USDA COMMODITY REQUIREMENTS

VASP4 VALUE ADDED SOY PRODUCTS FOR USE IN EXPORT PROGRAMS

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Part 1 COMMODITY SPECIFICATIONS

Section 1.1 VALUE ADDED SOY PRODUCTS

- A. Quality of Value Added Soy Products
 - (1) Defatted soy flour shall be made entirely from defatted soy meal. This product may also be fortified with various micronutrients and minerals. The product shall meet the chemical and physical requirements shown in the following table.

	Requirements	
Item	Minimum	Maximum
Protein (Nx6.5) As is	50.0%	
Moisture		9.0%
Fat		1.5%
Crude Fiber		3.5%
Ash		7.0%
PDCAAS	0.90	
Carbohydrates (by difference)	20	
Standard Plate Count		50,000
Salmonella	Nega	ative
E. Coli	Nega	ative

Soy Flour, Defatted

(2) **Soy protein concentrate (SPC)** shall be made wholly from defatted soy meal. This product may also be fortified with various micronutrients and minerals. The product shall meet the chemical and physical requirements shown in the following table.

	Requirements	
Item	Minimum	Maximum
Protein (Nx6.5) As is	65.0%	
Moisture		6.0%
Fat		1.0%
Crude Fiber		4.0%
Ash		6.0%
PDCAAS	0.95	
Carbohydrates (by difference)	20	
Material through a U.S. Standard	95	
100 screen	95	
Standard Plate Count		10,000
Salmonella (class)	Nega	ative
E. Coli	Nega	ative

Soy Protein Concentrates

(3) Soy protein isolate (SPI) shall be made wholly from defatted soy meal. This product may also be fortified with various micronutrients and minerals. The product shall meet the chemical and physical requirements shown in the following table.

Requirements		ements
Item	Minimum	Maximum
Protein (Nx6.5) As is	90.0%	
Moisture		6.0%
Fat		1.0%
Crude Fiber		0.2%
Ash		4.5%
PDCAAS	0.90	
Carbohydrates (by difference)	4	
Material through a U.S. Standard 100 screen	95	
Standard Plate Count		10,000
Salmonella (class II)	Nega	ative
E. Coli	Nega	ative

a	D / •	T	
Soy	Protein	Iso	late

(4) Soy milk Replacer shall meet the chemical and physical requirements shown in the following table.

Soy Milk Replacer		
	Requirements	
Item	Minimum	Maximum
Protein (Nx6.5) As is	25.0%	
Moisture		5.0%
Fat		25.0%
Crude Fiber	N/A	
Ash		6.0%
PDCAAS	0.90	
Carbohydrates (by difference)	20	
Material through a U.S. Standard	95	
100 screen	93	
Standard Plate Count		10,000
Salmonella	Nega	ative
E. Coli	Nega	ative

Mill D

(5) Textured Soy Protein (TSP) shall be made wholly from either defatted soy meal flakes or soy protein concentrate. This product may also be fortified with various micronutrients and minerals. TSP shall be the caramel colored variety and meet the chemical and physical requirements shown in the following table.

Textured Boy Trotem			
	Requirements		
Item	Minimum	Maximum	
Protein (Nx6.5) As is	50.0%		
Moisture		10.0%	
Fat		3.0%	
Crude Fiber		4.0%	
Ash		6.5%	
PDCAAS	0.90		
Carbohydrates (by difference)	20		
Standard Plate Count		50,000	
Salmonella (class II)	Negative		
E. Coli	Negative		
Granule size	May vary from 1/16 inch to 1/4 inch		

Textured Soy Protein

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.

Part 2 CONTAINER AND PACKAGING REQUIREMENTS

Section 2.1 COMMERCIAL PACKAGING

- A. Commercial packaging requirements shall be applicable to Soy Protein Concentrate, Soy Protein Isolate, and Soy Milk Replacer
- B. The components that make up the fabricating materials of the containers and packaging materials shall be of U.S. origin to the extent that they are commercially available.
- C. Container and packaging requirements for commercial products are those used in current commercial shipping practices for export and shall comply with the following unitization requirements:
 - (1) Unless otherwise specified by the Government, all shipments of packaged products shall be unitized (palletized and stretch wrapped).
 - (2) Pallets shall be:
 - a. Constructed to facilitate the safe handling and transportation of the

packaged product, as a unit, without loss or damage.

- b. 48 X 40 inches, four-way or partial four-way, and reversible or nonreversible flush stringer.
- c. Suitable for use in the shipment of food products.
- (3) Plastic stretch wrap shall be:
 - a. Constructed of a plastic film which is to be stretched a minimum of 50 percent beyond its original length when stretched around the pallet load.
 - b. Applied as tightly as possible around all tiers of the palletized shipping containers. The shipping containers shall be held firmly in place by the stretch wrap.
- (4) Pallet loads shall be:
 - a. Stacked in such a way as to minimize the amount that shipping containers overhang the edges of pallets.
 - b. Blocked and braced or otherwise loaded into the conveyance in a manner that prevents shifting during transit.
- D. Shipping containers shall be marked to show the maximum safe stacking height.

Section 2.2 GOVERNMENT SPECIFIED PACKAGING

Government specified packaging requirements shall be applicable to Textured Soy Protein and Defatted Soy Flour.

Subsection 2.2.1 CONTAINERS AND MATERIALS

- A. All containers and packaging 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

to but not inclusive of, "Made in [Name of Foreign Country.]" or "Product of [Name of Foreign Country.]" are strictly prohibited.

Subsection 2.2.2 50-POUND MULTIWALL PAPER BAGS

- A. Textured Soy Protein
 - 50-Pound of product shall be packed in multi-wall paper bags meeting the requirements of Federal Specification UU-S-48, as amended, Type VI, Style B Pinch Bottom Open (PBOM) or Webb Bottom Pinch Top (Webb). The use of recycled materials is not required if performance or food safety is jeopardized.
 - (2) The PBOM variety bag shall have three (3) inner walls. These will be comprised of two (2) innermost 50-pound nominal basis weight natural kraft paper and one 60-pound nominal basis weight natural kraft paper. Additionally, there shall be an outer fourth wall of 60-pound nominal basis weight wet strength paper in accordance with Uniform Freight Classification, Rule 40, as amended.
 - (3) The PBOM variety bag shall have an inner plastic liner constructed of one .5 mil. high density polyethylene film immediately placed after the two (2) innermost 50-pound nominal basis weight natural kraft paper.
 - (4) The Webb variety bag shall have an innermost plastic liner constructed of one .5 mil. high density polyethylene film and three (3) inner walls. These will be comprised of two (2) 50-pound nominal basis weight natural kraft paper, and one 60-pound nominal basis weight natural kraft paper. Additionally, there shall be an outer fourth wall of 60pound nominal basis weight wet strength paper in accordance with Uniform Freight Classification, Rule 40, as amended.
- B. Defatted Soy Flour
 - 50-Pound of product shall be packed in multi-wall paper bags meeting the requirements of Federal Specification UU-S-48, as amended, Type VI, Style B Pasted Valve Bag (PVB). The use of recycled materials is not required if performance or food safety is jeopardized.
 - (2) The PVB variety bag shall have three (3) inner walls. These will be comprised of two (2) innermost 50-pound nominal basis weight natural kraft paper and one 60-pound nominal basis weight natural kraft paper. Additionally, there shall be an outer fourth wall of 60-pound nominal basis weight wet strength paper in accordance with Uniform Freight Classification, Rule 40, as amended.
 - (3) The PVB variety bag shall have an inner plastic liner constructed of one .5 mil. high density polyethylene film immediately placed after the two

- (2) innermost 50-pound nominal basis weight natural kraft paper.
- C. Longitudinal seams of the outer wall of the bag shall be glued so that there is no more than 3/16-inch of unglued edge on the outer surface of the bag. The adhesives used in the longitudinal seams shall be waterproof and applied in accordance with Federal Specification UU-S-8, as amended.

Subsection 2.2.3 OUTER CLOSURE AND SEALS

- A. Textured Soy Protein
 - (1) For the pinch bottom open mouth bag, the bottom and top of the 50 pound bag shall be closed to provide a tight seal using hot-melt or thermoplastic adhesive applied in a single band along the top edge of the long side of the bag and extending downward at least 3/4 inches. The fold line on the field closure end shall be 1-5/8 inches plus or minus 1/4-inch. Refer to section 3.2.L. for bag closure guide location bars.
 - (2) For the Web Bottom Pinch Top Bag, the top of the 50 pound bag shall be closed to provide a tight seal using hot-melt or thermoplastic adhesive applied in a single band along the top edge of the long side of the bag and extending downward at least 3/4 inches. The fold line on the field closure end shall be 1-5/8 inches plus or minus 1/4-inch. Refer to section 3.2.L. for bag closure guide location bars.
 - (3) The outer wall of the bag shall be stepped at the bottom and top fold over flap, beyond all inner walls, in order to provide a positive seal over the ends of the inner walls so that there is no more than 3/16 inches unbonded edge beyond the adhesive line. The inner polyethylene film may be heat-sealed.
- D. Defatted Soy Flour
 - (1) For the Pasted Valve Bag, the filling spout shall be closed to provide a tight seal using a tuck in sleave of a 70-pound natural extensible paper coated with 20-pound polyethylene. The filling spout shall be heat-sealed.
 - (2) The inner polyethylene film may be heat-sealed.

Subsection 2.2.4 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 $(73.4^{\circ}F)$ 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.
- (4) Bags submitted under this performance specification shall conform to all other applicable material, construction, and performance specifications.
- B. <u>Test Laboratories</u>

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

Michigan State University School of Packaging East Lansing, MI 48824-1223 (517) 355-9580 <u>http://packaging.msu.edu/</u>	Lansmont Corporation 1287 Reamwood Sunnyvale, CA 94089 (408) 734-9724 Lansmont Corporation 6539 Westland Way, Suite 24 Lansing, MI 48917 (888) 526-7666 www.lansmont.com
Rutgers University Packaging Science and Engineering Dept. P.O. Box 909 Piscataway, NJ 08854 (201) 932-3679	Ten-E Packaging Services, Inc. 1666 County Road 74 Newport, MN 55055 (651) 459-0671 <u>www.ten-e.com</u>

Subsection 2.2.5 SEAL PEEL TEST

- A. Seal peel testing is applicable for open mouth bags only. The contractor shall perform periodic seal peel tests on the filling end of multiwall paper bags to determine whether the paper plies are adequately adhered. The seal peel test shall be performed at every start up and a minimum of every hour during commodity packing operations. The seal peel test shall demonstrate tear of paper fiber (fiber tear) for all paper plies. The contractor shall maintain records of seal peel test results for review by the Government.
- B. The seal peel test shall be performed as follows:
 - (1) Run an empty bag through the sealing unit.
 - (2) Cut bag approximately 3 to 8 inches below the seal.
 - (3) Cut both gussets along the center crease to the top of the bag end.
 - (4) Spread bag to expose poly liner.
 - (5) Check inside plastic liner along the closure and gussets to determine

that the liner is heat-sealed. Pinholes, no larger than 1/8 inch in diameter, are allowable in the closure.

- (6) Grip inside fold at center of the bag end.
- (7) Pull apart sides of the bag end at the center, separating seals. (If the seal is good, fibers shall completely cover adhesive. If the seal is poor, glossy adhesive will show).
- C. The contractor's seal peel test records shall include the following information for each test: date, time, employee's name, product, contract number, railcar number, and result of the test. The result of the test shall be reported as either "good seal" or "poor seal", "insufficient fiber tear", as applicable. The contractor shall take corrective action if the seal peel test indicates a poor seal and shall retest until a good seal is achieved.

PART 3 MARKING REQUIREMENTS

Section 3.1 COMMERCIAL MARKINGS

- A. Commercial marking requirements shall be applicable to Soy Protein Concentrate, Soy Protein Isolate, and Soy Milk Replacer
- B. The marking and labeling for commercial products shall be in accordance with good commercial practices.
- C. At contractor's option, a statement such as "NOT FOR RETAIL SALE" may be printed on the principal display panel of the food label.
- D. The manufacturer's lot code/lot identification shall be shown on the commercial bill of lading.

Section 3.2 GOVERNMENT SPECIFIED MARKINGS

- A. Government specified marking requirements shall be applicable to Textured Soy Protein and Defatted Soy Flour.
- B. 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.
- C. All dimensions are approximate. Unless otherwise specified, all characters shall be in normal block print.
- D. 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.
- E. 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 edge of the panel.

- F. The USAID vertical identity, including the logo, brand name, 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 brand name 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.
- G. The USDA logo shall be 4 1/2 inches high and 6 1/2 inches in total width. See exhibits.
- H. 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.
- I. 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.
- J. 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 exhibits.
- K. 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.
- L. Gussets. 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, as shown in the applicable exhibits.
- M. Gussets. The letters USA shall be 3 inches high and printed in both gussets, as shown in the applicable exhibits.
- N. For Textured Soy Protein only, the 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.

Subsection 3.2.1 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, and "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, and "SMR-2". See exhibit SMR-2, front. Back: Identical. See exhibit SMR-2, back.

Back. Identical. See exhibit SWIK-2, back.

Standard Marking Requirement #3 (SMR-3)

USAID – Monetization

Front: US Flag, the commodity name, USAID logo, contract number, net weight, and "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, and "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, 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, 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, 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, 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, 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, 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, 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, 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.

Subsection 3.2.2 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.

Marking Exhibits

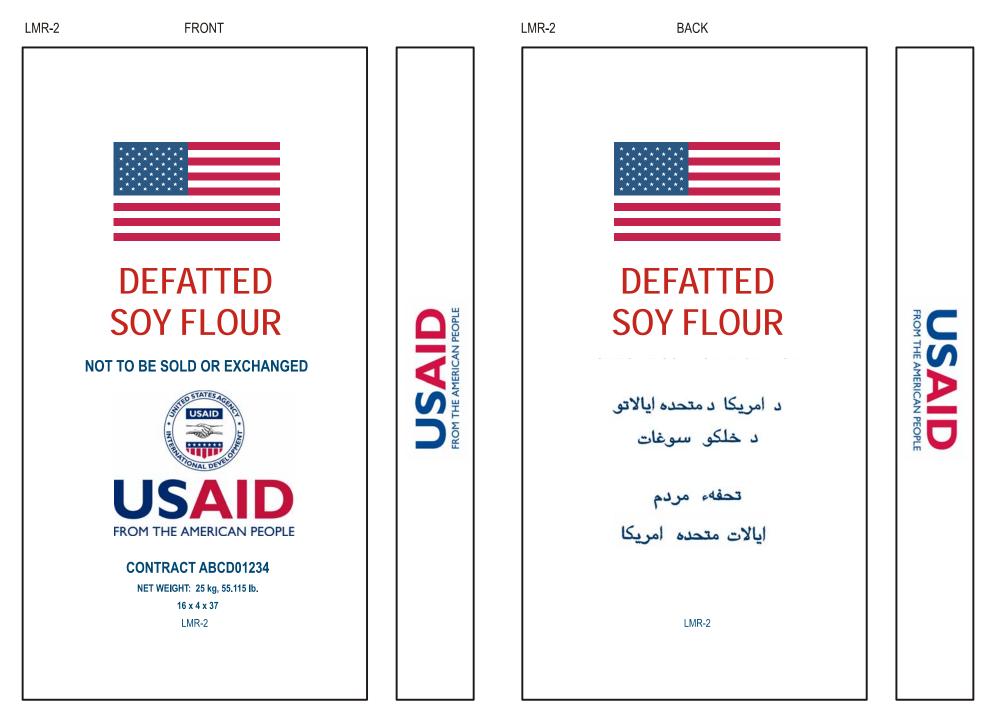


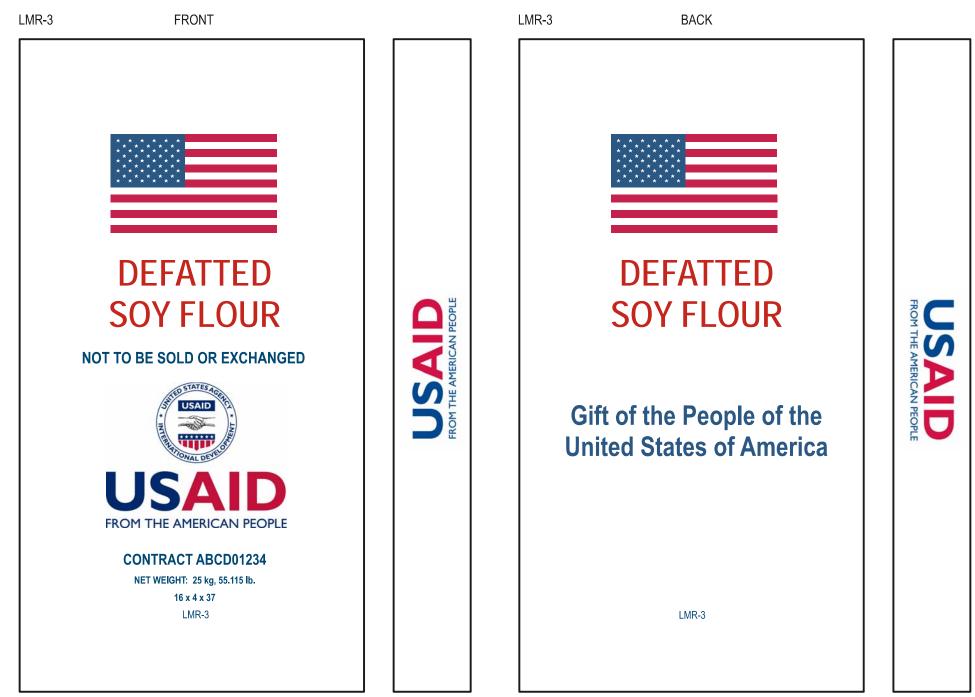


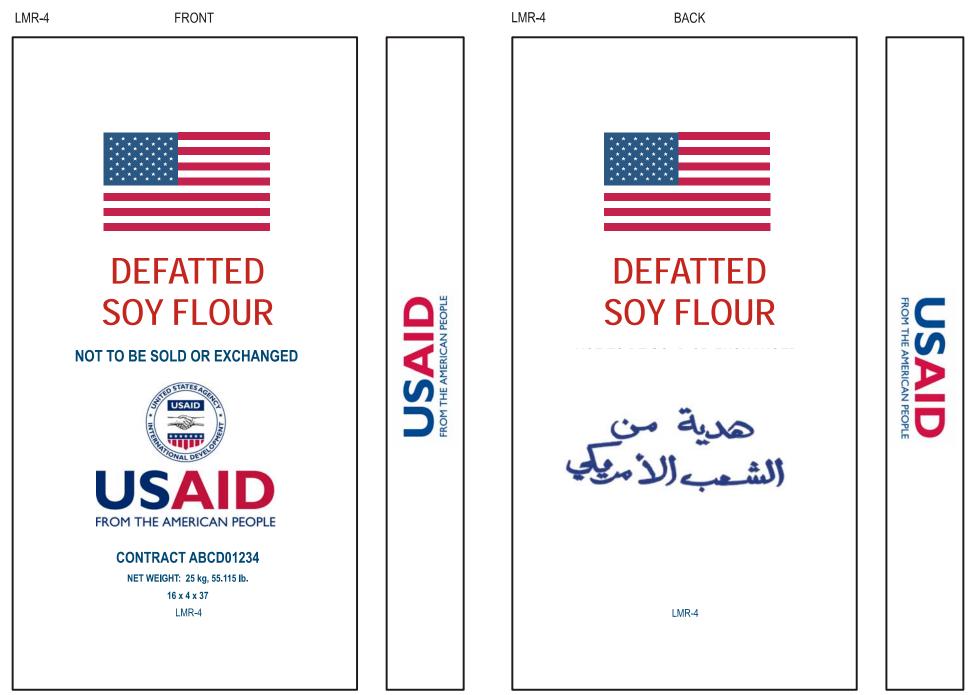




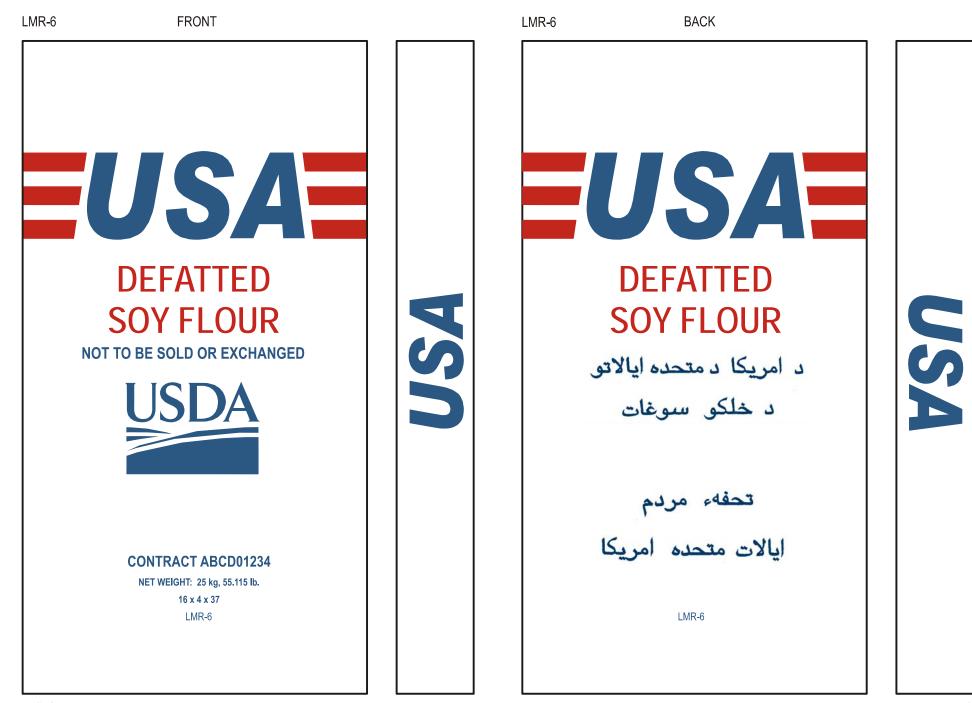














BACK -USA-DEFATTED

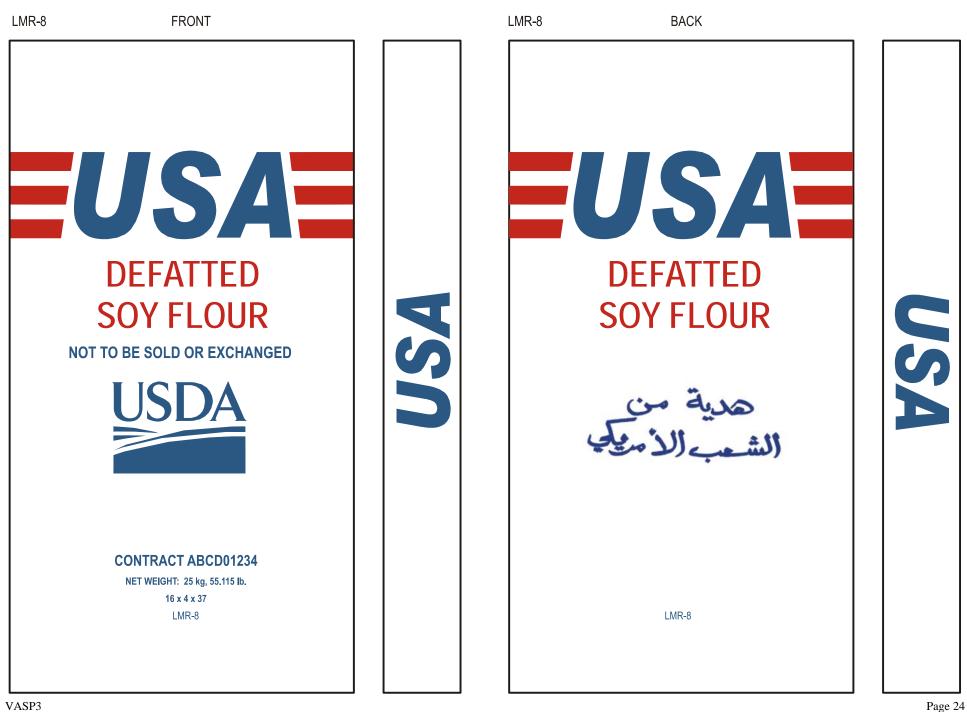
LMR-7

Gift of the People of the **United States of America**

SOY FLOUR



LMR-7

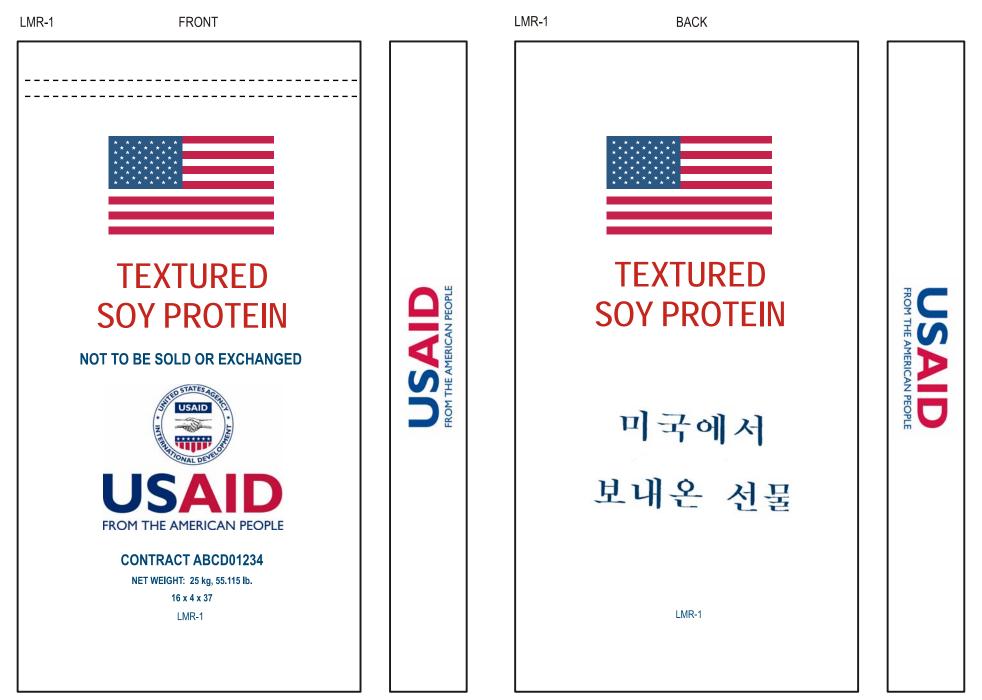




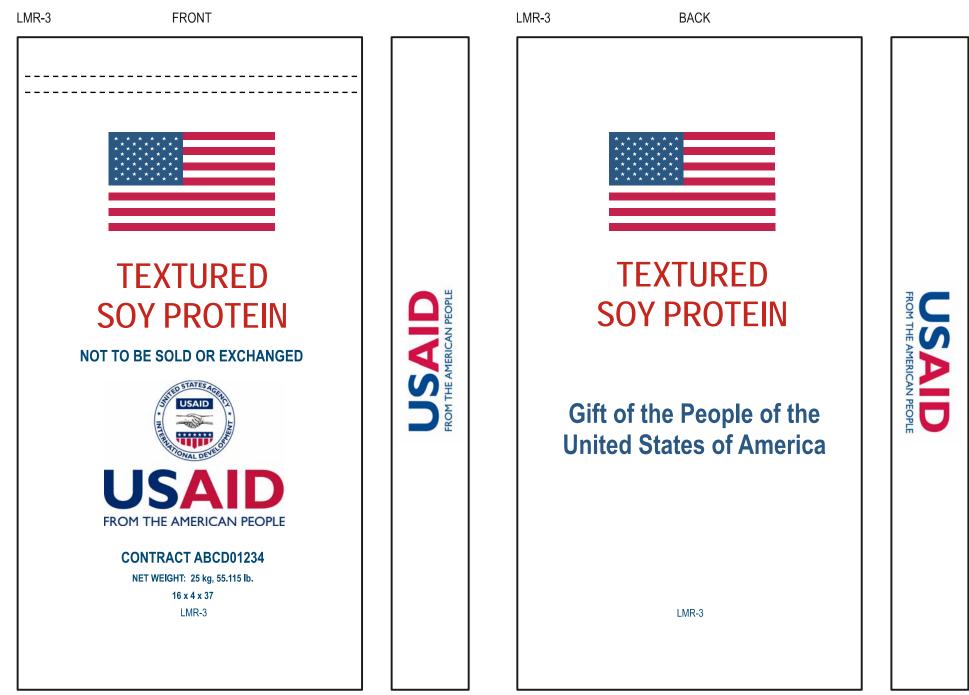




















LMR-7



BACK

Gift of the People of the United States of America



LMR-7



Bag Closure Guide Location

