quality Assurance
- 3.3 QI: Quality inspector
- **3.4** Quality inspector: The person deputed for inspection by concerned head of the Department
- 3.5 AQL: Acceptance Quality Level
- 3.6 Defect: A departure of quality characteristics that results in a product, process or service not satisfying the intended normal usage requirement
- 3.7 Non Conformity: A departure of a quality characteristic that results in product, process or service not meeting a specific requirement.
- 3.8 NCMSL: National Collateral Management Services Ltd
- 3.9 TOG: Testing and Operations Group
- 3.10 NeML: NCDEX e Markets Ltd..

4.0 RESPONSIBILITY

The Head -TOG and Head - AIG are responsible for preparing an efficient and reliable sampling plan for Pre shipment Inspection based on client's requirements. The inspectors are responsible to implement this Shipment Inspection procedure, draw samples, analyze the samples and maintain records at unloading points.

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5.0 REQUIREMENTS

- **5.1** Analysis Kit: Weighing balance, Moisture meter, Plastic tray, Plastic bowl, Plastic scoop and Test sieve 1 mm, Plastic liner 2 x 2 feet.
- **5.2** Sampling Kit: Sampling covers, Tags, Plastic seals, perky, Test report book.

6.0 PRECAUTIONS

- **6.1** Balance: While using the balance remove or loose the screw beneath the balance. While transportation tight the screw.
- **6.2** Balance: Don't keep over weight on the balance.
- 6.3 Moisture Meter: While transportation keep the black colour locks (Foam) surrounding the measuring cell.
- 6.4 Moisture meter: Don't use Battery and adaptor at a time, moisture meter will damage. While using the adaptor (Power), remove the batteries from the instrument at the bottom of the Moisture meter.

7.0 PROCEDURE

Organization / Client intending Shipment inspection/sampling and analysis at Maharashtra civil supplies corporation warehouses and/or sampling and analysis at unloading point. Following are the steps in sampling and assaying.

- 1. Maharashtra Food civil supplies corporation declare winner for supply of Tur Dal.
- 2. Maharashtra Food civil supplies corporation issue work order to supplier mentioning quantity and delivery location. One supplier may cater more than one district.
- 3. NeML share the district wise winner list with Assayer agency.
- 4. Supplier arranges the quantity and quality as per specification prescribed by Maharashtra Food civil supplies corporation circular no....
- 5. Supplier prior to dispatch of stock need to inform Assayer coordinator. It is the sole responsibility of supplier to inform the Assayer coordinator about vehicle details, driver name and contact no. etc and share the vehicle route plan.
- 6. Assayer coordinator in turn inform the field testing quality person about tentative arrival time, delivery location, vehicle details, drive name and cell no.
- 7. As per vehicle travel plan field assayer must ensure his availability at the delivery location with proper assaying kit.
- 8. As and when vehicle reach the delivery location, supplier need to handover the delivery challan and work order copy to Govt. appointed godown in-charge.

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- 9. Govt. appointed godown in-charge handover the document to assayer for further needful.
- 10. Field level quality testing person need to perform following procedure as mentioned in point no. 7.1 and their sub points.
- 11. Due to some unforeseen circumstances if assayer not available on site Godown incharge need to call the field assayer to know about his whereabouts.
- 12. In case Govt nominated godown in-charge not available at site then Field assayer need to inform Coordinator for further information.
- 13. In either case point 11 or 12 decision of unloading of stock will rest with Govt. nominated official or District in-charge.
- 14. Head -TOG nominates at least three coordinators at Mumbai or other places with in Maharashtra for coordination with Supplier and NeML team. Head -TOG nominates trained inspector(s) to carry out the job by providing the necessary materials, tools and documents. The inspector on reaching the site will verify the premises for the suitability of inspection. Inspection should be carried out as below:

7.1 SHIPMENT INSPECTION AND SAMPLING:

The number of shipping packages shall be verified for their compliance of following requirements:

- 7.1.1 Truck Inspection(Tarpaulin cover should be proper)
- 7.1.2 Packing
- 7.1.3 Labeling, as specified by NCDEX e
- 7.1.4 Indent No.
- 7.1.5 Lot No.
- 7.1.6 Packed material's gross and net wt., should be invariably noted and verified with contractual specifications.
- 7.1.7 The sample of consignment may be taken from bags. The consignment is divided into lots to get representative samples of the same species, variety, type, grade, source and the year of production. (need to define the % sampling)
- 7.1.8 One representative sample should be obtained from each sub-lot. Thus there will be as many sub samples in a lot. The samples for tests shall be prepared from the aggregate sample. In order to achieve randomness in selection of bags, the following procedure may be adopted.
- 7.1.9 Produce the representative samples (The Coning and quartering method)

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- 1. The heap of tipped grain will take the rough form of a cone it can be described as having four quarters
- 2. Select two opposite corners (eg A and D) and remove the other two quarters and return them to the original container.
- 3. Mix samples A and D again to form a new cone of grain. Repeat until the size of one of the quarters is the equivalent weight of the final sample required (eg 1kg).
- 4. Distribution of aggregate sample: To prepare the samples, the material constituting the aggregate sample should be thoroughly mixed to make it homogeneous.
- **7.1.10** During unloading: From homogenized aggregate sample, one sample should be prepared. The one with white tag is for analysis and the same should be submitted to Govt. authorize representative at warehouse itself. (sample consist of 100 g).
- **7.1.11** Inspector will collect the samples from different lots as per 7.1.9, and properly seal them. Analysis will be performed as per procedure. Results will be given in preprinted report format
 - **7.1.11.1** During unloading: White Lab copy, Yellow- QC copy (need to send to NeML), Green- to Warehouse and Pink for Customer.
- **7.1.12** When the results are in the acceptable quality level, inspector shall allow the supplier to unload the bags.

7.1.13 ANALYSIS:

7.1.13 Parameters to be tested:

Parameters	Test Method
Moisture%	AG - QMT Portable Moisture Meter Users Manual
Split/Broken grains (W/W)%	IS 4333 (PARTI) 1996
Foreign Matter W/W%	IS 4333 (PARTI) 1996
Damaged, Discoloured grains (W/W%)	IS 4333 (PARTI) 1996
Grains with husk W/W%	IS 4333 (PARTI) 1996
Powder Residues W/W%	IS 4333 (PARTI) 1996
Immature/Green grains W/W%	IS 4333 (PARTI)1996
Weevilled grains (By Count)%	IS 4333 (PARTI) 1996

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7.1.14 Definitions

Parameters	Definition /Methodology
Moisture	By Agri Tech Moisture meter
Splits & Broken	The pieces of kernel or grains which are equal to or smaller than half of the grain or kernel.
Foreign Matter	"Foreign matter" includes sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and metallic pieces, includes animal filth, chaff, weed seeds, straw and other edible and inedible grains.
Damaged and discoloured	Damaged: Kernels or pieces of kernels that are sprouted or internally damaged more than 50% as a result of heat,
	moisture, weather or microbes. Discoloured: Seed having more than 50% different color than the parent seed is considered as discoloured.
Immature/ green grains W/W	Immature: Kernels or pieces of grain kernels that are not fully developed.
Weeviled grains	Weeviled Seeds: Seeds which are eaten by weevils, bored partially or fully
Grains with husk	Grain with Husk: grains or kernels carrying husk more than 50% is considered as grains with husk.
Powder residues	Collect the Powder passed from the sieve mentioned in the below procedure except foreign matter.

7.1.15 Test Methodology

7.1.16 Foreign matter

- 7.1.16.1 Pour the above sample over the set of pre arranged sieves (IS sieves) of 4.00mm, 3.35mm, 1.70mm & 1.00mm.
- 7.1.16.2 Then agitate the sample thoroughly to strain out the foreign matter at various levels.
- 7.1.16.3 Other food grains, stones, foreign matter like big size pieces still remains on the sieve according to their size.
- **7.1.16.4** Weigh all the foreign matter. Calculate the percent of foreign matter by the given formulae.

	Wt of the foreign matter	
Foreign matter%=		X100
	Wt of the sample	

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7.1.17 Moisture

- 7.1.17.1 Place the Moisture Meter on an even table.
- **7.1.17.2** Prepare the sample to be tested without any impurity.
- **7.1.17.3** Fill up to 100g of sample in the sample loader. Make sure, it levels the low edge.
- **7.1.17.4** Switch on the power supply by pressing (ON/OFF) button.
- 7.1.17.5 Press the (Up/Down) keys to select the species code of the crop to be tested from the Table provided. (Example: For TUR dal Select P-21).
- 7.1.17.6 Place the sample loader on top of the measuring cell, press the loader switch and let the sample fall in to the measuring cell equally & completely.
- **7.1.17.7** The moisture content is displayed after decimal point stops flashing.
- **7.1.17.8** Remove the sample cup and close the sample cup gate by pressing it gently.
- **7.1.17.9** Empty the measuring cell before beginning next sample analysis.

7.1.18 Damaged & Discoloured grains

- **7.1.18.1** Take 100gm of the above sieved sample (free from foreign matter).
- **7.1.18.2** Separate damaged & discolored grains defined above. Weigh the separated grains.
- **7.1.18.3** Calculate the Damage and discoloured by the given formulae.

	Wt of the damaged&	
	discolored grains	
Damaged & discoloured grains%=_		X100
ngi tajilang pagimatan magasi ratas	Wt of the sample	

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7.1,19 Immature & Green grains

- 7.1.19.1 Take the above sample.
- 7.1.19.2 Separate the Immature & Green grains (defined above). Weigh them.
- 7.1.19.3 Calculate the Immature & green by the given formulae.

	Wt of the Immature & Green gra	ains
Immature & Green grains%=	***************************************	X100
	Wt of the sampl	

7.1.20 Splits & Broken grains

- 7.1.20.1 Take the above sample.
- 7.1.20.2 Separate the Splits and broken grains (defined above) and weigh them.
- 7.1.20.3 Calculate the Splits & Brokens by the given formulae.

Wt of the Splits & Brokens

Splits & Brokens%= _____ X100

Wt of the sample

7.1.21 Grains with husk

- 7.1.21.1 Take the above sample.
- 7.1.21.2 Separate the grains with husk (defined above) and weigh them.
- 7.1.21.3 Calculate the grains with husk by the given formulae.

Wt of the Grains with husk

Grains with husk*= X100

Wt of the sample

7.1.22 Weevilled grains

- 7.1.22.1 Weigh 5g of the above sample.
- 7.1.22.2 Count the total grains and note down the number.
- 7.1.22.3 Separate the weevilled grains from the above 5g sample. Count the weevilled grains and note down the number.
- 7.1.22.4 Calculate the weevilled grains by the given formulae.

	No of the	Weevilled	grains
Weevilled Grains %=			X100

No of total grains per 5gm sample

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8.0 REFERENCES

8.1 IS 4333 (Part1)1996

8.2 IS 2813:1996

8.3 AG - QMT Portable Moisture Meter Users Manual

9.0 RECORDS

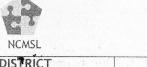
The following records are maintained by the agencies, in the format mentioned, for the period defined

S No	Record	Agency	Format	Retention Period
1.	Test Report	Quality Inspector	FORM - SIR	6 months

10.0 VALIDITY STATEMENT

This SOP is valid up to 6 Month.

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DISTRICT	
REPORT REF NO	
DATE	
SEAL NO	

TEST REPORT CUSTOMER COPY

SEAL NO																				
In accordance with commodity being dep	ı t oosi	he ted	ord at th	er de	of esign	ated	war	ehou	 ise, \	we ca	ırrie	d out	the	anal	ysis	of th	e co	 mma	, for	the
Weighment Details:											***************************************	***************************************								
Bag No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Gross Wt of the Bag																				***************************************
									200, 2000 magns 4											

	SAMPLE DETAILS
Name of the commodity & Variety	
Date of Sampling	
Warehouse address / Place of sampling	
Quantity as per Invoice	
Supplier Name	
Indent No.	
Truck No/Lot No	

<u>TestResults</u>
The above sample was analyzed by us and the results are as follows:

Test Item	Specification Tur Dal	Test Result
Moisture % (W/W)	12 Max.	
FM % -Organic(W/W)	0.5 Max.	
FM % - Inorganic(W/W)	0.1 Max.	
Admixture/Other edible grain %(W/W)	0.5 Max.	
Damaged/Discolored grain %(W/W)	0.75 Max.	
Broken or Fragment %(W/W)	2 Max.	
Grain and whole with husk/ Partially Husked%(W/W)	8 Max.	
Immature/Green Grains %(W/W)	3 Max.	
Weevilled %(W/W)	1 Max.	
Slightly damaged or touched %(W/W)	5 Max.	

The goods delivered may be	*
	7

Remarks by Warehouse Manager:

Authorized by

Acknowledged by

Supplier

Acknowledged by Warehouse Manager

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