SECTION C

This document covers hand and body wipes, pre-moistened packaged for use by the Department of Defense as a component of operational rations.

C-1 ITEM DESCRIPTION

PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR CID A-A-461D HAND AND BODY WIPES, PRE-MOISTENED

Type, style, and packaging.

Type I - Hand wipe Style 2 - Non-antibacterial Packaging A - Individually wrapped, single pack

C-2 PERFORMANCE REQUIREMENTS

A. <u>Product standard</u>. A sample shall be subjected to first article (FA) or product demonstration model (PDM) inspection as applicable, in accordance with the tests and inspections of Section E of the Packaging Requirements and Quality Assurance Provisions document. The approved sample shall serve as the product standard. Should the contractor at any time plan to or actually produce the product using different raw material or process methodologies from the approved product standard, which result in a product noncomparable to the product standard, the contractor shall submit a replacement FA or PDM for approval. In any event, all product produced must meet all requirements of this document including product standard comparability.

B. <u>Overall appearance</u>. The finished product shall be equal to or better than the approved product standard in overall appearance.

SECTION D

D-1 PACKAGING

A. <u>Packaging</u>. The saturated and folded wipe shall be packaged into a packet. The packet shall be made from a heat sealable barrier material, one layer of which is a minimum of 0.000285 inch thick aluminum foil. The exterior color of the packet shall be white, dull yellow, or light brown. All four edges of the packet shall be heat sealed with seals not less than 1/8 inch wide. The filled and sealed packet shall have maximum outside dimensions of not more than 3-7/8 inches long by 2-1/8 inches wide. The filled and sealed packet shall tear easily across the width of the packet. A tear nick, notch, or serrations may be provided to

facilitate opening of the filled and sealed packet. The sealed packet shall not leak when tested in accordance with E-6,B(1). There shall be no crushed, misshapen, or unclean packets.

D-2 LABELING

A. <u>Packet</u>. Each packet shall be correctly and legibly labeled. Printing ink shall be permanent black ink or other dark contrasting color which is free of carcinogenic elements. The label shall contain the following information:

- (1) Name of product (letters not less than 1/8 inch high)
- (2) Contractor's name and address

NOTE: Commercial graphics (colors, design, and labeling) shall be submitted to the Contracting Officer for review and approval and to Combat Capabilities Development Command (DEVCOM) Soldier Center (FCDD-SCD-SCR) for review.

D-3 PACKING

A. <u>Packing</u>. Not more than 40 pounds of product shall be packed in a fiberboard shipping box constructed in accordance with style RSC-L of ASTM D5118/D5118M, Standard Practice for Fabrication of Fiberboard Shipping Boxes. The fiberboard shall conform to type CF, class D, variety SW, minimum burst grade 200 or ECT 32 of ASTM D4727/D4727M, Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes. Each box shall be closed in accordance with ASTM D1974/D1974M, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes.

D-5 MARKING

A. <u>Shipping containers</u>. Shipping containers shall be marked in accordance with DLA Troop Support Form 3556, Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence.

SECTION E INSPECTION AND ACCEPTANCE

The following quality assurance criteria, utilizing ANSI/ASQ Z1.4, Sampling Procedures and Tables for Inspection by Attributes, are required. Unless otherwise specified, single sampling plans indicated in ANSI/ASQ Z1.4 will be utilized. When required, the manufacturer shall provide the Certificate(s) of Conformance to the appropriate inspection activity. Certificate(s) of Conformance not provided shall be cause for rejection of the lot.

A. Definitions.

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

B. <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:

(1) <u>Product standard inspection</u>. The first article or product demonstration model shall be inspected in accordance with the provisions of this document and evaluated for overall appearance. Any failure to conform to the performance requirements or any appearance failure shall be cause for rejection of the lot.

(2) <u>Conformance inspection</u>. Conformance inspection shall include the examinations/tests and methods of inspection cited in this section.

E-5 QUALITY ASSURANCE PROVISIONS (PRODUCT)

A. <u>Product examination</u>. The finished product shall be examined for compliance with the performance requirements specified in A-A-461D and Section C of this Packaging Requirements and Quality Assurance Provisions document utilizing the double sampling plans indicated in ANSI/ASQ Z1.4. The lot size shall be expressed in packets. The sample unit shall be the contents of one packet. 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.

Category		Defect
<u>Major</u> 101	<u>Minor</u>	Product not type or not style or not packaging as specified.
102		Type I, style 2 hand wipe does not contain a surfactant to loosen soil.
	201	Type I hand wipe not white or not non-woven fabric or does not have a basis weight of 35 grams/square meter (1.0 ounces/square yard) ± 10 percent.
	202	Type I open hand wipe less than 20.32 centimeter (cm) [8.0 inch (in)] by 20.32 cm (8.0 in) or equivalent overall surface area.
	203	Extracted solution pH not 5.0 to 9.0 units.
	204	Solution specific gravity not 0.970 to 0.995.
	205	Type I hand wipe does not have a minimum of 4.5 grams solution per wipe.
	206	The wipe leaves visible or sticky residue of nonvolatile matter on hand.
103		Wipe shreds or pills or causes irritation to skin.
104		Wipe does not completely remove test soil from palm of hand. $\underline{3}/$

TABLE I. Product defects 1/2/

 $\underline{1}$ / Presence of any foreign materials such as, but not limited to dirt, insect parts, hair, glass, wood, or metal, or any foreign odors such as, strong chemical, musty or moldy shall be cause for rejection of the lot.

 $\underline{2}$ / Finished product not equal to or better than the approved product standard shall be cause for rejection of the lot.

 $\underline{3}$ / Excluding the soil in the creases of the skin on the palm of hand.

E-6 QUALITY ASSURANCE PROVISIONS (PACKAGING AND PACKING MATERIALS)

A. <u>Packaging and labeling</u>.

(1) <u>Packet material certification</u>. Conformance to packet material, shall be verified by a Certificate of Conformance (CoC).

(2) <u>Filled and sealed packet examination</u>. The filled and sealed packets shall be examined for the defects listed in table II. The sample size shall be expressed in packets. The sample unit shall be one packet. The inspection level shall be I and the AQL, expressed in terms of defects per hundred units, shall be 0.65 for major defects and 2.5 for minor defects.

TABLE II. Filled and sealed packet defects 1/			
Category		Defect	
<u>Major</u>	Minor		
101		Tear or hole or open seal.	
102		Seal width less than $1/16$ inch. $2/$	
103		Seal separation. <u>2</u> /	
104		Packet not heat sealed on all four edges or not with minimum 1/8 inch wide seals.	
105		Packet is crushed or misshapen or is unclean. $3/$	
106		Leakage. <u>4</u> /	
107		Packet has foreign odor.	
	201	Packet exceeds maximum dimensions.	
	202	Label missing or incorrect or illegible.	
	203	Does not tear easily across the width of the packet.	

1/ Any evidence of rodent or insect infestation shall be cause for rejection of the lot.

2/Effective seals are defined as any uncontaminated, fusion bonded, continuous path, minimum 1/16 inch wide, that produces a hermetically sealed packet.

 $\underline{3}$ / Outer packaging shall be free from foreign matter which is unwholesome, has the potential to cause packet damage (for example, glass, metal filings) or generally detracts from the clean appearance of the packet. The following examples shall not be classified as defects for unclean:

a. Foreign matter which presents no health hazard or potential packet damage and which can be readily removed by gently shaking the packet or by gently brushing the packet with a clean dry cloth.

b. Dried product that affects less than 1/8 of the total surface area of one packet face (localized and aggregate).

<u>4</u>/ Examine packet after removal from leakage test apparatus.

B. Methods of inspection.

(1) Leakage test. The filled and sealed packets shall be tested as required in a or b.

a. <u>Wet method</u>. The filled and sealed packets shall be examined by submerging them in water that is contained in a desiccator or other suitable container and maintaining a vacuum of 15 inches of mercury (atmospheric pressure is 29.9 inches of mercury) for at least 30 seconds. A leak is indicated by a steady progression of bubbles. Isolated bubbles caused by entrapped air are not considered a sign of leakage. Testing may be performed using other similar apparatus (i.e.: dunk tank , bubble leak tester) and may reference ASTM D3078 for preparation, execution of testing and reporting.

b. <u>Dry method</u>. The filled and sealed packets shall be tested by placing them in a dry desiccator, or similar apparatus, and subjecting them to a vacuum of 20 inches of mercury (atmospheric pressure is 29.9 inches of mercury) for at least 30 seconds. Any packet that does not swell to form a tightly distended packet having at least one distorted edge during the test shall be recorded as a leaker. After vacuum testing, the packets shall be visually inspected for evidence of delamination and for seal separation. Any leakage, any delamination, or any seal separation of more than 1/16 inch from the product edge of any seal shall be recorded as a defect.

C. Packing.

(1) <u>Shipping container and marking examination</u>. The filled and sealed shipping containers shall be examined for the defects listed in table III. The lot size shall be expressed in shipping containers. The sample unit shall be one shipping container fully packed. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 4.0 for major defects and 10.0 for total defects.

Category		Defect
Major	Minor	
101	<u>10111101</u>	Marking missing or incorrect or illegible.
102		Inadequate workmanship. <u>1</u> /
	201	More than 40 pounds of product.

TABLE III. Shipping container and marking defects

1/Inadequate workmanship is defined as, but not limited to, incomplete closure of container flaps, loose strapping, inadequate stapling, improper taping, or bulged or distorted container.

SECTION J REFERENCE DOCUMENTS

Unless otherwise specified, the applicable version of these documents is that which is active on the date of the solicitation or contract.

DLA Troop Support Form

Form 3556	Marking Instructions for Boxes, Sacks, and Unit
	Loads of Perishable and Semiperishable Subsistence

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY (ASQ) <u>www.asq.org</u>

ANSI/ASQ Z1.4	Sampling Procedures and Tables for Inspection by
	Attributes

ASTM INTERNATIONAL <u>www.astm.org</u>

D1974/D1974M	Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes
D3078	Standard Test Method for Determination of Leaks in Flexible Packaging by Bubble Emission
D4727/D4727M	Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes

D5118/D5118M

Standard Practice for Fabrication of Fiberboard Shipping Boxes