#### GHANA COMMODITY EXCHANGE STRAIGHT MILLED RICE CONTRACT

#### 1. CONTRACT CLASSIFICATIONS AND DELIVERY CENTERS

Straight Milled Rice (S)	Juaben Bolgatanga

## 2.0 General Specifications

Criteria	Specifications	Details
Colour	White	
Length of Grain	Long grain (L)	Straight Milled Rice with 80% or more of kernels having a length of at least 6.6mm and a length/width ratio of over 3.0.
	Medium grain (M)	Straight Milled Rice with 80% or more of kernels having a length greater than or equal to 6.2mm but less than 6.6mm and a length/width ratio between 2.0 and 3.0.
Variety	Aromatic- (A) Non-Aromatic – (N)	Aromatic rice has a nut-like aroma while non-aromatic rice has no aroma.

#### **2.1 Straight Milled Rice Grading Parameters**

Straight Milled Rice Type	Delivery Location	Symbol	Grade
Aromatic Long Grain			
Straight Milled Rice	GCX certified warehouse	ALSMR	1,2,3,4
Non - Aromatic Long Grain			
Straight Milled Rice	GCX certified warehouse	NLSMR	1,2,3,4
Aromatic Medium Grain			
Straight Milled Rice	GCX certified warehouse	AMSMR	1,2,3,4
Non-Aromatic Medium			
Grain Straight Milled Rice	GCX certified warehouse	NMSMR	1,2,3,4

#### 2.2 General Requirements

All Straight Milled rice delivered and stored in a GCX certified warehouse shall:

- Be dry, mature, clean and wholesome.
- Be Uniform in size, colour and shape.
- Be safe and suitable for human consumption.
- Be free from abnormal flavors, musty, sour or other undesirable odour.
- Be free from any obnoxious smell.
- Be free from discolouration.
- Be free from micro-organisms and substances originating from micro-organisms
- Be free from fungi or other poisonous or deleterious substances in amounts that may constitute a hazard to human health.
- Have a maximum moisture content of 13.50%,
- Not contain any live or dead pest
- Not contain any toxic seeds, or metal fragments.

#### 2.3 Definitions

Straight Milled Rice		Dehusked rice from which all or part of the bran and germ	
		have been removed by milling,	
Paddy Rice		Rice which has retained its husk after threshing.	
Maistana Cantant		The moisture content, expressed on a wet weight bases,	
Moisture Content		shall be determined using a GSA calibrated moisture meter.	
OL:		Fragments of kernels which pass through a metal sieve with	
Chips		round perforations 1.4mm in diameter.	
Duelsen Kennele		Pieces of rice kernels that are less than ¾ of the whole	
Broken Kernels		kernel but will not pass through a 1.4mm sieve.	
	Filth	Impurities of animal origin (Including dead pests)	
Extraneous matter		Inorganic components other than whole and broken	
	Inorganic	kernels of rice such as stone, soil, metal fragments, glass	
	Extraneous Matter	pieces, dust, pieces of plastic etc.	
		pieces, dust, pieces of plastic etc.	

Organic		Organic components other than whole or broke kernels of	
Extraneous Matter		rice such as foreign seeds, husks, bran, fragments of straw.	
		Head rice or broken kernel showing evident deterioration	
Damaged Kernels		due to moisture, pest, disease or other causes but excluding	
		heat-damaged kernels.	
Heat Damaged Kerne	ale	Kernels, whole or broken, that have changed their normal	
ricat Damagea Kerik		colour as a result of microbiological heating.	
		Whole or Broken except for glutinous rice, of which at least	
Chalky Kernels		three-quarters of the surface has an opaque and floury	
		appearance.	
		Stained kernel, whole or broken kernel which has	
Discoloured Kernel		undergone an obvious change in its natural colour, even if	
		on a small area of its surface.	
Shriveled Kernels		Straight Milled rice kernels that are shrunk and wrinkled	
Cimitalian Remais		from great heat or lack of moisture.	
Immature Kernels		Malformed Kernel. Head rice or broken Kernel which is	
		unripe or badly developed.	
Other grains		Grains, whole or broken, other than Straight Milled Rice.	
		Plant seeds which if present may have damaging effect on	
		health, organoleptic properties or technological	
		performance such as Jimson weed Datura (D. fastousa Linn	
Poisonous, Toxic and	l/or Harmful seeds	and D. stramonium Linn.) corn cokle (Agrostemma githago	
		L., Machai Lallium remulenum Linn.) Akra (Vicia species),	
		Argemone mexicana, Khesari and other seeds that are	
		commonly recognised as harmful to health.	
Live insect infestation		The presence of any living insect.	
		Unpleasant smell that is caused by weathering, chemical	
Undesirable Odour		contamination, mold infection, disease or damage caused	
b		by pests.	
Admixture	Imixture The presence of kernels of undesirable rice varieties		

Red Kernels	Whole or broken kernels with a red-coloured pericarp	
	covering more than one quarter of its surface.	
Red-Streaked Kernels	Kernels, whole or broken, with red bran streaks, the length	
	of which may be equal to or greater than one-half or that of	
	the average length, but the surface area covered by these	
	red streaks shall be less than one-quarter of the total	
	surface.	
Whole Kernel	Husked or milled kernel without any broken part, or part of	
	a kernel with a length greater than or equal to nine-tenths	
	of the average length of the test sample kernels.	
Head Rice	Whole kernel or part of a kernel with a length greater or	
	equal to three-quarters of the average length of the test	
	sample kernels.	
	Whole or Broken except for glutinous rice, of which at least	
Ungelatinized/Chalky Kernels	three-quarters of the surface has an opaque and floury	
	appearance.	

#### 2.4 Grading Parameters

#### GHANA COMMODITY EXCHANGE GRADING STANDARDS FOR STRAIGHT MILLED RICE

Parameter	Grade 1	Grade 2	Grade 3	Grade 4
Moisture Content	13.50%	13.50%	13.50%	13.50%
Extranenous Matter	0.2%	0.5%	0.7%	1.0%
Immature /Shrivelled	0.5%	0.95%	1.4%	1.9%
Chipped	0.0%	0.05%	0.1%	0.1%
Damaged kernels	0.5%	1.0%	2.0%	3.0%
Heat damaged Kernels	0.0%	1.0%	2.0%	3.0%
Ungelatinized/Chalky	3.0%	4.0%	5.0%	7.0%
Admixture/Red Kernel/Red Streaked Kernels	3.0%	5.0%	7.0%	10.0%
Total Defective Grains	7.2%	12.5%	18.2%	26.0%
Discoloured	None	None	None	None
Broken Kernels (% Broken)	5.00%	10.00%	15.00%	25.00%
Paddy Rice	0.05%	0.10%	0.20%	0.25%
Live Insect Infestation	None	None	None	None

- A downward adjustment of 1.0% is made to the weight of the grain on deposit to make provision for weight losses during the handling and storage process.
- Total Defective Grains include the sum of:
  - o Extraneous Matter
  - o Immature /Shrivelled /Chipped
  - o Damaged kernels
  - Heat damaged Kernels
  - Ungelatinized/Chalky/Heat damaged Kernels
  - Admixture/Red Kernel/Red Streaked Kernels/Pecks.
- The sampling and grading is done using a work sample of at least 200 gram and is based on the procedures below.

# AFLATOXIN IS NOT A GRADING PARAMETER BUT NO GRADE 1, 2, 3 or 4 Straight Milled Rice will be accepted by the GCX for trading if the

- Total Aflatoxin level exceeds 10 ppb
- Aflatoxin B1 exceeds 5ppb

#### Based on test run on all commodities received in GCX warehouses.

- \*\*Fumonisin exceeds 2ppb
- \*\*Deoxynivalenol (DON) exceeds 2000ppb
- \*\*Testing would only be done based on buyer's request by sending samples to the Ghana Standards Authority (GSA) for testing.

Straight Milled rice which does not meet the requirements of Table 2.4 shall not be accepted to be stored at GCX warehouses.

The GCX may not accept Straight Milled Rice at all the warehouses based on operational factors such as lack of space, Aflatoxin levels exceeding 10ppb and live insect infestation.

PACKAGING			
Packaging	Each grade of Straight Milled rice shall be packed in clean and sound 50 kg capacity laminated polypropylene (PP) sacks used no more than once prior to deposit. Delivery will be effective on Net Weight basis, which implies that weighing of Straight Milled rice will be done exclusive of bag basis and no additional payment will be given for the cost of bag.		
S	SAMPLING PROCEDURES		
Sampling Procedures	<ol> <li>A representative sample shall be taken from the consignment.</li> <li>The number of bags sampled per consignment will depend on the number of bags delivered         <ul> <li>(25 bags: Every bag shall be sampled</li> <li>(25 bags: 10 % of consignment (min 25 bags) must be sampled</li> </ul> </li> <li>The sample shall be ≥ 0.5 kg</li> </ol>		
	4.The sample shall be clearly marked.		

	5.The samples shall be taken at different parts on the bags like		
	at the bottom of the bag, in the middle of the bag and on the		
	top of the bag. More than one sample can also be taken from		
	the same bag.		
	The bags of rice will be weighed by applying the following:		
	GSA Calibrated scales shall be used.		
Weighing Procedure	The GCX warehouse operating manual shall be followed.		
	The equipment shall be clean, empty and balanced (zero)		
	before the process starts.		
	The grading of the Straight Milled rice shall be done according		
	to the grading standards in 2.4, based on the following:		
	to the graining continue to the continue to th		
	1. A working sample of at least 200grams will be		
	obtained by dividing the grading sample into smaller		
	samples using a Multi slot divider.		
	2. The majeture content will be recovered by using a		
	2. The moisture content will be measured by using a		
	moisture meter with a repeatability of $\pm 0.3$ as		
Grading Procedure	indicated by the supplier of the moisture meter.		
Grading Freeduce	3. The broken kernels will be calculated by using a		
	1.4mm round whole metal sieve. The sieve will be		
	pushed 20 times (away and return) on a hard-smooth		
	surface.		
	Surface.		
	4. All grading parameters will be adhered to by		
	identifying the non-conformed kernels according to		
	the definitions in 2.4 and calculating the grading		
	parameter percentages.		
	The depositor may request the GCX Warehouse Manager to		
	regrade and resample his Straight Milled rice. Where the		
	depositor is dissatisfied with the grading results, the depositor		
Disputes during intake	may request for regrading and resampling in accordance with		
	the GCX dispute resolution process.		
	1. The holder of the electronic warehouse receipt may be		
Disputes during deliveries (out loading)	present when the Straight Milled rice is being regraded		
	and reweighed.		
	2. Where the holder of the electronic warehouse receipt		
	is not satisfied with the grading results and the		
	quantity, the GCX Warehouse Manager may repeat		
	the process of sampling and grading. Where the holder		
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of the electronic warehouse receipt is dissatisfied with the results of the regrading and resampling the following shall be carried out: 3. Where quantity is disputed, the scale / weighbridge shall be tested by using the test weights. The quantity / weight shall be accepted as the final quantity where the test weights confirm the weight. Where the scale weighs the test weights incorrectly there is the need to re-calibrate the scale and re-test the weights after which the product will be re-weighed. 4. Where the grade result is in dispute, an independent mediator may be requested to grade the sample under dispute. 5. The independent mediator may give an opinion on the sample in dispute. 6. The findings of the independent mediator are final The losing party in the dispute shall be responsible for travel cost, fees of the independent mediator as well as any standing cost of the transport vehicle for pickup of the Straight Milled rice. Consequential damages are excluded from the claim. The independent mediator may be an expert grader from the Ghana Standards Authority (GSA)

#### 3.0 STANDARD TRADING TERMS

Trading unit	1 Metric Tonne (MT) net weight (in 50kg bags) equivalent to <b>1000kg</b> . The weight tolerance level per lot upon deposit is +/-	
	1.0%	
Tick size (minimum price movement)	Minimum price increment or decrement by which price may be quoted: 1 Ghana Cedis	
Daily Trade Limit	1,000MT for members 500MT for clients The Daily Trade Limit is the total quantity a member or a client is allowed to buy or sell during a trading session.	

Weight Tolerance Per Lot	The difference between exact weight recorded and the contract standard weight is adjusted at settlement.
Daily price filter/Price range	The daily price filter is the maximum percentage range, relative to the previous day's closing price, outside of which offer and bid prices may not fall or rise. GCX may change these limits from time to time, on a pre-announced basis.  Price Limit for Straight Milled rice: +/- 4%
Warehouse Receipt Expiration Period	The Warehouse Receipt will be tradable for a period of 90 days from the date of Warehouse Receipt issuance.
Penalty on warehoused goods after expiration of Warehouse Receipt	A penalty of 0.1% per day calculated on the current tradable value of the good, using the closing price of the same grade as the warehoused goods, will be applied after the expiry of the Warehouse Receipt.
Warehouse Receipt	All transactions shall be based on GCX Warehouse Receipt, indicating that commodities are in deposit in a GCX operated or certified warehouse prior to trade.
Contract quote basis	All prices will be quoted "Ex- Warehouse", exclusive of taxes, fees and charges.
Quotation Factor	Prices are represented in Ghana Cedis per MT
Trading session	Monday through Friday, with the exception of public holidays.

#### **4.0 STANDARD SETTLEMENT TERMS**

Pay-in of Funds		
(Time when funds will be withdrawn	Next working day (T+1)	
from buyer pay-in accounts).		
Pay-out of Funds		
(Time when funds will be deposited	Next working day (T+1)	
into seller pay-out account)		
Trading fees	0.91% of transaction value (Buyer & Seller)	
Regulatory (SEC) fees	0.20% of transaction value (Buyer & Seller)	
	The handling and product certification fee will include:	
Handling and Product Certification fee	Sampling and Testing	No charge
Handling and Froduct Certification fee	Handling (Loading& Offloading)	GHS1.50 per 50kg bag
	Storage & Fumigation (Per Month)	GHS0.80 per 50kg bag

Grading, Weighing and Rebagging	GHS2.50 per 50kg bag
Electronic Warehouse Receipt	GHS2.00 per MT

#### **5.0 STANDARD DELIVERY TERMS**

GCX Warehouse Locations	Delivery locations will be GCX certified delivery centers.
Delivery Notice	Warehouse pick-up instructions will be delivered to the Member representing the buyer (T+1)
Pick Up Notice	Member must fill out a pickup notice (PUN) with the exchange before picking up goods
Delivery Period	Number of days the buyer will have to pick up the lots from the warehouse without paying additional charges is T+10 (calendar days)
Failure to Pick up	Buyer is responsible for making arrangement to pick up commodity by T+10 (calendar days). Buyer will be responsible for all warehouse storage charges after failure to pick up the commodity.
Extension of Delivery Period	The Exchange may extend the delivery period in the event of a force majeure situation