USDA COMMODITY REQUIREMENTS

CSBP2

CORN SOY BLEND PLUS
FOR USE IN
INTERNATIONAL FOOD AID PROGRAMS

Effective Date: January 24, 2012
USDA COMMODITY REQUIREMENTS
CSBP2
CORN SOY BLEND PLUS
FOR USE IN INTERNATIONAL FOOD AID PROGRAMS

Table of Contents

Part 1  COMMODITY SPECIFICATIONS .................................................. 1
  Section 1.1  COMMODITIES ............................................................. 1
  Section 1.2  QUALITY ASSURANCE .................................................. 6

Part 2  CONTAINER AND PACKAGING REQUIREMENTS ............................ 7
  Section 2.1  GENERAL ................................................................. 7
  Section 2.2  CONTAINERS AND MATERIALS .................................... 7
  Section 2.3  PACKAGING ............................................................ 7
  Section 2.4  25-KILOGRAM HIGH PERFORMANCE PACKAGING ............ 8
  Section 2.5  PERFORMANCE TEST PROCEDURES .................................. 8

PART 3  MARKING REQUIREMENTS ....................................................... 9
  Section 3.1  MARKINGS ............................................................... 9
  Section 3.2  MARKING DESCRIPTIONS ............................................. 11
  Section 3.3  EMPTY BAG DIMENSIONS .......................................... 13
  Section 3.4  CONTAINERS WITH INCORRECT MARKINGS ..................... 13

EXHIBITS – Marking exhibits immediately follow on pages 14 – 27
Part 1  COMMODOITY SPECIFICATIONS

Section 1.1  COMMODITIES

A. Product Type

CSB Plus is prepared from heat treated corn and soybeans, vitamins and minerals. If CSB Plus is consumed as a porridge or gruel, it should be prepared by mixing an appropriate proportion of flour and clean water (i.e. 40g of CSB Plus with 250 g of water) followed by a boiling time at simmering point from five to ten minutes.

B. Main Ingredients

1. CSB Plus shall be manufactured from fresh corn and soybeans of good quality, free from foreign materials, substances hazardous to health, excessive moisture, insect damage and fungal contamination and shall comply with all relevant national food laws and standards. Requirements for the raw materials are:
   a. Corn: Corn shall be tested for aflatoxin in accordance with procedures approved by Federal Grain Inspection Service (FGIS). If the aflatoxin test proves positive, a quantitative test shall be performed. If the result of the quantitative test exceeds 20 p.p.b., the corn shall not be used in the production of the commodity.
   b. Corn and Soybeans must be stored under dry, ventilated and hygienic conditions. Only Government (Federal, State and/or local)-approved fumigants may be used when fumigation is necessary. Fumigation must be performed in accordance with all applicable laws and regulations.

C. Vitamins and Minerals

1. Micronutrient premixes shall be used at the following rate per metric ton of finished product:
   a. 2 kg of vitamin premix.
   b. 11.6 kg of Tri-Calcium Phosphate.
   c. 1.7 kg of Potassium chloride.
2. Requirements of Potassium chloride and Tri-Calcium Phosphate are:
   a. Particle size for Potassium chloride min 60% < 250 μm (microns).
   b. Particle size for Tri-Calcium Phosphate min 95% <250 μm (microns).
3. The composition of micronutrient premixes is presented in product specification.
4. Micronutrient premixes must be delivered to the processor of CSB Plus with a complete Certificate of Analysis as well as with a Proof of purchase of premixes.
5. Micronutrient premixes must be stored in a dry, cool and clean place where the temperature is a maximum of 25°C.
D. Processing

1. Formula
   a. CSB Plus is manufactured according to the following formula:

   Table 1: CSB Plus - formula

<table>
<thead>
<tr>
<th>N°</th>
<th>Ingredients</th>
<th>Percentage (by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Corn (white or yellow)</td>
<td>78.47</td>
</tr>
<tr>
<td>2</td>
<td>Whole soybeans</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Vitamin/Mineral</td>
<td>0.20</td>
</tr>
<tr>
<td>4</td>
<td>Tri-Calcium Phosphate</td>
<td>1.16</td>
</tr>
<tr>
<td>5</td>
<td>Potassium chloride</td>
<td>0.17</td>
</tr>
</tbody>
</table>

   b. A percent mixture of 78.47 percent corn and 20 percent whole soybeans will normally meet the nutritional specifications for protein (see nutritional value below).

   c. Soybeans have varying levels of protein and fat depending on origin. To ensure that the nutritional targets for protein and fat are met, the processor should check the fat and protein content of soy and if necessary make adjustments to the ratio of corn to soy in the formulation.

2. Methods of Processing
   CSB Plus - Corn Soy Blend Plus shall be processed as a partially pre-cooked food under conditions which permit improvements in the digestibility of starches and proteins and in particular the de-activation of trypsin inhibitors in soy as indicated by the urease test. Preferred heat treatments include wet extrusion, dry extrusion or roasting.

E. Product Specifications

1. Moisture Content: 10% maximum

2. Nutritional Value: it shall contain the following nutritional value per 100g dry matter:
   a. Energy: 380 kcal minimum
   b. Protein: 14.0% (N x 6.25) minimum
   c. Fat: 6.0% minimum
   d. Crude Fiber: 5.0% maximum

3. Variation in Food Specifications
   The variation of the final product with respect to contents of protein and fat shall not exceed minus five percent of the specified value using standard analytical techniques. The moisture and crude fiber should not exceed five percent of the specified values. Products not meeting this requirement will be rejected.
4. Micronutrient
   a. *CSB Plus* must be fortified with a micronutrient supplement containing
      the following micronutrient levels per 100 grams —

   Table 2: Micronutrient rate and chemical form

<table>
<thead>
<tr>
<th>Vitamin/Mineral</th>
<th>Required Level*</th>
<th>Chemical forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin A RE **</td>
<td>3460IU</td>
<td>Dry Vitamin A Palmitate 250 Cold Water Dispensible Stabilized</td>
</tr>
<tr>
<td>Vitamin D3</td>
<td>441.6IU</td>
<td>Dry Vitamin D3 100 Water Dispersible Stabilized</td>
</tr>
<tr>
<td>Vitamin E TE</td>
<td>8.3 mg</td>
<td>Dry Vitamin E Acetate 50% Water Dispersible</td>
</tr>
<tr>
<td>Vitamin K1</td>
<td>30 µg</td>
<td>Dry Vitamin K1 5% Water Dispersible</td>
</tr>
<tr>
<td>Vitamin B1</td>
<td>0.2 mg</td>
<td>Thiamine mononitrate</td>
</tr>
<tr>
<td>Vitamin B2</td>
<td>1.4 mg</td>
<td>Vitamin B2 fine powder</td>
</tr>
<tr>
<td>Vitamin B6</td>
<td>1 mg</td>
<td>Pyridoxine hydrochloride</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>90 mg</td>
<td>Ascorbic acid</td>
</tr>
<tr>
<td>Pantothenic acid</td>
<td>1.6 mg</td>
<td>Calcium D-Pantothenate</td>
</tr>
<tr>
<td>Folic acid (as Dietary Folate Equivalents)</td>
<td>110 µg</td>
<td>Folic Acid***</td>
</tr>
<tr>
<td>Niacin</td>
<td>8 mg</td>
<td>Niacinamide</td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>2 µg</td>
<td>Vitamin B12 0.1% or 1% Spray Dried</td>
</tr>
<tr>
<td>Biotin</td>
<td>8.2 µg</td>
<td>Biotin 1%</td>
</tr>
<tr>
<td>Iodine</td>
<td>40 µg</td>
<td>Potassium Iodide***</td>
</tr>
<tr>
<td>Iron (total)**</td>
<td>6.5 mg</td>
<td></td>
</tr>
<tr>
<td>Iron (a)</td>
<td>4 mg</td>
<td>Ferrous fumarate fine powder</td>
</tr>
<tr>
<td>Iron (b)</td>
<td>2.5 mg</td>
<td>Iron-sodium EDTA</td>
</tr>
<tr>
<td>Zinc</td>
<td>5 mg</td>
<td>Zinc Sulphate Monohydrate</td>
</tr>
<tr>
<td>Carrier</td>
<td></td>
<td>Corn maltodextrin</td>
</tr>
</tbody>
</table>

**Other minerals**

| Potassium                       | 140 mg          | Potassium Chloride with 0.5% silicon dioxide as anticaking agent, compliant with food chemical codex, min 90%<425 micron and min 60%<250 micron |
| Calcium                         | 452 mg          |                                                    |
| Phosphorous                     | 290 mg          | Tri-Calcium Phosphate                              |

*Premix variation (except for vitamin A and iron): The permitted variation in premix content is -10 to +15% for other added vitamins and minerals for acceptance.
**Vitamin A and Iron ranges:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin A (including intrinsic and</td>
<td>2930IU</td>
<td>4329IU</td>
</tr>
<tr>
<td>premix contributions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron (including intrinsic iron)</td>
<td>6.5mg/100g</td>
<td>13.5mg/100g</td>
</tr>
</tbody>
</table>

***Adequate dilution must be used in order to guarantee premix homogeneity***

*Note:* Alternative chemical forms will be considered but must be approved by the contracting officer. Variable levels of micronutrients (i.e. iron, zinc, etc.) naturally present in corn and soy may lead to variable amount of micronutrients in finished product.

5. Finished Product Characteristics
   a. Particle size shall have a uniform fine texture with the following particle distribution:
      (1) 95% must pass through a 600 micrometer sieve
      (2) 100% must pass through a 1,000 micrometer sieve.
   b. Organoleptic: it shall have a pleasant smell and palatable taste.

6. Microbiology
   Not to exceed the following levels of microbiological contamination in the finished product:

   **Table 3: Limit of microorganisms in CSB Plus**

<table>
<thead>
<tr>
<th>Microorganisms</th>
<th>Maximum levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesophyllic aerobic bacteria</td>
<td>50,000 cfu per g</td>
</tr>
<tr>
<td>Coliforms</td>
<td>100 cfu per g</td>
</tr>
<tr>
<td>Salmonella</td>
<td>0 cfu per 25g</td>
</tr>
<tr>
<td>Escherichia Coli</td>
<td>&lt;10 cfu per g</td>
</tr>
<tr>
<td>Staphylococcus aureus</td>
<td>&lt;10 cfu per g</td>
</tr>
<tr>
<td>Bacillus cereus</td>
<td>50 cfu per g</td>
</tr>
<tr>
<td>Yeasts and molds</td>
<td>1,000 cfu per g</td>
</tr>
</tbody>
</table>

7. Additional Requirements
   a. Cooking time: It shall be suitable for young children and adults after boiling at simmering point for a minimum of five minutes and a maximum of ten minutes.

b. Shelf life: The product shall have a shelf life of 18 months at 80 degrees Fahrenheit, and it shall retain all commodity specification qualities included in this requirements document for at least 12 months from date of manufacture when stored dry at ambient temperatures prevalent in the country of destination.

c. Peroxide value: Maximum 10 meq/kg fat.
d. Dispersiveness: It shall be free from lumping or balling when mixed with water of ambient temperature.

e. Consistency/Viscosity of porridge (Bostwick flow rate): Consistency value cooked: minimum 55 per 30 seconds at 45°C and at the proposed preparation dosage (i.e. 40g of product plus 250g water after boiling at simmering point for five minutes).

f. Anti-nutrients: The urease index of CSB Plus should be a maximum of 0.2 pH units.

g. Additional safety parameters: SB Plus shall be free from objectionable matter, not contain any substances originating from micro-organisms or any other poisonous or deleterious substances such as antinutritional factors, heavy metals or pesticide residues, in amounts which may represent a hazard to health.

(1) Permitted level of total aflatoxin: 20 ppb (B1, B2, G1, G2).

**F. Storing**

CSB Plus must be stored under dry, ventilated and hygienic conditions.

**G. Analytical requirements of Finished Product**

*Table 4: List of analytical requirements*

<table>
<thead>
<tr>
<th>No.</th>
<th>Analyses/tests</th>
<th>Required level</th>
<th>Reference methods*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Main composition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Moisture</td>
<td>10 % (maximum)</td>
<td>ISO 712: 2009</td>
</tr>
<tr>
<td>2</td>
<td>Protein</td>
<td>14% (N x 6.25) (minimum)</td>
<td>AOAC 981.10 ISO 20483:2006</td>
</tr>
<tr>
<td>3</td>
<td>Fat</td>
<td>6 % (minimum)</td>
<td>AOAC 954.02 ISO 11085:2008</td>
</tr>
<tr>
<td>4</td>
<td>Crude Fiber</td>
<td>5 % (maximum)</td>
<td>AOAC 992.16 AOAC 985.29 AOAC 962.09</td>
</tr>
<tr>
<td></td>
<td><strong>Chemical and physical characteristics of Finished Product</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Peroxide value</td>
<td>10 meq/kg fat, (maximum)</td>
<td>AOAC 965.33</td>
</tr>
<tr>
<td>6</td>
<td>Urease index</td>
<td>0.20 pH units (maximum)</td>
<td>AOCS Ba 9-58 (1997)</td>
</tr>
<tr>
<td>7</td>
<td>Particle size</td>
<td>- 95% must pass through a 600 microns sieve.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 100% must pass through a 1,000 microns sieve.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Organoleptic (smell, taste, color)</td>
<td>Pleasant smell and palatable taste, typical color.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Viscosity (Bostwick flow rate)</td>
<td>Min 55mm /30s (15% dry matter porridge)</td>
<td>Mouquet &amp; Treche, 2006</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------------</td>
<td>------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td></td>
<td><strong>Vitamins</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Vitamin A</td>
<td>2930 - 4329IU/100 grams</td>
<td>AOAC 992.04 AACC 86-03</td>
</tr>
<tr>
<td></td>
<td><strong>Minerals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Iron</td>
<td>6.5 -13.5mg/100grams</td>
<td>AOAC 944.02</td>
</tr>
<tr>
<td>12</td>
<td>Calcium</td>
<td>459-594 mg/100 grams</td>
<td>AOAC 984.27</td>
</tr>
<tr>
<td>13</td>
<td>Potassium</td>
<td>246-333 mg/100 grams</td>
<td>AOAC 984.27</td>
</tr>
<tr>
<td></td>
<td><strong>Mycotoxins</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Aflatoxin (total)</td>
<td>20 ppb (total of B1, B2, G1, G2), (maximum)</td>
<td>AACC 45-16</td>
</tr>
<tr>
<td></td>
<td><strong>Microorganisms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Mesophylllic aerobic bacteria</td>
<td>50,000 cfu per g (maximum)</td>
<td>ICC No 125 AACC 42-11</td>
</tr>
<tr>
<td>16</td>
<td>Coliforms</td>
<td>100 cfu per g (maximum)</td>
<td>AOAC 2005.03</td>
</tr>
<tr>
<td>17</td>
<td>Salmonella</td>
<td>0 cfu per 25g</td>
<td>AACC 42-25B</td>
</tr>
<tr>
<td>18</td>
<td>E. coli</td>
<td>&lt;10 cfu per g</td>
<td>AOAC 991.14</td>
</tr>
<tr>
<td>19</td>
<td>Staphylococcus aureus</td>
<td>&lt;10 cfu per g</td>
<td>AACC 42-30B</td>
</tr>
<tr>
<td>20</td>
<td>Bacillus cereus</td>
<td>50 cfu per g (maximum)</td>
<td>AOAC 980.31</td>
</tr>
<tr>
<td>21</td>
<td>Yeasts and molds</td>
<td>1,000 cfu per g (maximum)</td>
<td>ICC No 146 AACC 42-50</td>
</tr>
</tbody>
</table>

* Or equivalent
**See acceptable ranges below Table 2 in Section E, paragraph 4 above.

Section 1.2 QUALITY ASSURANCE

A. The contractor shall perform the product testing and quality analysis to ensure that the product meets the commodity specifications. The results shall be evidenced by a Certificate of Analysis (COA). Copies of the original COA must be submitted as part of the invoice package. The COA shall provide the results of all tests specified. If quality discounts are provided in the contract, and the product to be delivered by the contractor falls within the quality discount table, those factors shall be identified by an asterisk on the copies of the COA.

B. Contractors shall notify the Government immediately of lots that fail to meet contract requirements.

C. Unless otherwise specified, test methods for the finished product, and any
ingredients therein, shall be those of the AOAC INTERNATIONAL, the American Association of Cereal Chemists (AACC), or the American Oil Chemists’ Society (AOCS), as applicable and in effect on the date of issuance of the solicitation, or in accordance with methods that give equivalent results.

Part 2 CONTAINER AND PACKAGING REQUIREMENTS

Section 2.1 GENERAL

This part provides the container specifications and packaging materials requirements used under this contract.

Section 2.2 CONTAINERS AND MATERIALS

A. All containers and packaging materials shall be constructed to meet the requirements of the Food and Drug Administration (FDA) for safe contact with the packaged product. The contractor shall obtain and maintain documentation from the container or packaging material manufacturer to verify that the containers and packaging materials used in this contract were in compliance with the Government’s regulatory requirements for safe contact with food products as required in the Master Solicitation, Part 3, Section A, Number 3.

B. Questions concerning the containers and materials should be directed to:
   USDA/FSA/DACO
   Room 5755 – South Bldg, STOP 0551
   1400 Independence Avenue SW
   Washington, DC  20250-0551
   ATTN:  Packaging

C. If the contractor purchases packaging and container ingredients from a foreign country and/or the package and container is manufactured in a foreign country, the package and container SHALL NOT display country of origin labeling. Phrases similar, but not limited to “Made in [Name of Foreign Country.]” or “Product of [Name of Foreign Country.]” are strictly prohibited.

Section 2.3 PACKAGING

A. Twenty-five kilograms of product shall be packed per bag. The use of recycled materials is not required if performance or food safety is jeopardized.

B. Any bags constructed of paper and utilizing a film liner shall:

   (1) Have a sufficient amount of anti-block. It shall be free from any blocking at 50 degrees C and not subject to reblock at 70 degrees C.

   (2) Not exceed a maximum average water vapor permeability of 0.65 grams per 100 square inches in 24 hours at 90 percent relative humidity and a temperature of 100 degrees F plus or minus 5 degrees.
Section 2.4 25-KILOGRAM HIGH PERFORMANCE PACKAGING

Contractors are not limited to, but may utilize one of the following constructions when the solicitation requires the use of high performance packaging:

1. Multiwall paper bag constructed of: One (1) ply inner film liner guaranteed 2.5 mil. minimum thickness linear low density polyethylene, four (4) plies of 50-pound natural multiwall kraft (NMK) paper, and one (1) outer ply of 60-pound wet strength natural multiwall kraft (WSNMK) paper; or

2. Multiwall paper bag constructed of: 3.1 mil. (70 grams per square meter) film consisting of two or more layers of co-extruded polyolefin film with alternating angles of orientation, laminated together and biaxially oriented, two (2) plies of 50-pound NMK paper, and one (1) outer ply of 60-pound WSNMK paper. The bag shall be heat-sealed at the bottom, by the bag manufacturer. The top of the liner shall be heat-sealed by the packer once the bag has been filled with products.

3. Both bag constructions shall:
   (a) be uniquely marked with a one (1) inch blue stripe located approximately three (3) inches above the letters “USA” and extending around the width of each bag;
   (b) meet the specifications and testing requirements outlined in these commodity requirements.

Section 2.5 PERFORMANCE TEST PROCEDURES

A. All bags shall be capable of withstanding the following performance test for impact resistance:

1. Ten filled and sealed bags shall each survive a single drop test on the butt and side on a shock machine that produces for each test a velocity change of 195 inches per second using a shock duration of .002 seconds without loss of product.

2. Testing shall be conducted under standard temperature (73.4°F plus or minus 1.8°F) and relative humidity (50% plus or minus 2%) conditions.

3. Filled bags shall be placed in the conditioned atmosphere for sufficient time before the tests are conducted for the bag materials to reach equilibrium.
Bags submitted under this performance specification shall conform to all other applicable material, construction, and performance specifications.

B. Test Laboratories
Independent or private laboratories known to be capable of conducting the shock machine test described above are as follows:

<table>
<thead>
<tr>
<th>Michigan State University</th>
<th>Lansmont Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>School of Packaging</td>
<td>1287 Reamwood</td>
</tr>
<tr>
<td>East Lansing, MI 48824-1223</td>
<td>Sunnyvale, CA 94089</td>
</tr>
<tr>
<td>(517) 355-9580</td>
<td>(408) 734-9724</td>
</tr>
<tr>
<td><a href="http://packaging.msu.edu/">http://packaging.msu.edu/</a></td>
<td>Lansmont Corporation</td>
</tr>
<tr>
<td></td>
<td>6539 Westland Way, Suite 24</td>
</tr>
<tr>
<td></td>
<td>Lansing, MI 48917</td>
</tr>
<tr>
<td></td>
<td>(888) 526-7666</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.lansmont.com">www.lansmont.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rutgers University</th>
<th>Ten-E Packaging Services, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Science and</td>
<td>1666 County Road 74</td>
</tr>
<tr>
<td>Engineering Dept.</td>
<td>Newport, MN 55055</td>
</tr>
<tr>
<td>P.O. Box 909</td>
<td>(651) 459-0671</td>
</tr>
<tr>
<td>Piscataway, NJ 08854</td>
<td><a href="http://www.ten-e.com">www.ten-e.com</a></td>
</tr>
<tr>
<td>(201) 932-3679</td>
<td></td>
</tr>
</tbody>
</table>

**PART 3 MARKING REQUIREMENTS**

**Section 3.1 MARKINGS**

A. The bags shall be marked in the color specified in the markings exhibits. Any markings not shown on the exhibits shall be printed in blue. When printed on the bag, the colors blue and red shall match the Pantone Matching System (PMS) chart numbers 280 and 200, respectively, to the extent practicable.

B. All dimensions are approximate. Unless otherwise specified, all characters shall be in normal block print.

C. The US Flag shall be 5 inches high and 9 inches in total width on the front and back of the applicable bag, see exhibits.

D. The letters USA shall be Univers black (75) oblique, or Helvetica extra bold with 70% scaling and -70 tracking or equivalent to match the style as shown in the exhibits. The letters USA shall be 4 3/4 inches high and 9 3/4 inches in total width. The three stripes adjacent USA shall be 1 inch high and must extend to the
E. The USAID vertical identity, including the logo, brandname, and tagline, shall be printed in the same style as shown in the marking exhibits, sized approximately 7 1/2 inches high and 9 3/8 inches in total width. The USAID logo shall be 4 1/4 inches in diameter. The USAID brandname shall be 2 inches in height. The tagline “FROM THE AMERICAN PEOPLE” shall be 1/2 inch in height. The USAID vertical identity is available to download at http://www.usaid.gov/branding/downloadsweb.html.

F. The USDA logo shall be 4 1/2 inches high and 6 1/2 inches in total width. See exhibits.

G. The commodity name shall be 1 1/4 inch print. Immediately below the commodity name on the front and back panels, insert additional commodity description in 5/8 inch print, if applicable.

H. The contract number and the statement "NOT TO BE SOLD OR EXCHANGED" shall be 3/4 inch print. The net weight, bag dimensions, and the Standard Marking Requirements (SMR) or Language Marking Requirements (LMR) number shall be centered at the bottom of the bag in 1/2 inch print. See exhibits. The contractor shall obtain a waiver, in writing, from the Government to print the contract number using on-line printing on filled bags.

I. The letters or symbols used in the language markings for LMR-1, LMR-3 and LMR-4, LMR-5, LMR-7, and LMR-8 should be sized approximately 1 5/8 inches. The language markings for LMR-2 and LMR-6 should be sized to fit as shown in the exhibits.

J. Lot numbers, production codes or any other means of identification required to meet the traceability requirement shall be printed as small as possible, yet legible.

K. Gussets. The geometric symbols shall appear in both gussets, adjacent to USAID, as shown in the applicable exhibits. The USAID identity shall be a total of 2 3/4 inches in height and 8 1/2 inches in total width and printed in both gussets. The letters “USAID” shall be 1 3/4 inches high and the tagline “FROM THE AMERICAN PEOPLE” shall be 3/8 inch high.

L. Gussets. The geometric symbols shall appear in both gussets, adjacent to USA, as shown in the applicable exhibits. The letters USA shall be 3 inches high and printed in both gussets.

M. Bag Closure Guide Location Bars (BCGL) shall be printed on the front panel of all multi-wall paper bags, as shown in the exhibits. The BCGL bars shall be plainly visible, approximately one inch in length, printed in blue in two parallel rows evenly spaced over the entire width of the bag. The BCGL bars are to be
used as visual quality control verification. Visually identifying two bars or no bars on the bag would indicate a bag closure failure. Visually identifying one bar would indicate a proper bag closure. (Exhibits A & B)

Section 3.2 MARKING DESCRIPTIONS
The Government shall furnish required markings within two business days after the date of the contract. The procurement of containers should be deferred for at least two business days after the date of the contract.

The following standard marking requirements may be requested under the contract:

Standard Marking Requirement #1 (SMR-1)
**USAID – Distribution**
Front: US Flag, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED,” USAID logo, contract number, net weight, dimensions, “SMR-1”. See exhibit SMR-1, front.
Back: Identical to front. See exhibit SMR-1, back.

Standard Marking Requirement #2 (SMR-2)
**FAS - Distribution**
Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USDA logo, contract number, net weight, dimensions, “SMR-2”. See exhibit SMR-2, front.
Back: Identical. See exhibit SMR-2, back.

Standard Marking Requirement #3 (SMR-3)
**USAID – Monetization**
Front: US Flag, the commodity name, USAID logo, contract number, net weight, dimensions, “SMR-3”. See exhibit SMR-3, front.
Back: Identical to front. See exhibit SMR-3, back.

Standard Marking Requirement #4 (SMR-4)
**FAS or USAID - Monetization**
Front: USA with stripes, the commodity name, contract number, net weight, dimensions, “SMR-4”. See exhibit SMR-4, front.
Back: Identical. See exhibit SMR-4, back.

Language Marking Requirement #1 (LMR-1)
**USAID – Distribution for North Korea**
Front: US Flag, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED,” USAID logo, contract number, net weight, dimensions, and “LMR-1.”. See exhibit LMR-1, front.
Back: US Flag, the commodity name, North Korean language panel, and “LMR-1” only. See exhibit LMR-1, back.

Language Marking Requirement #2 (LMR-2)
USAID – Distribution for Afghanistan, with Pashtu and Dari
Front: US Flag, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USAID logo, contract number, net weight, dimensions, and “LMR-2.” See exhibit LMR-2, front.
Back: US Flag, the commodity name, Pashtu and Dari language panel, and “LMR-2” only. See exhibit LMR-2, back.

Language Marking Requirement #3 (LMR-3)
USAID – Distribution for South Africa Region
Front: US Flag, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USAID logo, contract number, net weight, dimensions, and “LMR-3.” See exhibit LMR-3, front.
Back: US Flag, the commodity name, English language panel, and “LMR-3” only. See exhibit LMR-3, back.

Language Marking Requirement #4 (LMR-4)
USAID – Distribution for Iraq with Arabic
Front: US Flag, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USAID logo, contract number, net weight, dimensions, and “LMR-4.” See exhibit LMR-4, front.
Back: US Flag, the commodity name, Arabic language panel, and “LMR-4” only. See exhibit LMR-4, back.

Language Marking Requirement #5 (LMR-5)
FAS – Distribution for North Korea
Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED,” USDA logo, contract number, net weight, dimensions, and “LMR-5.” See exhibit LMR-5, front.
Back: USA with stripes, the commodity name, North Korean language panel, and “LMR-5” only. See exhibit LMR-5, back.

Language Marking Requirement #6 (LMR-6)
FAS – Distribution for Afghanistan, with Pashtu and Dari
Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED,” USDA logo, contract number, net weight, dimensions, and “LMR-6.” See exhibit LMR-6, front.
Back: USA with stripes, the commodity name, Pashtu and Dari language panel, and “LMR-6” only. See exhibit LMR-6, back.

Language Marking Requirement #7 (LMR-7)
FAS – Distribution for South Africa Region
Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED,” USDA logo, contract number, net weight, dimensions, and “LMR-7.” See exhibit LMR-7, front.
Back: USA with stripes, the commodity name, English language panel, and “LMR-7” only. See exhibit LMR-7, back.
Language Marking Requirement #8 (LMR-8)

FAS – Distribution for Iraq with Arabic

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED,” USDA logo, contract number, net weight, dimensions, and “LMR-8.” See exhibit LMR-8, front

Back: USA with stripes, the commodity name, Arabic language panel, and “LMR-8” only. See exhibit LMR-8, back.

Section 3.3 EMPTY BAG DIMENSIONS
A. All bags shall be marked with the empty dimensions as follows:

<table>
<thead>
<tr>
<th>Gusseted Bags</th>
<th>Face Width X Gusseted Width X Finished Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat Tube Bags</td>
<td>Face Width X Finished Length</td>
</tr>
</tbody>
</table>

B. The bag dimensions shall be centered at the bottom of the bag, as small as possible, yet legible.

Section 3.4 CONTAINERS WITH INCORRECT MARKINGS
A. Any labels, bags, cans, can lids, cases, or any other type of packaging (hereinafter referred to as "containers") displaying incorrect markings may be used under a Government contract provided that the incorrect markings are obliterated and correct markings are applied in a permanent manner with approval of the contracting officer.

B. The appearance of containers in commercial or other channels either filled or unfilled bearing markings identifying the containers as part of a Government contract may cause the Government expense in determining whether commodities have been diverted from authorized use and in answering inquiries. The contractor shall take all necessary action to prevent the appearance in commercial or other channels of containers and container materials bearing any markings required under a Government contract, including those held by the contractor or others; e.g., overruns, misprints, etc. The contractor shall ensure that any container from a Government contract that appears in commercial or other channels shall have all markings required under this contract permanently obliterated.

EXHIBITS – Marking exhibits immediately follow on pages 14 – 27
CORN SOY BLEND PLUS

NOT TO BE SOLD OR EXCHANGED

CONTRACT ABCD01234

NET WEIGHT: 25 kg, 55.115 lb.
16 x 4 x 37
SMR-2

USA

CORN SOY BLEND PLUS

NOT TO BE SOLD OR EXCHANGED

CONTRACT ABCD01234

NET WEIGHT: 25 kg, 55.115 lb.
16 x 4 x 37
SMR-2

USA
CORN SOY BLEND PLUS

NOT TO BE SOLD OR EXCHANGED

CONTRACT ABCD01234
NET WEIGHT: 25 kg, 55.115 lb.
16 x 4 x 37
LMR-1

FROM THE AMERICAN PEOPLE

USAID

FROM THE AMERICAN PEOPLE

USAID

미국에서 보내온 선물
CORN SOY BLEND PLUS

NOT TO BE SOLD OR EXCHANGED

CONTRACT ABCD01234
NET WEIGHT: 25 kg, 55.115 lb.
16 x 4 x 37
LMR-3

USAID
FROM THE AMERICAN PEOPLE

Gift of the People of the United States of America
CORN SOY BLEND PLUS

NOT TO BE SOLD OR EXCHANGED

USAID
FROM THE AMERICAN PEOPLE

CONTRACT ABCD01234
NET WEIGHT: 25 kg, 55.115 lb.
16 x 4 x 37
LMR-4
CORN SOY BLEND PLUS

NOT TO BE SOLD OR EXchanged

USA

CONTRACT ABCD01234
NET WEIGHT: 25 kg, 55.115 lb.
16 x 4 x 37
LMR-5

CORN SOY BLEND PLUS

미국에서
보내온 선물

LMR-5
CORN SOY BLEND PLUS

NOT TO BE SOLD OR EXCHANGED

CONTRACT ABCD01234
NET WEIGHT: 25 kg, 55.115 lb.
16 x 4 x 37
LMR-6

USA

CORN SOY BLEND PLUS

د امريكا د متحده ایالاتو
د خلکو سوغات
تحفه، مردم
ایالات متحده امريكا

USA

USA

LMR-6
CORN SOY BLEND PLUS

NOT TO BE SOLD OR EXCHANGED

USDA

CONTRACT ABCD01234
NET WEIGHT: 25 kg, 55.115 lb.
16 x 4 x 37
LMR-7

CORN SOY BLEND PLUS

Gift of the People of the United States of America
Bag Closure Guide Location

Pre-applied Hot Melt

Front of Bag
High Performance Bags:
1 inch blue stripe