

SECTION C

C-1 ITEM DESCRIPTION

PCR-E-001, EGGS, SCRAMBLED, COOKED, DEHYDRATED, PACKAGED IN A BRICKPACK POUCH, SHELF STABLE

Types.

- Type I - Scrambled Eggs
- Type II - Scrambled Eggs with Bacon Pieces
- Type III - Scrambled Eggs with Cheese, Western-style

Styles.

- Style A - Meal, Cold Weather (MCW), Packaged in a White Brickpack Pouch
- Style B - Food Packet, Long Range Patrol (LRP), Packaged in a Subdued Colored Brickpack Pouch

Unless otherwise specified the following applies to all types:

Each component is consumed by combat personnel under worldwide environmental extremes as part of an operational ration, and is a source of nutritional intake.

C-2 PERFORMANCE REQUIREMENTS

A. Product standard. A sample shall be subjected to first article or product demonstration model inspection as applicable, in accordance with the tests and inspections of Section E of this Performance-based Contract Requirements document.

B. Shelf life. The packaged food shall meet the minimum shelf life requirement of 36 months at 80°F.

C. Dehydrated product.

(1) Appearance.

a. General. The dehydrated product shall be free from foreign materials.

b. Type I. The dehydrated scrambled egg shall be a mixture of cooked egg pieces that have been dehydrated. The egg pieces shall be medium yellow color.

c. Type II. The dehydrated scrambled egg with bacon pieces shall be a mixture of cooked egg and bacon flakes. The egg pieces shall be medium yellow color. The bacon flakes shall be a medium brown color.

d. Type III. The dehydrated scrambled egg with cheese western style shall be a mixture of cooked egg pieces, ~~cheese,~~ ham dices, green and red pepper dices and onion pieces. The egg pieces shall be medium yellow color. ~~The cheese pieces shall be a medium orange to orange color.~~ The diced ham shall be a cooked meat color. The vegetables shall have the characteristic color of the appropriate cooked dehydrated vegetables.

(2) Odor.

a. Type I. The odor shall be characteristic of cooked, dehydrated scrambled eggs.

b. Type II. The odor shall be characteristic of cooked dehydrated scrambled eggs with smoked bacon.

c. Type III. The odor shall be characteristic of cooked dehydrated scrambled eggs with ~~cheese,~~ ham, and green and red peppers.

Comment [U1]: Natick case ES09-145, (DSCP-SS-09-46387), change 04, 28-AUG-09.
a. page 1 Section C-2, C. (1) d. Type III, make the following changes:
(1) Line 2, delete "cheese,"
(2) Line 3-4, delete sentence 3 entirely, "The cheese pieces. . . to orange color."

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d. Foreign. The dehydrated product shall be free from foreign odors.

(1) (3) Texture.

a. General. The product shall be fully dehydrated.

b. Type I. There shall be discernable pieces of egg.

c. Type II. There shall be discernable pieces of egg and bacon.

d. Type III. There shall be discernable pieces of egg, ~~cheese~~, ham, and green and red peppers.

Comment [U2]: Natick case ES09-145, (DSCP-SS-09-46387), change 04, 28-AUG-09, page 2, Section C-2, C. (1) Texture, renumber to (3)

(4) Weight. The average net weight of the pouched product shall be not less than 75 grams.

Comment [U3]: Natick case ES09-145, (DSCP-SS-09-46387), change 04, 28-AUG-09, Section C-2, C. (3) d. Type III, delete "cheese,"

(5) Nutrient content. The nutrient content for the packaged food is as follows:

<u>Entree</u>	<u>Protein</u>	<u>Fat</u>	<u>Sodium Content</u>
	not less than	not greater than	not greater than
Type I	32.0 percent	41.0 percent	2500 mg per 100 grams
Type II	32.0 percent	41.0 percent	2500 mg per 100 grams
Type III	32.0 percent	41.0 percent	2500 mg per 100 grams

(6) Moisture content. The moisture content of the dehydrated product shall not exceed 2.0 percent.

(7) Microbiological. The aerobic plate count shall not be greater than 75,000 per gram in four of five samples, and not greater than 150,000 per gram in any sample. The E. coli count shall be less than 3 per gram (no positives in the standard 3 tube MPN technique) in four of five samples and not greater than 10 per gram in any sample. The product shall be free of Salmonella.

D. Rehydrated product.

(1) Appearance.

a. General. The rehydrated product shall be free from foreign materials.

b. Type I. The overall appearance shall be characteristic of scrambled eggs that have been frozen and reheated.

c. Type II. The overall appearance shall be characteristic of scrambled eggs that have been frozen and reheated. The bacon pieces shall resemble flakes.

d. Type III. The overall appearance shall be characteristic of scrambled eggs with cheese that have been frozen and reheated. The ham shall be piece sizes typically produced by a 3/8 inch dicer setting. The cooked ham shall be free of bone or bone fragment, cartilage, coarse connective tissue, tendons or ligaments, and glandular material. The green and red peppers shall be piece sizes typically produced by a 3/8 inch dicer setting. The vegetables shall be the characteristic color for the appropriate vegetable.

(1) Odor and flavor.

a. Foreign. The packaged food shall be free from foreign odors and flavors.

b. Type I. The product shall have an odor and flavor characteristic of frozen and reheated cooked eggs.

c. Type II. The product shall have an odor and flavor characteristic of frozen and reheated cooked eggs and smoked bacon.

d. Type III. The product shall have an odor and flavor characteristic of frozen and reheated cooked eggs with cheese, ham, and peppers.

(1) Texture.

a. General. The product shall rehydrate within ten minutes.

b. Ham. The ham shall be moist and tender.

c. Vegetables. The vegetables shall be slightly soft to slightly firm.

d. Bacon. The bacon flakes shall be tender.

e. Eggs. The egg product shall be moist, slightly spongy, and shall not be rubbery.

(4) Palatability and overall appearance. The finished product shall be equal to or better than the approved product standard in palatability and overall appearance.

C-3 MISCELLANEOUS INFORMATION

THE FOLLOWING IS PROVIDED FOR INFORMATION ONLY TO PROVIDE THE BENEFIT OF PAST GOVERNMENT EXPERIENCE. THIS IS NOT A MANDATORY CONTRACT REQUIREMENT.

A. Scrambled Eggs (Type I)

(1) Scrambled eggs ingredients/formulation. Ingredients and formulation percentages for scrambled eggs may be as follows:

<u>Ingredients</u>	<u>Percent by weight</u>
Eggs, whole liquid or frozen	78.50
Water	15.76
Oil, vegetable	2.00
Maltodextrin	1.50
Stabilizer compound	0.80
Salt	0.70
Flavoring, egg, natural	0.40
Xanthan gum	0.25
Pepper, white, ground	0.09

B. Scrambled Eggs with Bacon Pieces (Type II).

(1) Scrambled eggs ingredients/formulation. Ingredients and formulation percentages for scrambled eggs for Type I may be used.

(2) Product ingredients/formulation. Ingredients and formulation percentages for scrambled eggs and bacon pieces may be as follows:

<u>Ingredients</u>	<u>Percent by weight</u>
Dehydrated scrambled eggs	84.0
Bacon pieces, shelf stable	16.0

C. Scrambled Eggs with Cheese, Western-style (Type III).

(1) Scrambled eggs with cheese, ingredients/formulation. Ingredients and formulation percentages for scrambled eggs with cheese, may be as follows:

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<u>Ingredients</u>	<u>Percent by weight</u>
Eggs, whole liquid or frozen	72.50
Water	18.41
Cheese, cheddar, sharp, dehydrated, uncolored	4.00
Oil, vegetable	2.00
Maltodextrin	1.00
Stabilizer compound	0.80
Salt	0.50
Flavoring, egg, natural	0.45
Xanthan gum	0.25
Pepper, white, ground	0.09

(2) Product ingredients/formulation. Ingredients and formulation percentages for scrambled eggs with cheese, western-style, may be as follows:

<u>Ingredients</u>	<u>Percent by weight</u>
Dehydrated scrambled eggs with cheese	74.9
Dehydrated ham	22.0
Dehydrated green peppers	1.5
Dehydrated red peppers	1.5
Dehydrated onions, chopped	0.1

SECTION D

D-1 PACKAGING

Product shall be filled into pouches in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR DEHYDRATED PRODUCTS IN A BRICKPACK POUCH.

D-2 LABELING

Each pouch shall be labeled in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR DEHYDRATED PRODUCTS IN A BRICKPACK POUCH.

D-3 PACKING

Packing for shipment to ration assembler shall be in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR DEHYDRATED PRODUCTS IN A BRICKPACK POUCH.

D-4 MARKING

Marking of shipping containers shall be in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR DEHYDRATED PRODUCTS IN A BRICKPACK POUCH.

SECTION E INSPECTION AND ACCEPTANCE

Inspection for packaging, labeling and packing, and marking shall be in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR DEHYDRATED PRODUCTS IN A BRICKPACK POUCH.

E-6 QUALITY ASSURANCE PROVISIONS

Definitions.

(1) Critical defect. A critical defect is a defect that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using,

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maintaining, or depending on the item; or a defect that judgment and experience indicate is likely to prevent the performance of the major end item, i.e., the consumption of the ration.

(2) Major defect. A major defect is a defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.

(3) Minor defect. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

Quality Assurance Provisions.

The following quality assurance criteria, utilizing ANSI/ASQC Z1.4-1993, Sampling Procedures and Tables for Inspection by Attributes, are required.

A. Classification of inspections. The inspection requirements specified herein are classified as follows:

(1) Product standard inspection. The first article or product demonstration model shall be inspected in accordance with the provisions of this Performance-based Contract Requirements document and evaluated for overall appearance and palatability. Any failure to conform to the performance requirements or any appearance or palatability failure shall be cause for rejection.

(2) Conformance inspection. Conformance inspection shall include the product examination and the methods of inspection cited in this section.

B. Product examination. The finished product shall be examined for compliance with the performance requirements specified in Section C of this Performance-based Contract Requirements document utilizing the double sampling plans indicated in ANSI/ASQC Z1.4 - 1993. The lot size shall be expressed in pouches. The sample unit shall be the contents of one pouch. The inspection level shall be S-3 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defects and 4.0 for minor defects. Defects and defect classifications are listed in Table I.

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TABLE I. Product defects 1/ 2/

Category		Defect
Major	Minor	
		<u>Dehydrated Product</u>
		<u>Appearance</u>
101		Glazed surface area measuring more than 0.5 inch in any dimension. 3/
102		Dark colored core in any dimension. 3/
	201	Egg pieces not medium yellow color or not characteristic of cooked dehydrated eggs (Type I, Type II, and Type III).
	202	Bacon flakes not medium brown color (Type II).
	203	Ham not cooked meat color or not characteristic of cooked dehydrated meat (Type III).
	204	Cheese pieces not medium orange to orange color (Type III).
	205	Peppers not red or green color (Type III).
		<u>Odor</u>
103		Not characteristic of dehydrated scrambled eggs (Type I).
104		Not characteristic of dehydrated scrambled eggs and bacon (Type II).
105		Not characteristic of dehydrated scrambled eggs with cheese, ham, and peppers (Type III).
		<u>Texture</u>
106		Wet spots or soft spots. 4/
	206	Less than 46 percent of egg ingredient, by weight, retained on a U.S. Standard 1/4 inch sieve (Type I). 5/
	207	Less than 46 percent of egg ingredient, by weight, retained on a U.S. Standard 1/4 inch sieve (Type II). 5/
	208	Less than 46 percent of egg ingredient plus 95 percent of ham and vegetable ingredients, by weight, retained on a U.S. Standard 1/4 inch sieve (Type III). 5/
		<u>Weight</u>
	209	Net weight less than 75 grams. 6/
		<u>Rehydrated Product 7/ 8/</u>
		<u>Appearance</u>
107		Bone or bone fragment measuring more than 0.3 inch in any dimension (Type III).

Comment [U4]: Natick case ES09-145, (DSCP-SS-09-46387), change 04, 28-AUG-09. d. pages 6-7, Section E-6, B, Table I, make the following changes:
 (1) Minor defect 204, delete entirely

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- 108 Type I product not discernable egg pieces.
- 109 Type II product not a mixture of egg pieces and bacon flakes.
- 110 ~~Type III product not a mixture of egg pieces, cheese pieces, diced ham, diced green and red peppers, and onion pieces.~~
- 210 Total weight of cartilage, coarse connective tissue, sections of tendons or ligaments, and glandular material more than 1.0 ounce (Type III).
- Odor and flavor
- 111 Type I product odor or flavor not characteristic of frozen and reheated cooked eggs.
- 112 Type II product odor or flavor not characteristic of frozen and reheated cooked eggs and smoked bacon.
- 113 Type III product odor or flavor not characteristic of frozen and reheated cooked eggs with cheese, ham, and peppers.
- Texture
- 114 Hard cores due to incomplete water penetration. 9/
- 211 Ham not moist or not tender (Type III).
- 212 Vegetables not slightly soft to slightly firm (Type III).
- 213 Bacon flakes not tender (Type II).
- 214 Scrambled egg not moist or not slightly spongy.
- 215 Scrambled egg is rubbery.

Comment [U5]: Natick case ES09-145, (DSCP-SS-09-46387), change 04, 28-AUG-09. d. pages 6-7, Section E-6, B, Table I, make the following changes:
(2) Major defect 110, delete "cheese pieces,"

1/ Presence of any foreign materials such as, but not limited to dirt, insect parts, hair, glass, wood, or metal, or foreign odors, and flavors such as but not limited to burnt, scorched, rancid, sour, or stale shall be cause for rejection of the lot. Foreign flavor is not applicable to dehydrated product.

2/ Finished product not equal to or better than the approved product standard in palatability and overall appearance shall be cause for rejection of the lot.

3/ Evidence of faulty dehydration.

4/ Evidence of incomplete dehydration.

5/ Sieve testing shall be conducted on the contents of two randomly selected pouches which are evenly distributed across the area of the sieve screen. The sieve shall be placed on a flat collection surface and moved by hand back and forth about 12 inches, ten times. The movement shall be gentle enough not to create additional fines but will allow existing fines to fall through the sieve.

6/ If the sample average net weight is less than 75 grams, the lot shall be rejected.

7/ Rehydrate according to pouch instructions. Product that does not rehydrate within ten minutes shall be cause for rejection of the lot.

8/ Machine setting requirement for ham and green and red pepper dices shall be verified with the producer's certificate of conformance.

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9/ Dry areas attributable to gristle and similar materials in the ham or bacon shall not be considered as defects because they do not necessarily rehydrate properly.

C. Methods of inspection.

(1) Shelf life. The contractor shall provide a certificate of conformance that the product has a 3 year shelf life when stored at 80°F. Government verification may include storage for 6 months at 100°F or 36 months at 80°F. Upon completion of either storage period, the product will be subjected to a sensory evaluation panel for appearance and palatability and must receive an overall score of 5 or higher based on a 9 point hedonic scale to be considered acceptable.

(2) Net weight. The net weight of the filled and sealed pouches shall be determined by weighing each sample unit on a suitable scale tared with a representative empty pouch. Results shall be reported to the nearest gram.

(3) Nutrient content. The sample to be analyzed shall be a composite of eight filled and sealed pouches which have been selected at random from the lot. The composited sample shall be prepared (see NOTE) and analyzed for protein content, fat content and sodium content in accordance with the following methods of the Official Methods of Analysis of AOAC International:

<u>Test</u>	<u>Method Number</u>
Protein	988.05, 992.15
Fat	925.32
Sodium	985.35, 984.27

Test results for protein and fat shall be reported to the nearest 0.1 percent. Test results for sodium content shall be reported to the nearest 1.0 mg per 100 grams. Any result not conforming to the requirements specified in Section C of this Performance-based Contract Requirements shall be cause for rejection of the lot.

NOTE: The USDA will use AOAC method 983.18 for preparation of the sample.

(4) Moisture content testing. Eight filled and sealed pouches shall be selected at random from the lot regardless of lot size. The contents of each pouch shall be blended to uniformity using a blender or a food processor. The blending must be rapid and conducted in such a way that minimum heat is transferred to the product and that the product has minimum exposure to atmospheric moisture. Each sample shall be tested for moisture content in accordance with the Official Methods of Analysis of the AOAC method 925.45/A (except that the temperature-time cycle for moisture analysis shall be modified by using a temperature of 70°C for 16 hours at a pressure of not more than 100 mm of mercury. Test results shall be reported to the nearest 0.1 percent. Any result not conforming to the requirements specified in Section C of this Performance-based Contract Requirements document shall be cause for rejection of the lot.

(5) Microbiological testing. Five filled and sealed pouches of finished product shall be selected at random from the lot regardless of lot size. The contents of each sample pouch shall be tested for aerobic plate count and E. coli in accordance with the Official Methods of Analysis of the AOAC, methods 966.23 and 966.24. The diluent shall be added to each sample of dry product and allowed to stand for 15 minutes before the blending of that sample. Continue as directed. Salmonella testing shall be in accordance with the Official Methods of Analysis of AOAC, method 967.26. Any result not conforming to the requirements specified in Section C of this Performance-based Contract Requirements document shall be cause for rejection of the lot.

SECTION J REFERENCE DOCUMENTS

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC)

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ANSI/ASQCZ1.4-1993 Sampling Procedures and Tables for Inspection by Attributes

AOAC INTERNATIONAL Official Methods of Analysis of the AOAC International

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For DSCP Website Posting

RDNS-CFF

28 August 2009

TO: DSCP-FTRE

SUBJECT: Follow up to ES09-145 (DSCP-SS-09-46387); Request for specification change to allow more than one data point over 75,000/g Aerobic Plate Count (APC) none of which exceed 150,000/g in Scrambled Eggs with Cheese, Western style, Type III only; PCR-E-001 Eggs, Scrambled, Cooked, Dehydrated; for MCW/LRP;

1. Natick recommends a one time waiver for high APC results on these two lots 9189 and 9191 only of Scrambled Eggs with Cheese, Western Style Type III. No data point exceeded the 150,000 per gram APC requirement as stated in the PCR and USDA findings indicated that no pathogens were present in these lots.

2. Natick recommends a specification change to PCR-E-001. While reviewing the information on the Scrambled Eggs with Cheese, Western Style we identified an error in the document. Natick agrees with Oregon Freeze Dry that the product was made with powdered cheese in the past and the cheese requirement was incorrectly transferred from the MIL SPEC to the PCR and was not caught during the coordination of this document.

3. Natick submits the following changes to the subject document for all current, pending and future contracts until the document is formally amended or revised:

- a. page 1, Section C-2, C. (1) d. Type III, make the following changes:
 - (1) Line 2, delete "cheese,"
 - (2) Line 3-4, delete sentence 3 entirely, "The cheese pieces. . . to orange color."
- b. page 2, Section C-2, C. (1) Texture, renumber to (3)
- c. page 2, Section C-2, C. (3) d. Type III, delete "cheese,"
- d. pages 6-7, Section E-6, B, Table I, make the following changes:
 - (1) Minor defect 204, delete entirely
 - (2) Major defect 110, delete "cheese pieces,"

4. Natick non-concurs with the request to make a specification change to allow for more than one data point over 75,000/g for APC, none of which to exceed 150,000/g. The aerobic plate count (APC) gives us an indication of the level of bacteria in the food product (the eggs, cheese, ham dices, green and red peppers and onion pieces) and we would not want to alter the current requirement. APC can be used also to evaluate the sanitary conditions of the food product or equipment.

5. The Service reps were contacted and their replies were:

Army - concurs with Natick
Marine Corps - concurs with Natick

6. Attached is the subject document with Change 04, dated 28 Aug 09.