

DLA Troop Support -FTS  
26 January 2017

**APP N**  
**DLA Troop Support H 4155.2**

**FOREWORD**

**(Supplementation is permitted.)**

**Appendix N** is an aid for the inspection of Food Packet, Modular Operational Ration Enhancement (MORE). It provides guidelines for sampling, inspecting, classifying defects, and determining lot serviceability.

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-FTS Changes will be coordinated with the Military Services and implemented as appropriate.

**BY ORDER OF THE COMMANDER**

Signature Block



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**I. GENERAL.**

**A. Purpose and Scope.** This Appendix provides a reference and guide for the surveillance inspection of Food Packet, Modular Operational Ration Enhancement (MORE) and was written and coordinated to facilitate use MOREs controlled by both DLA Troop Support and the individual Military 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 food packets and their estimated remaining shelf life. Basically, it involves a two-step process: (1) Determine if any components exceed an action number and if so, (2) classify food packets containing the defective components using the criteria contained in Table N.

**C. Receipt Inspection Guidance.** For receipt inspections, use the same sampling criteria and defect tables as for surveillance. In some cases, a cursory inspection may be performed in lieu of a receipt inspection (see guidance on cursory inspections below). In addition, inspectors shall advise DLA Troop Support (AFESC / DEHF for Air Force inspection activities) when containers/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 can be initiated. Inspectors will be provided additional guidance concerning warranty inspection/actions if required.

**D. Cursory Inspections.** Cursory inspections are simply the visual inspection of palletized load and conveyance to determine if there is any obvious damage or contamination that occurred during transport. Cursory examination is only authorized for MOREs received directly from an assembly plant or for loads that received a full (not cursory) inspection at the installation from which the MOREs were received within the last 30 days.

**E. Inspection Test Date (ITD) Extensions.** 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. Remarking of the unitized loads/cases with a revised ITD will be accomplished in accordance with DLAM 4155.2, Appendix S, and/or the appropriate service regulation. Posting of extensions can be accomplished by posting stickers containing updated ITD information to each pallet or case.

**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 with this Appendix, estimated remaining shelf-life, TTI stage, and a summary of general lot characteristics. Inspectors are also encouraged to provide additional comments and pictures 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 will not always apply.

a. Can the defective food packet(s)/component(s) be removed or replaced just prior to consumption?

b. How rapidly is the most defective component expected to deteriorate to the point that it is likely to become unserviceable?

c. Can the lot be issued and supplemented/substituted with similar commercial items, Supply catalog items, or operational ration component(s)? Component replacement of MOREs can be completed successfully. If the actual troops consuming the rations never received the recommended supplements/substitutes the inspectors, if possible, should:

1) Communicate with accountable officer to see if such a substitution is possible. (Note: If it can be determined that the substandard components deteriorated through some action or inaction that occurred prior to the military service taking possession from DLA Troop Support, then normally DLA Troop Support will provide replacement rations or ration components. If the deterioration took place because of poor storage and transportation after the military service took possession of it, then supplements or substitution would be paid for by the accountable officer.

2) Follow-up on the supplement or substitution action to see if it was done properly.

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

1. Adequate lighting.
2. Magnification lens (3 to 5 power recommended) is optional.
3. Metal ruler (32nd inch graduation).
4. Paper plates.
5. Paper cups.
6. Paper towels.
7. Scissors, general use (must be strong enough to easily cut food packets and retort pouches).
8. Tape (for re-taping food packets and cases).
9. Permanent marker.
10. Number 2 stylus.
11. Sharp knife, box cutter, or scalpel that can be sanitized.
12. Alcohol swabs.

## H. Definitions.

1. **Monograph.** An information and instruction sheet that provides the inspection activity with a description of a MORE 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.dla.mil/TroopSupport/Subsistence/Operationalrations/qapubs.aspx> under Appendix N.

2. **Component Classification.** The Monograph index (Table M) 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. Table M can be accessed at <http://www.dla.mil/TroopSupport/Subsistence/Operationalrations/qapubs.aspx> under Appendix N.

a. **Primary.** Any individual component in the MORE which, if unserviceable, will make the meal nutritionally inadequate for any method of intended use.

b. **Secondary.** Any individual component in the MORE which, if unserviceable, will reduce the nutritional value of the meal but will not render the meal unfit for its intended purpose.

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. The words “*are likely to*” are important. They do not mean “*could possibly*” since it is always possible to develop grand scenarios that transform trivial happenings into major catastrophes. Therefore, the use of this classification requires experience, prudence and sound judgment.

4. **Major B Defect.** These are defects that are not hazardous or unsafe. However, they may restrict the use of the product 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 where resupply or alternative feeding strategies are available. However, under more restrictive conditions the components could be consumed without concern that illness could be produced.

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 food packet loses its serviceability.

**6. Product Codes.**

a. Assembly code information/Assembler's lot number: Contract and component identification markings found on the shipping container or food packets that reflects ration assembly information only (e.g., assembly contractor, date of pack, assembly lot numbers, Inspection Test Date (ITD), etc.).

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

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

**8. Condition Coding.** Traditionally, condition codes have been based primarily on estimates of remaining shelf-life. MORE serviceability will be determined based on the usability status of all food packets. 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 as soon as possible; or to replace specific components with supplements, provided that the inspector has determined that supplementary components are available).

c. 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.

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

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

**9. Thermostabilized Component.** Any component subjected to a thermal process in a closed retort approved by a process authority.

10. **MORE Lot Serviceability**. Two factors are considered when determining the overall serviceability of a MORE lot. First the lot is condition coded using Table N and then the integrity of the packaging and packing is considered. It is recognized that the status of a MORE lot initially declared unserviceable may change as the result of a rework effort or special instructions provided by the accountable officer at/prior to issue.

11. **Time-Temperature Indicator**. A small label attached to the outer case used to monitor storage conditions. The TTI should be used as a tool only, and shall not be the sole factor for determining disposition of rations in storage.

12. **Abrasion**. A break or crack in the outer lamination of the retort pouch.

13. **Fold-over wrinkle**. Pouch material is overlapped on itself in the seal area that reduces the closure seal to less than 1/16 inch.

14. **Entrapped Matter**. Foreign material may be trapped in the seal area, when the pouch is sealed or bonded. Entrapped matter weakens the seal, but as long as there is 1/16 inch of continuous seal all the way across the seal area (i.e. from one side of the pouch seal to the other), then the seal is considered acceptable.

15. **Delamination**. Delamination is the separation of laminated films in a flexible laminated pouch.

16. **Stress Crack**. It is possible that the foil barrier layer in the MORE pouch material may break, but the outer layer (lamination) of polyester is still intact. This would be called a stress crack and it is not scored as a defect.

17. **Barrier Layer**. For a MORE retort pouch this is the lamination (foil) that prevents transmission of light, water vapor, or oxygen into out of the retort pouch.

18. **Product Contact Layer**. For a MORE retort pouch, this would be the inner lamination (polyolefin) which is in contact with the food.

19. **Adhesive**. Bonding material that binds the laminations (thin sheets of polyolefin, biaxially oriented polyamide, aluminum foil, or polyester) that make up the retort pouch material.

20. **Inspection Module**. In Operational Rations, the word module typically means a set of boxes whose combined content yields the components necessary to feed one meal to a given number of troops. For the purposes of MORE inspection, we will refer to a full/complete single case as an inspection module. This is meant to minimize confusion. The unit of issue is a single case (or box). In order to make sure that inspection covers all the food packets/components during inspections, inspectors will use the term "inspection modules". An inspection module is a full/complete case.



**21. Commercially Sterile.** Food that is free of all pathogens and those spoilage organisms capable of growth during normal storage and transportation conditions. Normal transportation and storage temperature is defined as 80°F or less.

## **II. ROUTINE INSPECTION GUIDANCE.**

**A. STEP 1: Cursory or Full Inspection.** A complete receipt inspection is required unless:

1. The MOREs are delivered to the installation directly from the MORE assembly plant; a full receipt inspection is not required. Inspect these deliveries only for transportation damage/obvious defects.

2. Normally, rations received will receive a full destination inspection. If the depot that the rations were received from performed a cursory inspection, then a full receipt inspection shall be performed at destination. The MOREs are delivered from a depot or other installation and a current (within the last 30 days) inspection report, completed at the point of origin (for example, a depot, not another installation that received the same lot) accompanies the shipment. The accompanying inspection report should match the lot number and manufacturer/assembler information on the shipping container, plus the delivery origin.

### **B. STEP 2: Evaluation of Storage Conditions (Surveillance).**

1. Storage conditions vary significantly. As a minimum MORE storage areas should be clean and dry. MOREs should not be stored directly on the floor. The area should be free of pests in accordance with:

a. MIL-STD 904 (current version) Detection, Identification, and Prevention of Pest Infestation of Subsistence.

b. TM-38, Protecting Meals, Ready-To-Eat Rations (MREs) during storage. Although this is written for MREs it is still applicable to MOREs.

2. When multiple pallets of MOREs are warehoused, the storage facility should meet the additional standards of MIL-STD-3006 (current version), Sanitation Requirements for Food Establishments, Appendix A. MOREs cannot be stacked more than 4 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/determining when the next inspection is due.

3. All cases 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. Cases should be back filled so that no more than one case will have less than 24 food packets.

**C. STEP 3: Determine If Grand Lotting Is Appropriate.**

1. Lotting procedures will be as follows:
  - a. Contractor's lots are composed of rations from the same assembly contractor, having the same contract number and lot number, and stored under substantially similar storage conditions.
  - b. Grand lots for the purpose of MORE inspections will be composed of rations from the same assembly contractor that have the same contract number. Grand lots will contain rations from two or more contractor's lots as long as the contractor (assembler) and production year are the same. Additionally, the rations must have been stored under substantially similar storage conditions (Check the TTI values on cases from each contractor's lot, they should be nearly the same). 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 sub-lot must be maintained throughout the inspection. This will be done by marking the food packets with the lot code from the case that the packs are drawn from.
2. When the action number is reached or exceeded during normal inspection of a grand lot, complete the normal inspection of the grand lot and then perform a special inspection of the affected component(s) of the nonconforming lot(s).
3. Defective contractor'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 the contractor's lot.
  - b. The Major B or Minor defects found seem to be concentrated in one or more of the contractor's lots comprising the grand lot.
  - c. The inspector determines for any reason, based on initial inspection results, that inspection of each contractor's lot is necessary.
4. Grand lotting is encouraged (to conserve inspection 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.

**D. STEP 4: Determine Lot Size.**

1. Lot size is expressed as the total number of inspection modules, food packets, or components as appropriate:
  - a. For inspection of shipping containers, verify total number of modules/cases.

b. For inspection of Food Packet, the sample unit is the pack, and the lot size would be the total number of food packets in the lot. To determine this, multiply the total number of inspection modules by 24.

**E. STEP 5: Inspect Shipping Containers and Selection of Food Packet Samples.**

1. IAW Table A, select the appropriate sample size for shipping container examinations. Obviously damaged shipping cases should not be selected unless they are truly representative of the lot. Damaged cases should be set aside, inspected, and salvaged separately.

2. Using the defects listed in Table C, the inspectors should check each sample case for loose straps, different type straps on one or more cases than those on the majority of the lot, or previously opened boxes. While these indicators may be the result of tampering, each may also be due to other reasons (e.g., a wholesale rework of a lot). Inspectors should contact their supervisors for guidance if pilferage or tampering is suspected.

3. Open the sample cases to determine how many different food packets they contain. The MORE was designed to have 3 menus, 8 packs each menu, 24 packs/box for Type I, High Altitude /Cold Weather and Type II, Hot Weather. Inspectors who encounter any other packing configuration should report it on the inspection report.

4. Using defects listed in Table C, observe each case for signs of rodent damage or insect infestation (see DLA Troop Support Handbook 4155.2, paragraph XI.) Record infestation findings on the inspection report, to include:

- a. Whether or not the pests were alive or dead.
  - b. Identification of the pests (preferably based on entomological or laboratory identification).
  - c. Probable origin of pests.
  - d. Probable movement of pests. For example, from outside the shipping container into the food packets or vice-versa.
5. Classify each defective case by the most serious defect it possesses.

**F. STEP 6: Perform Closed Package Inspection of Food Packets.**

1. IAW Table D, select the appropriate number of food packets being sure the samples are proportionally representative of the food packet in the lot.

2. If the inspection lot has been grand lotted, always mark each food packet with the

assemblers lot code from the case from which the pack was taken. Use a permanent marker, a self-adhesive label, or some other method that will not easily rub off. The assembler lot code is a four-digit number (Julian Date) taken from the side panel of the case. In this way, if the action number is exceeded, then the inspector can determine whether all the contractor's lots require a Special Inspection. It is also recorded on the inspection report for each defect even if the action number is not exceeded.

3. Inspect for defects listed in Table F.

**G. STEP 7: Perform Closed Package Inspection of Food Packet Contents**

1. Open the food packet.
2. Food Packet components will be inspected for defects in accordance with Table G. When inspecting retort/thermostabilized pouches, use the following Non-Destructive Open Package Inspection (NDOPI) method:
  - a. Remove pouch from protective carton (if there is one).
  - b. Lay pouch on flat surface; check for swelling.
  - c. Visually scan both sides of the surface of the pouch. Use the light source by changing the position of the pouch in relation to the light source to better spot anomalies, such as delamination. Run fingers along both sides of the pouch surface, particularly along the ridges of wrinkled areas, feeling for breaks in the outer layer of the laminate. These will feel like small snags. Using a nylon is a good way to find abrasions or draw a stylus gently across the possible abrasion. It may also be helpful to examine possible abrasions with a magnification lens.
  - d. Press down firmly on the pouch, pushing the food towards the outer edge.
  - e. Look at the edge of the pouch, looking for indication that product has leaked through the pouch seal.
  - f. Examine the seal area around the pouch. Look for abnormalities.
3. Thoroughly examine all pouches within the food packet under a good light source and, if available, use 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.

**H. STEP 8: Perform Destructive Open Package Inspection (DOPI).**

1. Open package inspection will be performed in accordance with Table H and those defects listed in Table J. Select food packets that did not already have defects noted during the closed package inspection. Use the following procedures for inspecting each retort pouch and

thermostabilized pouch in the DOPI sample:

- a. Lay pouch on flat surface; check for swelling.
  - b. Visually scan both sides of the surface of the pouch. Use the light source by changing the position of the pouch in relation to the light source to better spot anomalies, such as delamination. Run fingers along both sides of the pouch surface, particularly along the ridges of wrinkled areas, feeling for breaks in the outer layer of the laminate (abrasions). These will feel like small snags. Using a nylon is a good way to find abrasions or draw a stylus gently across the possible abrasion. It may also be helpful to examine possible abrasions with a magnification lens.
  - c. Press down firmly on the pouch, pushing the food towards the outer edge.
  - d. Look at the edge of the pouch, looking for indication that product has leaked through the pouch seal.
  - e. Examine the seal area around the pouch. Look for abnormalities such as fold-over wrinkles or entrapped matter.
  - f. Using a sharp scalpel-type knife that is sanitary, make an “X” incision across the body cavity. Peel back the flaps.
  - g. Look at the food, smell it, and transfer to a plate for sensory exam.
  - h. Clean pouch and determine if the seam areas are intact by running a Number 2 stylus down the now exposed inner surface of the pouch seal area, and using a magnification lens if necessary. The purpose of this is to determine if there are weak seal areas or channels that were plugged by the food inside the pouch.
2. 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 for the MORE can be accessed at: <http://www.dla.mil/TroopSupport/Subsistence/Operationalrations/qapubs.aspx> under Appendix N.
3. Each component of the sample DOPI food packets will be opened and inspected. If no Major A or Major B defects are noted and the action number for minor defects is not exceeded during normal open package inspection, this phase of the inspection should be considered complete.
4. Classify each defective component by the most serious defect it possesses.

**I. STEP 9: Recording Results.**

1. Record the following information for all defective components:
  - a. Pack 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). Note: Anytime an inspector uses the defect description for "other", they will need to enter a description to complete the report.
  - h. Tally defects (Major A, Major B, Minor) according to type of components.
2. All components observed during the inspection with Major A or Major B defects will be discarded (whether they are part of the sample or not). Components not exhibiting defects or those exhibiting only minor defects may be reassembled into the lot.
3. Component packages with a Major A or Major B packaging defect (other than swelling) 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. Do not taste product from defective pouches. **NOTE:** This inspection is an exception to normal destructive open package inspection (DOPI), during which product is given a sensory examination and compared to criteria found in the applicable monograph.

**J. STEP 10: Determine if Special Inspection is Required.** Special Inspection is normally required when any action number is reached/exceeded. However, there are rare occasions when an action number may be exceeded and it may be appropriate to waive the Special Inspection. This would normally be a situation in which it can be determined that there is degradation throughout the grand lot. For example, a situation in which the entire lot is heat stressed or infested. If the TTI value is 4 or 5 and the Normal Inspection shows that multiple components are heat stressed in numbers in excess of the action numbers. If a Special inspection is deemed necessary, go to Section III for procedures.

**K. STEP 11: Determine Disposition.** Disposition based on routine inspection results will be determined when no Major A or Major B defects were noted or the action number for minor defects combined has not been reached.

1. The Condition Code of a lot may only be downgraded based on Special Inspection results or if a factor such as heat stress or infestation causes uniform degradation throughout the lot. (not sure if it is necessary to capitalize type of inspection, but it should be consistent.

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.

**L. STEP 12: Provide Results and Recommendations to Accountable Officer/Agency.**

2. Inspection results are reported in the US Army Public Health Center (USAPHC) database or as required by local SOP. A fillable version of the DSCP Form 5117 at the following website: <http://www.dla.mil/TroopSupport/Subsistence/Operationalrations/qapubs.aspx> under Appendix N.

**M. STEP 13: Scheduling the Next Surveillance Inspection.**

1. Condition Code A – Reinspect in 6 months if this lot is in stock. If average storage temperatures are between 80-100°F, inspect within 3 months. If average storage temperatures are in excess of 100°F, inspect within 1 month.

2. Condition Code B – Reinspect within 3 months if this lot is still in stock. If average storage temperatures are between 80-100°F. If average storage temperatures are in excess of 100°F, inspect within 1 month.

**III. SPECIAL INSPECTION GUIDANCE.** During a Special Inspection, the inspector pulls an additional quantity of only those components that met or exceeded the action numbers during the Normal Inspection. All defective samples will be classified by the most serious defect they possess. If you are performing a grand lot inspection and defects are present for a particular lot or lots, complete the Normal Inspection and then perform a Special Inspection on the lot(s) that require further examination. There may be situations in which it is not necessary to perform a Special Inspection. Normally this would be due to a deteriorative condition throughout the lot that is readily apparent during the Normal Inspection. Possible examples would be heat stress or infestation throughout the lot. When action numbers are exceeded, but the inspector believes that a Special Inspection is not necessary, then the inspector must discuss this with his chain-of-command and request approval to forego the Special Inspection. The approving officer and the reason for not performing the inspection will be documented on the inspection report.

**A. STEP 1: Determine Lot Size.** Initially determine lot size of the 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 food packets contain the defective component(s) utilizing Table S and the previous inspection results. These food packets will be the only food packets selected for the special inspection.

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

1. Sample size will be determined in accordance with Table B, E or I. Special Inspections are performed only on contractor's lots.
2. Inspect IAW applicable defect table (Table F, G or J).
  - a. The sample size for each component involved will dictate the minimum number of cases that must be selected for special inspections.
  - b. Table S on the DLA Troop Support website can be used to determine the food packet arrangement for the ration lot in question. This appendix can be used by the inspector to determine which lots to pull. The website address is:  
<http://www.dla.mil/TroopSupport/Subsistence/Operationalrations/qapubs.aspx>.

**C. STEP 3: Perform Inspection of Selected Components.** This will be done in the same manner as performed on individual components during Normal Inspection, to include pouch examination, DOPI, and comparison with characteristics in the monographs.

**D. STEP 4: Determine Disposition of the Lot.**

1. If none of the ANs are reached or exceeded, each food packet is considered to be fully useable and the Condition Code of the lot may remain unchanged.
2. Compare defects noted with the ANs for each type of component (primary, secondary) and use the criteria in Table N to determine the condition code of the lot.

**E. STEP 5: Provide Results and Recommendations to Accountable Officer/Agency.**

1. Complete DSCP Form 5117, and provide copy of report to accountable officer.
2. Inspection results are reported in the US Army Public Health Center (USAPHC) database or as required by local SOP. A fillable version of the DSCP Form 5117 at the following website:  
<http://www.dla.mil/TroopSupport/Subsistence/Operationalrations/qapubs.aspx> under Appendix N.
3. For DLA owned stocks, inspections resulting in *less than Condition Code A* status must be telephonically reported to DLA Troop Support-FTSC (215) 737-4847/7771/7773/ (DSN 444).



**IV. SAMPLING AND EXAMINATION TABLES.**

**TABLE A 1/ 2/**  
**SAMPLING CRITERIA FOR INSPECTION OF**  
**SHIPPING CONTAINERS (NORMAL INSPECTION)**

LOT SIZE (CASES)	SAMPLE SIZE (CASES)	DEFECT CLASS	ACTION NUMBER
1-250	6	Major B Minor	1 3
251-17,500	20	Major B Minor	2 8
17,501-250,000	32	Major B Minor	3 11
> 250,000	50	Major B Minor	4 15

**1/** For use with Table C.

**2/** American National Standard ANSI/ASQC Z1.4-2003 was the basis for the sampling tables within this appendix.

**TABLE B 1/**  
**SAMPLING CRITERIA FOR INSPECTION OF SHIPPING CONTAINERS**  
**(SPECIAL INSPECTION)**

LOT SIZE (CASES)	SAMPLE SIZE (CASES)	DEFECT CLASS	ACTION NUMBER
1-75	3	Major B Minor	1 3
76-250	10	Major B Minor	2 8
251-600	16	Major B Minor	3 11
601-1,600	25	Major B Minor	4 15
1,601-5,000	40	Major B Minor	6 22
5,001-17,500	63	Major B Minor	8 31
> 17,500	100	Major B Minor	11 45

**1/** For use with Table C.

**TABLE C 1/ 2/**  
**INSPECTION OF SHIPPING CONTAINERS**

CATEGORY		DEFECT
MAJ B	MINOR	
501		Evidence of rodent or insect infestation on or in the shipping container. <u>2/</u>
502		Container damaged, contents exposed or affected.
	601	Container damaged, contents not exposed or affected.
	616	Missing TTI.
	618	Shrink/Stretch Wrap is torn or does not cover all four sides.
	619	TTI is attached to case strap.
	620	Exterior of case shows mold growth.

**1/ For use with Table A and B.**

**2/ Requires immediate corrective action according to local Pest Management Program.**

**TABLE D 1/ 2/ 3/**  
**SAMPLING CRITERIA FOR INSPECTION OF FOOD  
PACKETS CONTENTS (NORMAL INSPECTION)**

LOT SIZE (Packet)	SAMPLE SIZE (Packet)	DEFECT CLASS AND ACTION NUMBERS		
		MAJ A	MAJ B	MIN
24 - 6, 000	9	1	1	11
> 6, 001	18	1	1	22

**1/ For use with Table F and G.**

**2/** Sample packets will be selected from the shipping containers selected for the Table A examination.

**3/** All defects noted on food packets and contents will be combined and compared to the normal inspection action numbers.

**TABLE E 1/ 2/**  
**SAMPLING CRITERIA FOR INSPECTION OF FOOD  
PACKETS AND CONTENTS (SPECIAL INSPECTION)**

LOT SIZE (Components)	SAMPLE SIZE (Components)	DEFECT CLASS AND ACTION NUMBERS		
		MAJOR A	MAJOR B	MINOR
24 – 36 ,000	9	1	2	9
> 36, 001	18	1	3	11

**1/ For use with Table F and G.**

**2/** On special inspections, compare separate component inspection results to the action numbers.

**TABLE F 1/ 2/  
INSPECTION OF UNOPENED FOOD  
PACKETS**

CATEGORY			DEFECT
MAJOR A	MAJOR B	MINOR	
	503		Rodent damage/insect infestation of packet. <u>2/</u>
	514		Less than 24 packets in a case.
		602	Visible tear/cut/hole/open seam in packet.

**1/ For use with Tables D and E.**

**2/ Requires immediate corrective action according to local Pest Management Programs.**

**TABLE G 1/ 2/ 3/ 4/ 5/ 6/ 7/**  
**CLOSED PACKAGE INSPECTION OF FOOD COMPONENTS**

CATEGORY			DEFECT
MAJOR A	MAJOR B	MINOR	
401			Swollen pouch. <b>3/</b>
402			Tear/cut/hole/open seal in primary package thermostabilized component.
406			Food Packet is missing an entrée.
	505		Complete loss of food packet <b>4/</b>
	506		Tear/cut/hole/open seal in primary package (other than those covered by defect 402).
	507		Inadequate vacuum with moderate to extreme effect on product. <b>6/</b>
	508		Foldover wrinkle extending into the seal such that the closure seal is reduced to less than 1/16 inch (retorted and thermostabilized pouches only).
	509		Presence of entrapped matter (for example, product, moisture, grease, etc.) that reduces the closure seal to less than 1/16 inch, or seal area width not a continuous 1/16 inch around the pouch.
	513		Missing Secondary Component from food packet, or primary component other than the entrée is missing.

605	Presence of delamination when multi-layered laminate is used. (not applicable to dehydrated components).
606	Inadequate vacuum, product not affected or only slightly affected. <b>6/</b>
607	Unserviceable carton (e.g., carton missing, severely torn, flaps not glued).
609	Presence of delamination when multi-layered laminate is used. (dehydrated components).
610	Abrasion in the exterior surface of retorted or thermostabilized pouches.
621	Missing tear notch on food component

**1/ For use with Table D and E.**

**4/ Score** when one or more defective components cause the entire packet to be unserviceable. For example, one or more leaking, ruptured, or contaminated packages may affect the other components.

**5/** This defect does not apply to inner wrapper of freeze dried components.

**6/** See component Monograph (defects 507 and 606 apply to vacuum packaged items only).

**7/** See component Monograph.

**TABLE H 1/ 2/ 3/  
SAMPLING CRITERIA FOR DESTRUCTIVE OPEN  
PACKAGE INSPECTION (DOPI) (NORMAL INSPECTION)**

LOT SIZE (Packet)	SAMPLE SIZE (Packet)	DEFECT CLASS AND ACTION NUMBERS		
		MAJ A	MAJ B	MINOR
24 - 6, 000	9	1	1	11
6, 000 or more	18	1	1	22

**1/ For use with Table J.**

**2/** Sample packets will be selected from those shipping containers selected for the Table A examination.

**3/** All defects noted will be combined and compared to the normal inspection action numbers.

**TABLE I 1/  
SAMPLING CRITERIA FOR DESTRUCTIVE OPEN  
PACKAGE INSPECTION (DOPI) (SPECIAL INSPECTION)**

LOT SIZE (Components)	SAMPLE SIZE (Components)	DEFECT CLASS AND ACTION NUMBERS		
		MAJOR A	MAJOR B	MINOR
1 – 3 ,000	9	1	1	8
3, 001 - 6, 000	18	1	2	9
6, 001 - 36, 000	27	1	3	10
36, 001 or more	36	1	3	11

**1/ For use with Table J.**

**TABLE J 1/ 2/ 3/  
DESTRUCTIVE OPEN PACKAGE INSPECTION (DOPI)**

CATEGORY			DEFECT
MAJOR A	MAJOR B	MINOR	
403			Evidence of rodent damage/insect infestation in product. /2
404			Product off conditions as evidenced by abnormal odor, color, flavor or texture suggesting contamination and/or spoilage for no apparent reason (e.g., package failure not evident).
405			Foreign material present, effecting wholesomeness (e.g., glass, metal, wire).
	510		Primary component fails to rehydrate (moderate to extreme) or dissolve (extreme).
	511		Moderate to extreme texture, odor, color or flavor change in a primary component not effecting wholesomeness (product unlikely to be consumed under conditions of intended use).
	512		Mechanical damage to primary component significantly effecting serviceability.
		611	Slight texture, odor, color or flavor change in a primary component not effecting wholesomeness.
		612	Primary component fails to rehydrate (slight) or dissolve (slight to moderate).
		613	Moderate to extreme texture, odor, color or flavor change in a secondary component not affecting wholesomeness.
		614	Secondary component fails to rehydrate or dissolve (moderate to extreme).



615	Evidence of mechanical damage to secondary component significantly affecting serviceability (e.g., crushed gum).
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**1/ For use with Table H and I.**

**2/** Requires immediate corrective action according to local Pest Management Programs.

**3/** Specify defect(s) observed. Enter all specific defect codes that apply and a narrative description when appropriate.

**TABLE K SPECIFIC  
DEFECT CODES**

<b>A. INSECT / RODENT</b>	
A1.	Rodent.
A2.	Insect.
A3.	Other (describe).
<b>B. PACKAGING, PACKING, MARKING, LABELING AND UNITIZATION</b>	
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.	Improperly unitized load.
B8.	Unit load failure.
B9.	Missing tear notch.
B10.	Tear notches ripped or torn.
B11.	Sifter (see Monographs).
B12.	Inadequate vacuum.
B13.	Delamination (separation of layers in laminate material).
B14.	Foldover wrinkle.
B15.	Entrapped matter or seal area width not a continuous 1/16 inch around the pouch.
B16.	Abrasion.
B17.	Sweller.
B18.	Leaker.
B19.	Other (describe).
<b>C. TEXTURE CHANGES</b>	
C1.	Too thick or pasty.
C2.	Chewy / gummy.
C3.	Mealy.
C4.	Tough / stringy.
C5.	Caked or hardened.
C6.	Brittle.
C7.	Crumbly, cracking.
C8.	Excessively dry.
C9.	Loss of crispness.
C10.	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. A good example

	is the separation or weeping of liquid of liquid from a gelatin mold when left sitting in a refrigerator too long).
C15.	Liquefaction (passing from dry, solid, or semi-solid) to a liquid state (e.g., complete loss of gel structure in jelly component).
C16.	Caramelized.
C17.	Watery gravy or excessive product juices (probably due to product formulation and/or time-temperature abuse).
C18.	Honeycombing.
C19.	Coagulation/gelation (beverage base).
C20.	Other (describe).
<b>D. ODOR CHANGES</b>	
D1.	Medicinal, vitamin-like.
D2.	Chemical odor, solvent-like/turpentine/paint-like.
D3.	Plastic-like.
D4.	Hay-like (oxidized).
D5.	Fermented.
D6.	Scorched/burnt.
D7.	Sulfur-like.
D8.	Musty, moldy, mildew.
D9.	Overripe.
D10.	Not ripe.
D11.	Stale.
D12.	Cardboard.
D13.	Soured.
D14.	Putrid.
D15.	Acidic/vinegary.
D16.	Other (describe).
<b>E. FLAVOR CHANGES</b>	
E1.	Loss of flavor, flat, bland.
E2.	Chemical flavor, solvent-like, turpentine/paint-like.
E3.	Medicinal, vitamin-like.
E4.	Plastic-like.
E5.	Hay-like (oxidized).
E6.	Bitter.
E7.	Burnt.
E8.	Soapy.
E9.	Musty, moldy, mildew.
E10.	Rancid (this may also be an odor change).
E11.	Stale.
E12.	Fermented.
E13.	Earthy.
E14.	Tart, acidic.
E15.	Overripe.
E16.	Green, not ripe.
E17.	Tobacco.
E18.	Sweet, perfume like, flowery.
E19.	Metallic.
E20.	Excessively over-processed / scorched.
E21.	Canned.
E22.	Putrid (this may also be an odor change).
E23.	Sour.
E24.	Excessively salty.
E25.	Other (describe).

<b>F. APPEARANCE CHANGES</b>	
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.	Cloudiness (beverage bases except orange).
F6.	Webbing (caffeine leeching).
F7.	Other (describe).
<b>G. FOREIGN MATERIAL</b>	
G1.	Potentially hazardous (e.g., glass, splinters, metal).
G2.	Not potentially hazardous.
G3.	Other (describe).
<b>H. COMPLETE LOSS OF PACKET (Does Not Consider Caloric Count)</b>	
<b>NOTE:</b> The purpose of this defect category is to enable inspectors and evaluators of the inspection data to properly identify packets that contained one (or more) leaking component that adversely affected the entire meal. For example, if an applesauce pouch leaks, the entire packet may be unfit for use because of the mold growth that would likely occur inside the food packet.	
H1.	Due to one leaking or ruptured component.
H2.	Due to more than one leaking or ruptured component.
H3.	Due to one or more components contaminated by insecticide/pesticide.
H4.	Due to one or more components contaminated by an unidentified substance.
H5.	Other (describe).
<b>J. MISSING COMPONENTS/PACKETS</b>	
J1.	Required component(s) missing from packet.
J2.	Required packets missing.

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

CONDITION CODE A	CATEGORY		
	MAJOR A	MAJOR B	MINOR
Primary	0	0	1
Secondary	0	1	2
<b>CONDITION CODE B</b>			
Primary	0	1	2
Secondary	0	2	3
<b>CONDITION CODE H or J (see note 5)</b>			
Primary	1	2	NA
Secondary	1	3	NA

**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 (Note this is the number of defective components with the same defect, not the total number of defects for the same component. For example, components that are identical except for the flavoring are also grouped together. If both the Energy Gel, Orange and the Energy Gel, Lemon Lime show significant darkening, that would be one secondary component with a Major B defect).

**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/** For lots that fail inspection and do not meet a serviceable condition code, a condition code of J or H is assessed. If it is necessary to send samples to the lab for food safety or production- related defects, or to investigate the lot further; then assess a condition code of J. If condition J is assessed, this will need to be revised once the lab evaluation or investigation is complete. Changing the condition code after the report is submitted is the responsibility of the report approver. If the defects have a readily explainable cause, such as heat stress, physical damage, or infestation, then Condition Code H (condemnation) is appropriate. Condition Code L means that warranty action is pending. Warranty inspections will be directed by the contracting officer and/or the chain-of- command. Inspectors who are asked to perform a warranty inspection will be supplied with specific sampling and inspection instructions.

## **V. INSPECTION RECORDS.**

**A. Inspection Form.** All inspections will be recorded on DSCP Form 5117. Local reproduction of DSCP Form 5117 is authorized.

**B. Database.** USAPHC operational rations database will be used to report MORE inspection results when available.

**C. Distribution.** For DLA owned/controlled stocks, one copy of DSCP Form 5117 will be provided to the accountable officer. Copies of all reports will also be maintained in the local quality history files. For DLA owned stocks, inspections resulting in less than Condition Code A status must be telephonically reported to DLA Troop Support-FTSC (215) 737-4847/7771/7773/ (DSN 444). Other distribution will be according to the directives of the responsible inspection agency and/or Military Service.