### GHANA COMMODITY EXCHANGE STRAIGHT MILLED RICE CONTRACT

#### 1. CONTRACT CLASSIFICATIONS AND DELIVERY CENTERS

	Ejura (EJ))
	Kumasi (KU)
Charinha Maille d Dine (C)	Kintampo (KI)
Straight Milled Rice (S)	Tamale (TA)
	Wa (WA)
	Sandema (SA)

### **1.1 General Specifications**

Criteria	Specifications	Details
Colour	White	
Length of Grain	Long grain (L)	Straight Milled Rice with 80% or more of kernels after milling to a well-milled degree, having a length of at least 6.67mm and a length/width ratio of over 3.0.
	Medium grain (M)	Straight Milled Rice with 80% or more of kernels after milling to a well- milled degree, having a length greater than or equal to 6.2mm but less than or equal to 6.6mm and a length/width ratio between 2.0 and 3.0.
Variety	Aromatic- (A)	
	Non-Aromatic – (N)	

## 2. Straight Milled Rice Grading Parameters

Milled Parboiled 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

#### 2.1 General Requirements

All Straight Milled rice delivered and stored in a GCX certified warehouse shall be dry and mature, Extra well-milled, clean, wholesome, uniform in size, colour and shape, safe and suitable for human consumption, free from abnormal flavors, musty, sour or other undesirable odour, obnoxious smell and discolouration, free from micro-organisms and substances originating from micro-organisms, fungi or other poisonous or deleterious substances in amounts that may constitute a hazard to human health, have a maximum moisture content of 14.0%, and contain no live or dead insects, toxic seeds, or metal fragments.

#### 2.2 Definitions

Straight Milled Rice		whole or broken kernels of white rice from (Oryza glaberrima, Oryza sativa, Oryza longistaminata). Husked rice from which all or part of the bran and germ have been removed by milling,
Parboiled Rice		Husked or milled rice processed form paddy or husked Rice that has been soaked in water and subjected to a heat treatment so that the starch is fully gelatized followed by a drying process
Extra Well-Milled		Rice obtained by milling husked rice in such a way that almost all of the germs, all of the external layers and the largest part of the internal layers of bran, and some endosperm, have been removed.
Moisture Content		The moisture content, expressed on a wet weight bases, shall be determined using an approved moisture meter.
Chips/Broken Kerne	ls	Fragments of kernels which pass through a metal sieve with round perforations 1.4mm in diameter.
	Filth	Impurities of animal origin (Including dead Insects)
Extraneous matter	Inorganic Extraneous Matter	Inorganic components other than whole and broken kernels of rice such as stone, soil, metal fragments, glass pieces, dust, pieces of plastic etc.
Organic Extraneous Matter		Organic components other than whole or broke kernels of rice such as foreign seeds, husks, bran, fragments of straw.
Insect damaged Kernels		Kernels with obvious insect bored holes or which have evidence of boring or tunneling, indicating the presence of

	insects, insect webbing or insect refuse, or seeds chewed in	
	one or more than one part of the grain which exhibit	
	evidence of an attack by vermin.	
	Head rice or broken kernel showing evident deterioration	
Damaged Kernels	due to moisture, pest, disease or other causes but excluded	
	heat-damaged kernels.	
Heat Damaged Kormela	Kernels, whole or broken, that have changed their normal	
Heat Damaged Kernels	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	
Siliveled Kernels	from great heat or lack of moisture	
Immature Kernels	Malformed Kernel. Head rice or broken Kernel which is	
minature Kerneis	unripe or badly developed.	
Other grains	Grains, whole or broken, other than Straight Milled Rice.	
	Ant 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/or Harmful seeds	and D. stramonium Linn.) corn cokle (Agrostemma githago	
	L., Machai Lallium remulenum Linn.) Akra (Vicia species),	
	Argemone mexicana, Khesari and other seedsthat are	
	commonly recognised as harmful to health.	
	Unpleasant smell that is caused by weathering, chemical	
Undesirable Odour	contamination, mold infection, disease or damage caused	
	by insects.	
Admixture	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.

## **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 /Chipped/Damaged kernels	1.5%	2.0%	3.5%	5.0%
Ungelatinized/Chalky/Heat damaged Kernels	3.0%	5.0%	7.0%	10.0%
Admixture/Red Kernel/Red Streaked Kernels	3.0%	5.0%	7.0%	10.0%
Total Defective Grains	7.7%	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 Infestation	None	None	None	None

- An adjustment of 1.0% is made to the weight of the grain on deposit to make provision for losses during the handling and storage process.
- Total Defective Grains include the sum of Extraneous Matter, Immature /Shrivelled /Chipped/Damaged kernels, Ungelatinized/Chalky/Heat damaged Kernels and 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
- Fumonisin exceeds 2ppb
- Deoxynivalenol (DON) exceeds 2000ppb

Based on regular tests done by an independent lab appointed by the GCX.

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 harmful for human consumption, live insect infestation.

PACKAGING	
Packaging	Each grade of Straight Milled rice shall be packed in clean and sound 50 kg capacity polypropylene (PP) bags 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	<ul> <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>a) &lt;25 bags: Every bag shall be sampled</li> <li>b) ≥25 bags: 10 % of consignment (min 25 bags) must be sampled</li> </ul> </li> </ul>
	<ul> <li>3.The sample shall be ≥ 0.5 kg</li> <li>4.The sample shall be clearly marked.</li> <li>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.</li> </ul>

Weighing Procedure	<ul> <li>The bags will be weighed by applying the following:</li> <li>Calibrated scales shall be used.</li> <li>The operating manual shall be followed.</li> <li>The equipment shall be clean, empty and balanced (zero) before the process starts.</li> </ul>
Grading Procedure	<ol> <li>The grading of the Straight Milled rice shall be done according to the grading standards in 2.4, based on the following:         <ol> <li>A working sample of at least 200grams will be obtained by dividing the grading sample in smaller samples using a Multi slot divider.</li> <li>The moisture content will be measured by using a moisture meter with a repeatability of ±0.3 as indicated by the supplier.</li> </ol> </li> <li>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.</li> <li>All grading parameters will be tested by identifying the non-conformed kernels according to the</li> </ol>
Disputes during intake	definitions in 2.4 and calculating the percentage.  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 may request for regrading and resampling in accordance with the GCX dispute resolution process lodged with the warehouse.
Disputes during deliveries (out loading)	<ol> <li>The holder of the electronic warehouse receipt may be present when the Straight Milled rice is being graded and weighed.</li> <li>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 of the electronic warehouse receipt is dissatisfied with the results of the regarding and resampling the following shall be carried out:</li> </ol>

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<ol> <li>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.</li> <li>Where the grade result is in dispute, an independent mediator may be requested to grade the sample under dispute;</li> </ol>
5. The independent expert grader may give an opinion on the sample in dispute;
6. The findings of the independent expert grader 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 <b>+/-1.0%</b>
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)	
Handling and Product Certification fee	The handling and product certification fee will include:	
	Sampling and Testing	No charge
	Handling (Loading& Offloading)	GHS1.50 per 50kg bag
	Storage & Fumigation (Per Month)	GHS0.80 per 50kg bag
	Grading, Weighing and Rebagging	GHS2.00 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