

APP K
DLA Troop SupportH-4155.2

DLA Troop Support -FTSA

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FOREWORD

(Supplementation is permitted.)

Appendix K is for the inspection of Unitized Group Ration Express(UGR- E) modules. It provides guidelines for sampling, inspecting, classifying defects, and determining lot serviceability. Prior to using this Appendix, inspectors should be thoroughly familiar with DLA Troop Support Handbook 4155.2, Inspection of Composite Operational Rations.

Users of this publication are encouraged to submit comments and recommended changes to improve this publication, through channels, to DLA Troop Support, ATTN: DLA Troop Support -FTSA.

BY ORDER OF THE COMMANDER



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DISTRIBUTION

Special

DLA Troop Support -FTR, FTRB, FTRE, FTRA,FTW

This DLA Troop Support Handbook 4155.2, supersedes DSCP Handbook 4155.2 App-K dated JAN 2008.

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SECTION I - GENERAL

A. Purpose and Scope. This Appendix is a reference and guide for receipt and surveillance inspections of government-owned unitized modules. It was written and coordinated to facilitate use on both DLA/ DLA Troop Support controlled stocks and those controlled by the individual Services

B. Explanation of Inspection Concept. This Appendix incorporates the concept of condition coding a lot based on the serviceability of the various components contained within the different modules and their estimated remaining shelf life. Basically, it involves a two step process: (1) Determine if any component(s) meet or exceed an action number and if so, (2) Classify module(s) containing the defective component(s) using the criteria contained in Table N.

C. Receipt Inspection Guidance. Modules being received should be accompanied by inspection paperwork from the previous storage/assembly location, or can be retrieved from the appropriate Lotus Notes database. If this is not the case, to avoid duplication of effort, call the last responsible unit from which the shipment came for inspection status. If no current inspection information can be found or Condition Code status cannot be determined, a full inspection in accordance with (IAW) this document will be performed. In addition, inspectors shall advise DLA Troop Support when products fail to comply with essential receipt criteria identified in the appropriate monographs. Notification should be by the most expeditious means when there is a possibility that warranty action may be initiated. Inspectors will be provided additional guidance concerning warranty inspection/actions if required. (Note: the same inspection database will serve for UGR-E, UGR-B, and UGR-H &S.)

D. Inspection Test Date (ITD) Extensions. The expected shelf-life is 18 months at NMT 80F. Inspectors may extend an ITD based on their estimate of the lot's remaining shelf life. Table N is provided to aid the inspectors in arriving at the best estimate possible without the benefit of laboratory testing. Remarketing of the unitized loads/cases with a revised ITD will be accomplished in accordance with DLAM 4155.37, Appendix S, and/or the appropriate service regulation. Posting of extensions may be accomplished by placing stickers with the updated ITD information on each pallet or module.

E. Inspection Frequencies. Inspections of UGR -E ration modules will be accomplished as follows:

1. At receipt:
 - i. If previous inspection/condition code information accompanies shipment and is less than 3 months old, a general inspection for transportation damage and identity will be performed.
 - ii. If UGR -E's possess obvious defects, mechanical damage or UGR -E's are more than three months from the last surveillance inspection, perform a full inspection IAW this document.
2. Surveillance:
 - ii. Surveillance inspections, to include DOPI are authorized for modules that are

one year old or greater. After ITD has passed, modules will be inspected at 3-month intervals for condition code A stocks if stored at 80F or below. If storage temperatures regularly exceed 80F, inspection frequency may be increased to monthly, but inspectors should always make the strongest recommendation to consume UGR -E rations prior to, or before the ITD date.

- iii. DOPI inspections of UGR-E modules that are less than 1 year old may be performed at the request of the contracting officer, or the accountable officer, or as directed by the inspector's chain-of-command.

F. Disposition Recommendations

1. The accountable officer/agency will be informed of inspection results by the Veterinary/Medical Food Inspector. Inspectors will include (as a minimum): the condition code as determined by this Appendix, estimated remaining shelf life, and a summary of general lot characteristics. Inspectors are also encouraged to provide additional comments that will assist the accountable officer/agency in determining a final disposition.

2. Final disposition instructions for lots placed on medical hold require review and approval by the local medical authority.

3. The points listed below should be considered when developing a disposition recommendation. This list is not all-inclusive and each point may not always apply.

- a. Can the defective module(s)/component(s) be removed just prior to consumption?
- b. How rapidly is the most defective component expected to deteriorate to the point that it is unlikely to be consumed?
- c. Can the lot be issued and supplemented with similar commercial items, supply catalog items, or operational ration component(s)?
- d. Are the module(s)/component(s) suitable for its intended purpose?

G. Inspection Equipment. The items listed below are recommended as the minimum necessary to perform the inspections of UGR -E modules. However, this list is not intended to be all encompassing.

1. High intensity lamp.
2. Inspection trays and pans, white enamel or plastic.
3. Magnification lens (3 to 5 power recommended).
4. Metal ruler (32nd inch graduation).
5. Spatula(s).
6. Blotter paper or paper towels.
7. Scissors, general use.
8. Tape.
9. Scissors, general surgical, straight, 5-1/2 inches.
10. Can opener.
11. Kimwipes, 5 x 8-1/2 wipe or towels, paper, type I, small.
12. Paper, white, chart size.
13. Paper, wax impregnated, white roll.
14. Knife.
15. Forceps/petri-dishes/5ml vials

16. Number 2 stylus

H. Definitions:

1. **Monograph.** An information and instruction sheet that provides the inspector with a detailed description of an UGR -E module/component, including normal characteristics and signs of deterioration, as well as special instructions on how to examine the item. Special notes concerning inspection techniques are also included in some monographs. Monographs can be accessed at <http://www.dscp.dla.mil/subs/support/qapubs/appk/index.asp>.

2. **Component Classification.** The monograph index (Table P is available at <http://www.dscp.dla.mil/subs/support/qapubs/appb/index.asp>) indicates the classification for each component. Component classification is determined by coordination of the Surgeon General and the Food Service Headquarters of the Military Services.

a. **Primary.** Any individual component in the UGR -E module that, if unserviceable, will make the meal nutritionally inadequate.

b. **Secondary.** Any individual component in the UGR -E module that, if unserviceable, will reduce the nutritional value of the meal but will not render the meal unfit.

c. **Ancillary.** Any component in the UGR -E module that contributes little or no nutritional value to the meal and if unserviceable, will not cause the meal to be nutritionally deficient.

3. **Major A Defect.** This classification should be used for defects that are likely to cause hazardous or unsafe conditions for individuals using, maintaining or dependent upon the product.

4. **Major B Defect.** These are defects that are not hazardous or unsafe. However, they may restrict product use or make its consumption unlikely under the conditions for which the rations were originally designed. Examples: Extreme color (darkening), odor (rancidity), or flavor (bitterness) changes in primary components of a ration that make them unlikely to be consumed under normal field conditions, but will not result in illness or injury.

5. **Minor Defect.** These are defects that make the product less useful than it should be, but not seriously so. Minor defects usually do not affect serviceability. However, their identification is important since they often reveal early signs of deterioration and can be detected before the item reaches a condition that makes its consumption unlikely under conditions of normal use. Their early detection may lead to a predictive intervention by the accountable officer to ensure consumption before the component or module loses its serviceability.

6. **Module.** The unit of issue for UGR -E menus. A module consists of 1 box and will contain everything needed to feed 18 individuals for one complete meal. Currently, there are six lunch/dinner menus, two Breakfast menus and one holiday menu. The UGR-E consists of one box. Within the box are a heating module, polymeric trays, beverages, food components, serving

utensils, disposable meal trays, and other components.

7. Product Codes.

a. Assembly code information: Contract and component identification markings found on the shipping container, modules, and components that reflect riation assembly

information only (e.g., assembly contractor, date of pack, assembly lot numbers, Inspection Test Date (ITD) etc.).

b. Component code information: Item identification markings found on the primary package and, when applicable, the secondary package (e.g., thermostabilized trays) that reflects the producer's name, the USDA Establishment Number, the production lot number of the component, the nomenclature, etc.

8. Action Number (AN). A number which, when reached or exceeded, indicates additional inspection is necessary or indicates a component has deteriorated beyond acceptable limits.

9. Condition Coding. Traditionally, condition codes have been based primarily on estimates of remaining shelf life. Serviceability will be determined based on the usability status of the complete module. However, to aid accountable officers in choosing the best disposition option, inspectors will provide them the best possible estimate of remaining shelf life. A list of applicable condition codes and their descriptions are as follows:

a. Condition Code A (issuable without qualification): Refer to Table N.

b. Condition Code B (issuable with qualification): Refer to Table N. Accountable Officers are required to determine what qualifications will be specified in order to issue Condition Code B stock (e.g., issue with instructions to consume within 60 days; issue with instructions to supplement, etc.).

c. Condition Code C (issuable with qualification): Refer to Table N. Accountable officers are required to determine what qualifications will be specified in order to issue Condition Code C stock. (e.g., issue with instructions to consume within 30 days; etc.).

d. Condition Code H (unserviceable - destroy in accordance with local policy). Refer to Table N. This classification will be used only when the **entire lot** has been deemed unserviceable.

e. Condition Code J (laboratory testing, medical hold, rework, or reclassification hold): Any item on hold pending laboratory analysis, rework, or awaiting authority for disposal.

f. Condition Code L (warranty action hold): Any item placed on hold pending warranty action.

10. Unit load packing list. A list attached to a unit load of modules that lists the components (including contractual identification information) contained in the module.

11. Self-Heating Tray Assembly. The unique feature of the UGR-E is that when properly assembled it will heat without the need for any Field Kitchen equipment. For further information on this feature, refer to MIL-DTL 32235 on the DLA Troop Support website. It is expected that further development of this feature will result in a change to the Self-Heating Tray Assembly.

SECTION II - INSPECTION GUIDANCE

A. STEP 1: Evaluation of Storage Conditions

1. Storage conditions vary significantly. As a minimum UGR -E module storage areas should be clean and dry. UGR -E modules should not be stored directly on the floor. The area should be free of pests.

2. When UGR -E modules are warehoused, the storage facility should meet the additional standards of MIL-STD-3006C, Sanitation Requirements for Food Establishments. UGR -E modules cannot be stacked more than 2 pallets high without the use of storage aids, pallet racks/pallet sets, etc. These pallet racks/pallet sets should support the full weight of any additional pallets. The pallet (s) above shall not be in contact with or supported by the pallets beneath. Temperature history of storage locations must also be considered when recommending final condition codes and dispositions.

3. All modules opened for inspection, or damaged, shall be recouped or repaired in a manner sufficient to ensure protection of the product during subsequent storage and handling.

B. STEP 2: Determine Lot Size.

1. The lot size for modules shall be the total number of modules by menu. The sample unit is one complete module. Unlike the other UGR's, a complete module is 1 box.

2. Lotting procedures will be as follows:

a. An assembler's lot will be composed of rations from the same assembler that have the same Date Of Pack (DOP) and menu number.

b. Grand lots for the purpose of UGR -E inspections will be composed of rations from the same assembler, and the same menu number, but will contain more than one lot number. Grand lots will be limited to a 120 day DOP window (earliest to latest lot number (Julian date) shall not exceed 120 days). Additionally, the rations must have been stored under substantially similar storage conditions. Samples from grand lots must represent all individual lots proportionally, even if the next highest sample size must be used. Identity of samples from each subplot must be maintained throughout the inspection.

3. Defective assembler's lots will be segregated from grand lots and inspected

individually when one or more of the following occurs:

- a. A Major A defect is found in an assembler's lot.
 - b. The Major B or Minor defects found seem to be concentrated in one or more (a small subset of lots) of the assembler's lots comprising the grand lot.
 - c. The inspector determines for any reason, based on initial inspection results, that inspection of an individual assembler's lot is justified.
4. Grand lotting is encouraged (to conserve resources) whenever it is considered appropriate by the inspection activity. Grand lotting will not be used when performing warranty inspections or on inspections of lots reported as possibly having wholesomeness deficiencies.

C. STEP 3: Inspect Modules

1. IAW Table A, select appropriate sample size of Module examinations. Obviously damaged Modules should not be selected as samples unless they are truly representative of the lot. Damaged Modules shall be set aside, inspected and salvaged.
2. Routine inspections will be conducted using a single sampling plan.
3. Using the defects listed in Table E, the inspectors shall check each sample Module for previously opened boxes. While this may indicate evidence of tampering, each may also be due to other reasons (e.g., a wholesale rework of a lot). Inspectors shall contact their supervisors for guidance if pilferage or tampering is suspected. Also, observe each Module for signs of rodent damage or insect infestation. Post the infestation findings on the inspection report, to include:
 - a. Whether or not the pests were alive or dead.
 - b. Identification of the pests (based on entomological or laboratory identification).
 - c. Probable origin of pests (see DLA Troop Support Handbook 4155.2, paragraph XIII.).
 - d. Probable movement of pests. For example, from outside the shipping container into the modules or vice-versa.
4. Classify each defective case by the most serious defect it possesses.

NOTE: Marking Requirements for Shipping containers and unit loads. Marking of shipping containers and unit loads shall be as specified in DLA Troop Support FORM 3556, Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence. Item name, in letters not less than 1 inch, shall be as follows:

UGR – Express L/D (Lunch/Dinner) MENU NUMBER No. __
or
UGR – Express B (Breakfast) MENU NUMBER No. __

or

UGR – Express Holiday Menu

The shipping container shall be also be marked with special marking:

FOR OUTDOOR USE ONLY

DO NOT ROUGH HANDLE WHEN FROZEN (0°F or below)"

D. STEP 4: Perform Closed Package Inspection (CPI) of Module Contents

1. IAW Table A, select the appropriate number of modules being sure the samples are proportionally representative of the modules in the lot.
2. Open the sample modules.
3. Module components will be inspected for defects in accordance with Tables F-K.
4. Thoroughly examine all components within the module under a good light source and, if available, with the aid of a magnification lens. When a component exhibits more than one defect, it will be classified by the most serious defect it possesses. Record the following information for all defective components:
 - a. Menu number.
 - b. Assembler's lot number.
 - c. Component nomenclature and code.
 - d. Processor's and/or plant name (if available).
 - e. Defect number.
 - f. Specific defect code (if applicable).
 - g. Narrative description of defect (if necessary).
 - h. Tally defects (Major A, Major B, Minor) according to type of component.

E. STEP 5: Perform Destructive Open Package Inspection (DOPI) of Module Contents (Not performed on receipt inspections, except as authorized (see Table L).

1. IAW Table A, select the appropriate number of modules being sure the samples are proportionally representative of the modules in the lot.
2. Open the sample module(s).
3. Module components will be inspected for defects in accordance with Table L.
4. Thoroughly examine all items within the module under a good light source and, if available, with the aid of a magnification lens. When a component exhibits more than one defect, it will be classified by the most serious defect it possesses. However, for the purpose of gathering additional information, the lesser defects will also be noted. Record the following information for all defective components:

- a. Menu number.
 - b. Assembler's lot number.
 - c. Component nomenclature and code.
 - d. Processor's and/or plant name (if available).
 - e. Defect number (Table L).
 - f. Specific defect code (if applicable).
 - g. Narrative description of defect (if necessary).
 - h. Tally defects (Major A, Major B, Minor) according to type of component.
5. Component packages with a Major A or Major B packaging defect should be opened to evaluate the effect the defect has on the product. Any findings should be recorded as a note on the inspection record.
6. Inspectors should refer to the component monographs for information relative to the product's normal characteristics, the most likely deteriorative conditions to be observed and any unique inspection information and special notes concerning the item. Monographs can be accessed at <http://www.dscp.dla.mil/subs/proserv/qapubs/app-b.htm>
7. Each component of the sample modules (including all accessory items) will be opened and inspected. If no Major A or Major B defects are noted and the action number for minor defects is not reached or exceeded during normal open package inspection, this phase of the inspection should be considered complete.
8. Classify each defective sample by the most serious defect it possesses.

F. STEP 6: Determine if Special Inspection is Required. Special inspection is required when any action number is reached/exceeded. If a special inspection is deemed necessary, go to Section III for procedures.

G.STEP 7: Determine Disposition.

1. The Condition Code of a lot may only be downgraded based on special inspection results.
2. If deemed necessary, samples may be submitted to the appropriate supporting laboratory. The lot will then be placed in Condition Code J pending results of the tests.

H. STEP 8: Provide Results and Recommendations to Accountable Officer/Agency.

1. Input data to the appropriate Lotus Notes (LN) database, and provide a copy of inspection report to accountable officer.
2. If LN access is not available, complete DLA Troop Support Form 5117, and provide

copy of report to accountable officer.

SECTION III - SPECIAL INSPECTION GUIDANCE

Background Information: When a special inspection is performed, the inspector may choose to inspect all of the components in a module during the special inspection if he/she deems it necessary to ascertain the true condition of the lot. Otherwise, only the component(s) that exhibited the defects that initiated the special inspection will be inspected. All defective samples will be classified by the most serious defect they possess.

A. STEP 1: Determine Lot Size.

1. Lot size is expressed as the total number of individual suspected defective components as determined during routine inspection (reached/exceeded Action Number). Each defective component will be inspected as a separate lot. To determine component lot size, you must determine which modules contain the defective component(s) utilizing the inspection results. These modules will be the only modules selected for the special inspection.

B. STEP 2: Determine Sample Size for Each Component and Select Sample Modules.

1. Sample size will be determined in accordance with Table B for Module inspections and for module component inspections.
2. Inspect IAW applicable defect tables (Tables E - L).
 - a. For special inspections, good sample representation of the lot is extremely important to help preclude unnecessary destruction. If routine inspection defects tend to be associated with a certain lot or lots, these shall be inspected separately.
 - b. The sample size for each component involved will normally dictate the minimum number of modules that must be selected for special inspections. The inspector may increase the number of modules from which samples are drawn for cogent reasons.

C. STEP 3: Determine Disposition of the Lot.

1. If none of the ANs are reached or exceeded, each module is considered to be fully useable and the Condition Code of the lot may remain unchanged.
2. For each AN equaled or exceeded, determine the Condition Code of the lot. Refer to Table N.

D. STEP 4: Provide Results and Recommendations to Accountable Officer/Agency.

1. Input data to the appropriate Lotus Notes UGR -E database and provide a copy of

inspection report to accountable officer.

2. If LN access is not available, complete DLA Troop Support Form 5117, and provide copy of report to accountable officer.

3. If, DLA owned rations are placed in *less than condition code A* and not entered into the LN database, notify DLA Troop Support -FTA telephonically @ (215) 737-7770/2911 (DSN444).

SECTION IV - INSPECTION RECORDS AND REPORTING

A. Inspection Form. All inspections (except turn-ins) will be entered into the Veterinary Command Lotus Notes Heat & Serve inspection database. DLA Troop Support Form 5117 will be completed if inspectors do not have access to this database. Local reproduction of DLA Troop Support Form 5117 is authorized.

B. Distribution.

1. For DLA owned/controlled stocks, provide one copy of the LN UGR -E database inspection report to the accountable officer. Copies of all reports not on the LN database will be maintained in the local quality history files. Other distribution will be according to the directives of the responsible inspection agency and/or Military Service.

2. Service Controlled Stock. One copy of each completed inspection report will be provided to the accountable officer and the inspection agency's MACOM. Further distribution will be according to the directives of the responsible military service. Copies of packing lists will be forwarded only when requested. The addresses below are provided to assist in report distribution:

Air Force: HSQ AFVSA/SVOHF
10100 Reunion Place
Suite 401
San Antonio, TX 78216-4138

Navy: Naval Supply Systems Command
5450 Carlisle Pike
PO Box 2050
Mechanicsburg, PA 17055-0791

Army CONUS: Commander
U.S. Army Veterinary Command
ATTN: MCVS-F
2050 Worth Road
Suite 5
Ft. Sam Houston, Texas 78234-6005

AND

Commander
DLA Troop Support
ATTN: DLA Troop Support -HR
Building 6
700 Robbins Avenue
Philadelphia, PA 19111-5092

Army Europe: Commander
100th Medical Detachment (VS-HSQ)
Attn: Food Safety Officer
CMR 442

AND

Commander
Defense Subsistence Region Europe
ATTN: HDSRE-Q
APO AE 09052-4131

APO AE 09042

Army Korea: Commander
 106th Medical Detachment (VS)
 ATTN: EAMC-VS
 APO San Francisco 96301-0025

Army Japan: Commander
 US Army Japan – IX Corps
 ATTN: AJHZ-VHSQ
 APO San Francisco 96343

Marine Corps: HEADQUARTERS, USMC
 ATTN: LFS-4
 Washington, D.C. 20380-1775

V. SAMPLE AND DEFECT TABLES.

Table A. Sampling Criteria for <u>Normal Inspection</u> of Modules and Module Contents NOTE: 1 Box = 1 Module for the UGR-E				
<u>LOT SIZE</u> (Modules)	<u>SAMPLE SIZE</u> (Modules)	<u>ACTION NUMBERS</u>		
		<u>MAJ A</u>	<u>MAJ B</u>	<u>MINOR</u>
50 or less	2	1	1	2
51-----500	3	1	1	2
501----35,000	5	1	1	3
35,000 or more	8	1	1	4

For use with Table E-L

Table B. Sampling Criteria for <u>Special Inspection</u> of Module Components				
<u>LOT SIZE</u> (Components)	<u>SAMPLE SIZE</u> (Components)	<u>ACTION NUMBERS</u>		
		<u>MAJ A</u>	<u>MAJ B</u>	<u>MINOR</u>
150 or less	5	1	1	3
151-----1,200	20	1	2	8
1,201----10,000	32	1	3	11
10,001 or more	50	1	4	15

For use with Table E-L

Table E. Defects for Module Boxes			
DEFECT	CLASSIFICATION(S)		
	MAJ A	MAJ B	MINOR
Evidence of rodent or insect infestation on or in the shipping container.		501	
Container damaged, contents exposed or affected.		502	
Container damaged, contents not exposed or affected.			601
Essential markings			
a. Missing		503	
b. Illegible/Incorrect			602

Table F. Defects for Polymeric Trays			
DEFECT	CLASSIFICATION (S)		
	MAJ A	MAJ B	MINOR
Swollen Container	415		
Tear, crack, cut, hole, or if a multi-layered laminate is used, abrasion through more than one layer of the tray or through the barrier (e.g. foil) layer of the lid material or leakage through any seal or surface	416		
Abrasion on the lid material within 1/16 inch of the food product edge	417		

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of seal		
Closure seal not continuous along tray flange, surface	418	
Closure seal width less than 1/8 inch	419	
Foldover wrinkle extending into the seal such that the closure seal is reduced to less than 1/8 inch	420	
Presence of entrapped matter within 1/16" of the food product edge of seal or entrapped moisture or vapor within 1/16" of the food product edge of seal that results in less than 1/16" of defect free seal width at the outside edge/2	421	
Presence of delamination when a multi-layered laminate is used /3	422	
Unclean container		524
Any impression or design on the seal surfaces which conceals or impairs visual detection of seal defects		525
Presence of delamination when a multi-layered laminate is used /3		526

Table F. Defects for Polymeric Trays (cont)

DEFECT	CLASSIFICATION (S)		
	MAJ A	MAJ B	MINOR
Presence of delamination when a multi-layered laminate is used /3			622
Color does not contribute to Woodland camouflage			623
Presence of any permanent tray body deformation, such that deformed area is discolored and roughened in texture			624
Presence of any seal defect or anomaly (ie: entrapped moisture, gases, etc.) within 1/16” of food product edge seal /2			625

Table G. Defects for Metal Containers Other Than Trays

DEFECT	CLASSIFICATION(S)		
	MAJ A	MAJ B	MINOR
Closure incomplete, incorrect or not sealed, crimped or fitted properly		509	
Corrosion Defects			
a. Rust stain			609
b. Pitted rust		510	
Dents			
a. Materially affecting appearance but not affecting usability			610
b. Materially affecting usability		511	
Buckled Containers			
a. Not involving end seam			611
b. Extending into the end seam		512	
Collapsed container		513	
Swell, springer, or flipper (not applicable to	407		

gas or pressure packed product)	
Leaker or blown container	408

Table H. Defects for Plastic/Glass Containers

DEFECT	CLASSIFICATION (S)		
	MAJ A	MAJ B	MINOR
Closure not sealed, crimped, or fitted properly		514	
Chip in glass			612

Table I. Defects for Flexible Pouches

DEFECT	CLASSIFICATION (S)		
	MAJ A	MAJ B	MINOR
Broken or leaking container	409		
Tear, hole, or open seal	410		
Swollen pouch	411		
Rupture of pouch when kneaded IAW the package instructions 1/		515	
Not clean			613
Pouch exhibits delamination and ruptures when tested		516	
Objectionable odor		517	
Footnotes:			

1/ Pouches exhibiting delamination in the body of the pouch will be examined for rupturing as follows: lay the pouch on a flat surface and apply moderate downward pressure with hands on both sides of the delaminated area. Pouches exhibiting delamination in the seal area will be examined as follows:

a. Test for spreading of the delamination by holding the pouch between the thumb and forefinger of each hand with the delaminated area located at the contact point between the thumbs and forefingers. Flex the delaminated area rapidly while exercising care not to tear the pouch with your fingernails.

b. Test for rupturing by laying the pouch on a flat surface and applying moderate downward pressure with one hand on the product side of the delaminated area.

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2/ The following shall be scored as minor defects if present within 1/16 inch of the food product edge of seal:

- a. Small concave impressions or cavities indicating slight tray imperfections or hard particulates affixed to the seal head and contact the lid and tray.
- b. Small (i.e. 1/32 inch or less in any direction) convex bumps or points on the seal area indicating small imperfections on the seal head. **NOTE:** this anomaly is typically visible on successive trays coming off the heat sealer.
- c. Minor impressions or scorching of the top layer of the lid material on the seal area indicating soft particulates on the seal head being “burned-off” during sealing. **NOTE:** This anomaly is typically visible on successive trays coming off the heat sealer.
- d. Areas of “wave-like” striations or wrinkles along the seal area indicating slight tray imperfection, improper lid tensioning, or vacuum release prior to lid cooling/setting.
- e. Anomalies caused by entrapped moisture or vapor (which typically appear as concave spots on the tray flange surface) that result in less than 1/8” of defect free seal width at the outside edge of these spots.

3/ Delamination Defect classification:

Major A – Evidence of outer ply delamination such that the adjacent ply in the lid body is exposed or evidence of multi ply delamination such that the food contact layer is exposed. Any evidence of outer ply delamination of the tray body or internal layer separation with the tray body due to, (for example) poor adhesion between layers.

Major B – Delamination of the outer ply in the lid seal area that can be propagated to expose the adjacent ply at the food product edge of the lid. The separated outer ply shall be grasped between thumb and forefinger and gently lifted toward the food product edge of the seal or if the separated area is too small to be held between thumb and forefinger, a number two stylus shall be inserted in the delaminated area and a gentle lifting force applied against the outer ply. If separation of the outer ply can be made to extend to the product edge of the seal with no discernible resistance to the gentle lifting, the delamination shall be scored as a Major B defect. Additionally, spot delamination of the outer ply in the body of the lid that can be propagated beyond its initial borders is also a Major B defect. To determine if the delaminated area is a defect, used the following procedure: Mark the outside edges of the delaminated area using a bold permanent marking pen. Open the tray and remove the contents. Cut the lid on opposing sides of the delaminated area not closer than 3/16 inch from the delaminated area. Hold the delaminated area between the thumb and forefinger of each hand with both thumbs and forefingers touching each other. The delaminated area shall than be rapidly flexed 10 times by rotating both hands in alternating clockwise-counter clockwise directions. After flexing, the separated outer ply shall be grasped between thumb and forefinger and gently lifted away from the lid surface or if the separated area is too small to be held between thumb and forefinger, a number two stylus shall be inserted into the delaminated area and a gentle lifting force applied against the outer ply. Any propagation of the delaminated area, evidenced by the delaminated area exceeding the limits of the outlined borders, shall be scored a Major B defect.

Minor – Minor delamination of the outer ply in the lid seal area is acceptable and shall not

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be classified as a minor defect unless it extends to within 1/16 inch of the food product edge of the seal. Isolated spots of delamination in the body of the lid that do not propagate when flexed shall be classified as minor. Post-retort wrinkling of the outer ply in the lid seal area shall also be scored as a minor defect. NOTE: Post-retort wrinkles of the outer play are typically perpendicular to the flange direction, in a straight line, and extend from within the food product area to the outer edges of the lid.

Table J. Defects for Envelopes (Packets)			
DEFECT	CLASSIFICATION(S)		
	MAJ A	MAJ B	MINOR
Tear, hole, or open seal		518	
Objectionable odor		519	
Not clean			614

Table K. Defects for Nonfood Components, including Self-Heating Tray Assembly			
DEFECT	CLASSIFICATION(S)		
	MAJ A	MAJ B	MINOR
Damaged/torn/crushed materially affecting usability		521	
Nonfood Component Missing			
a. Completely		524	
b. Partially/count not as specified			622
Heater trays cracked or broken		525	
Pull Tab not well attached to all four Activator Fluid Bags		526	
Activator fluid bag is leaking		527	
Pouch containing heating pads is not sealed		528	
Pouch containing heating pads has less than 4 pads		529	

Table L. DOPI Defects (For surveillance inspections, or as authorized.)

DEFECT	CLASSIFICATION (S)		
	MAJ A	MAJ B	MINOR
Evidence of rodent damage or insect infestation in product	412		
Product off-condition as evidenced by abnormal odor, color, flavor or texture suggesting contamination and/or premature spoilage for no apparent reason.	413		
Foreign material present, affecting wholesomeness (e.g., glass, metal, etc.)	414		
Component missing			
a. Completely		520	
b. Partially/count not as specified			615
Moderate to extreme texture, odor, color, or flavor change in a component not affecting wholesomeness (product unlikely to be consumed under conditions of intended use).		522	
Component fails to rehydrate or dissolve (extreme)		523	
When assembled and activated, the self-heating procedure fails to raise the temperature of the poly tray contents 85F. Note this a DOPI procedure. It is only authorized for surveillance inspection, or inspection at time of consumption, or when authorized by Contracting Officer, Accountable Officer, or the inspector's Commander.		530	
Slight texture, odor, color, or flavor change in a component not affecting wholesomeness			616
Component fails to rehydrate or dissolve (slight to moderate)			617
Internal container defects			
a. Detinning			618
b. Flaking/scarring of enamel			619
c. Faulty coating (tray)			620
d. Damaged coating (tray)			621

Table M - Specific Defect Codes

A. Insect/ Rodent.

- A1. Rodent, describe
- A2. Insect, describe
- A3. Other, describe

B. Packaging, Packing, Marking, Labeling, and Unitization.

- B1. Essential case markings missing
- B2. Essential case markings illegible
- B3. Essential case markings incorrect
- B4. Essential labeling missing
- B5. Essential labeling illegible
- B6. Essential labeling incorrect
- B7. Pitted rust
- B8. Gray spots, leaks when probed
- B9. Gray spots, external, Base metal weakened
- B10. Grey spots, external, Base metal not weakened
- B11. Rust stains
- B12. Dents
- B13. Flat Tray (Low Vacuum)
- B14. Loose lid (Flipper)
- B15. Paneling-Affects double seam
- B16. Paneling-Not affecting seam
- B17. Incomplete/false seam tray closure
- B18. Hard sweller
- B19. Soft sweller
- B20. Leaker-pinhole
- B21. Leaker-blown/ruptured container
- B22. Leaker-seam area
- B23. Collapsed Container-other than Trays
- B24. Incomplete Closure-other than Trays
- B25. Swell, Springer, Flipper-other than Trays
- B26. Buckled containers-other than Trays
- B27. Chip in Glass

- B28. Broken or leaking Glass/Plastic Container
- B29. Tear, Hole, Leaker-Flexible Pouches/Envelopes/Poly Trays
- B30. Swollen Flexible Pouch
- B31. Pouch Ruptures when Kneaded
- B32. Unclean Pouches/Envelopes/Poly Trays
- B33. Delamination
- B34. Objectionable odor-Flexible Pouches/Envelopes
- B35. Damaged/Missing Food Components
- B36. Damaged/Missing Non-Food Components
- B37. Defects pertaining to the self-heating module assembly
- B38. Shipping Container Damaged, Contents Exposed
- B39. Shipping Container Damaged, Contents Not Exposed
- B40. Abrasion of Lid Material-Poly Trays
- B41. Foldover Wrinkles-Poly Trays

Table M - Specific Defect Codes (cont.)

- B42. Seal Defect or Amanoly-Poly Trays
- B43. Tray Body Deformation-Poly Trays
- B44. Color not contributing to Woodland Camouflage-Poly Trays
- B45. Impression concealing Visual Detection of Seal Defects-Poly Trays
- B46. Other, Describe

C. Texture Changes.

- C1. Too thick or pasty
- C2. Lumpy
- C3. Chewy/gummy
- C4. Mealy
- C5. Tough/stringy
- C6. Caked or hardened
- C7. Brittle
- C8. Crumbly, cracking
- C9. Excessively dry
- C10. Loss of crispness/soft/mushy
- C11. Curdled
- C12. Gritty/grainy
- C13. Spongy/rubbery
- C14. Syneresis (The contraction of a gel, or a homogeneous colloid system, when left standing, separates into two phases, a coherent gel and a liquid. An example is the separation or weeping of liquid from a gelatin mold when left sitting in a refrigerator too long.)

- C15. Liquefaction (passing from dry, solid, or semisolid to a liquid state.)
- C16. Caramelized
- C17. Watery gravy or product juices (probably due to product formulation and/or time temperature abuse)
- C18. Honeycombing
- C19. Other, describe

Table M - Specific Defect Codes (cont.)

D. Odor Changes.

- D1. Medicinal (vitamin-like)
- D2. Chemical odor (solvent-like; turpentine/paint like; etc.)
- D3. Fermented
- D4. Oxidized (hay-like)
- D5. Plastic-like
- D6. Scorched
- D7. Sulfur-like
- D8. Musty, moldy
- D9. Overripe
- D10. Green (i.e., not ripe)
- D11. Stale
- D12. Cardboard
- D13. Metallic
- D14. Soured
- D15. Putrid
- D16. Rancid
- D17. Acidic/vinegary
- D18. Loss of spice or product aroma
- D19. Ammonia
- D20. Other, describe

E. Flavor Changes.

- E1. Loss of flavor (flat, bland, etc.)
- E2. Chemical flavor (solvent -like, plastic-like, etc.) E3. Medicinal (vitamin-like)
- E4. Excessively salty
- E5. Oxidized (hay-like)
- E6. Bitter
- E7. Burnt
- E8. Soapy (hydrolytic rancidity)
- E9. Musty, moldy
- E10. Rancid
- E11. Stale
- E12. Fermented

- E13. Earthy
- E14. Tar, acidic
- E15. Overripe
- E16. Green (not ripe)
- E17. Tobacco
- E18. Sweet (perfume-like)
- E19. Metallic
- E20. Overprocessed/scorched
- E21. Canned
- E22. Putrid
- E23. Sour
- E24. Other, describe

F. Appearance Changes.

- F1. Darkened
- F2. Bloomed, blotchy (e.g., chocolate)
- F3. Oily, oiled-off (Partial disintegration of an oil in water emulsion whereby a film, pockets, or droplets of oil form on the surface of the product or within the product.)
- F4. Off-color (e.g., pink, off-white, reddish, green)
- F5. Foreign Material affecting wholesomeness
- F6. Other, describe

**TABLE N 1/ 2/ 3/ 4/ 5/
CONDITION CODE CRITERIA
DEFECTS FROM SPECIAL INSPECTION RESULTS
(COMPONENTS THAT EQUAL OR EXCEED
AN ACTION NUMBER)**

CONDITION CODE A	CATEGORY		
	MAJOR A	MAJOR B	MINOR
Primary	0	0	1
Secondary	0	1	2
Ancillary	0	1	2
Self-Heating Tray Assembly	N/A	0	N/A
CONDITION CODE B			
Primary	0	0	2
Secondary	0	2	3
Ancillary	0	2	3
Self-Heating Tray Assembly	N/A	1 (see /6)	N/A
CONDITION CODE C			
Primary	0	1	3
Secondary	0	3	4
Ancillary	0	3	4
Self-Heating Tray Assembly	N/A	1	N/A
CONDITION CODE H			

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Primary	1	2	NA
Secondary	1	4	NA
Ancillary	1	4	NA
Self-Heating Tray Assembly	N/A	2 (see /7)	N/A

- 1/ Lots determined to be unwholesome will be classified Condition Code J until final disposition is made by the responsible veterinarian.
- 2/ Each column lists the maximum number of components allowed to equal or exceed an action number for that category.
- 3/ Each row lists the maximum number of components allowed to equal or exceed an action number by component classification.
- 4/ Compare the number of components from the inspection that equals or exceeds the special inspection action numbers for each category. If the number in any row/column intersection is exceeded, the lot must be downgraded to the next lower Condition Code.
- 5/ Components determined to be unwholesome will be classified Condition Code J and final disposition will be made by the responsible veterinarian.
- 6/ Perform Special inspection to see if defect in self-heating assembly is an isolated occurrence.
- 7/ If self-heating assembly is not functional, discuss with accountable officer if the poly-tray contents can be heated by other means, such as in a Dining Facility or in a Field Kitchen hot water bath.