

DEFENSE LOGISTICS AGENCY TROOP SUPPORT 700 ROBBINS AVENUE PHILADELPHIA, PENNSYLVANIA 19111-5092

DLA Troop Support I 4145.31

13 October 2017

## INTEGRATED STORED PRODUCTS PEST MANAGEMENT

(This publication has been revised significantly and must be reviewed in its entirety.)

# A. REFERENCES.

1. DLAI 4145.31, Integrated Stored Products Pest Management, 20 JUNE 2002, superseded.

2. DOD Instruction 4150.7, DOD Pest Management Program.

3. DLAR 4155.37, Materiel Quality Control Depot Storage Standards.

4. DOD 4145.19-R-1, Storage and Materials Handling.

5. DSCPM 4155.6, Subsistence Inspection Manual.

6. Armed Forces Pest Management Board Technical Information Guide Number 11 (TG #11), Hydrogen Phosphide Fumigation of Subsistence with Aluminum Phosphide.

7. Armed Forces Pest Management Board Technical Information Guide Number 27 (TG #27), Stored-Product Pest Monitoring Methods.

8. Armed Forces Pest Management Board Technical Information Guide Number 38 (TG #38), Protecting Meal, Ready-to-Eat Rations (MREs) and Other Subsistence During Storage.

B. PURPOSE. This instruction:

1. Supersedes reference A.1.

2. Implements DOD Instruction 4150.7, DOD Pest Management Program.

3. Establishes procedures and assigns responsibilities for the conduct of the DLA Integrated Stored Products Pest Management Program (hereinafter referred to as the "Program"). The Program is designed to protect perishable and semi-perishable subsistence, infestible clothing and textiles, medical items, and wood products from damage, contamination, or loss due to pest infestation.

C. APPLICABILITY AND SCOPE. This instruction applies to HQ DLA, Defense Supply Centers, Defense Depots, Defense Subsistence Offices and Military Service Depots/Installations storing DLA-owned infestible material in accordance with Inter-service Support Agreements

#### **D. DEFINITIONS**

1. Consulting DOD Entomologist. Professional DOD pest management personnel designated in writing by the Components to the Executive Director, Armed Forces Pest Management Board (AFPMB), who are the primary points of contact for the Component's pest management program including technical guidance, management oversight, and information requirements.

2. Entomologist, a military officer or DOD civilian, with a degree in entomology and filling a position as an entomologist within DOD. Civilian contract entomologists are not included. The DLA Staff Entomologist resides in the DLA Environmental and Safety Policy Office (CAAE), is the agency representative to the AFPMB. The DLA Troop Support (DLA-TS) Staff Entomologist provides oversight to the Program.

3. Infestible Products. Subsistence, clothing and textile, medical items, wooden items, and other products that are subject to insect, rodent or other pest infestation, damage, or contamination.

4. Integrated Pest Management (IPM). A planned program, incorporating continuous monitoring, education, record keeping, and communication to prevent pests and disease vectors from causing unacceptable damage to operations, people, property, materiel, or the environment. IPM uses targeted, sustainable (effective, economical, environmentally sound) methods including educational tactics, habitat modification, biological control, cultural control, mechanical control, physical control, and where necessary, the judicious use of less-hazardous pesticides.

5. Non-perishable. Any raw or processed food not subject to rapid decay or deterioration that would render it unfit for consumption.

6. Pest Control Operator. Personnel specifically trained in the safe and effective conduct of pest control services and possessing a valid DOD or state pesticide applicator certification.

7. Pest Management Plan. A long-range, comprehensive installation planning and operational document that establishes the strategy and methods for conducting a safe, effective, and environmentally sound integrated pest management program. Written pest management plan is required as a means of establishing and implementing an installation pest management program.

8. Pheromone Trap. An insect monitoring device utilizing sex attractant and/or food attractant lures to attract and capture specific stored product insects.

9. Semi-perishable. Interchangeable with non-perishable

10. Stored Products Pest Management. The use of IPM techniques for the prevention and control of infestation of insects, rodents, birds and other pests in stored products of an infestible nature.

11. Surveillance and Monitoring. Inspections, reviews, or surveys conducted on a regular basis to determine the presence or prevalence of pests or disease vectors.

## E. PROCEDURES

1. General Guidance

a. Maximum use of the technical entomological expertise available at DLA-TS will be made in the conduct of this Program.

b. Only certified pest control operators shall apply restricted-use pesticides. Non-restricted-use pesticides or nonchemical controls shall be made by or under the direct supervision of a certified pest-control operator.

c. All pest management procedures shall be conducted in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act, as amended; DOD Instruction 4150.7, DOD Pest Management Program; Installation Pest Management Plan; and other applicable Federal, state, local, tribal, and host nation laws.

d. All requests for exceptions or modifications to any part of this instruction shall require approval by a DLA-TS entomologist.

2. Integrated Pest Management (IPM) program guidelines for stored-product pests:

a. Sanitation. All storage areas shall be maintained in such a manner as to ensure the highest level of sanitation possible.

(1) Spilled food, waste packaging or packing material, broken pallets, trash containers, and other debris shall be cleaned up and disposed of at the end of each workday. In no case shall such spills or debris be allowed to collect within a storage area for more than 24 hours.

(2) The grounds surrounding the perimeter of the facility shall be maintained in a clean and orderly manner with bulk trash receptacles positioned away from the building proper and covered at all times.

(3) In-bound conveyances containing infestibles shall be inspected for the presence of pest infestation and/or filth and appropriate measures shall be taken if encountered.

(4) Out-bound conveyances shall be inspected and rendered clean and pest free before loading.

b. Facility maintenance and physical pest exclusion.

(1) All storage facilities shall be maintained in good condition to prevent the entry of pests.

(2) Repairs shall be made, as required, to prevent the entry or accumulation of rainwater in and around buildings.

(3) All holes or gaps in walls or floors, including those around plumbing and electrical lines, shall be sealed.

(4) All windows, air exchangers, and vents shall be screened with 16-mesh screening with <sup>1</sup>/<sub>4</sub>-in mesh, unless fitted with operable louvers.

(5) All doorframes shall be constructed of rodent-proof material in such a manner to preclude rodent entry when closed. Loading-dock doors shall be equipped with full-length vinyl strips or inflatable boots whenever possible.

c. Warehousing techniques and stock-handling practices

(1) All infestible stocks of like commodities shall be consolidated to the maximum extent possible in order to concentrate pest management procedures.

(2) Infestible products shall be stacked away from all walls and partitions, a minimum of 18 inches with inspection/control aisles of not less than 18 inches maintained between each three stacks or rows of product. Naturally occurring breaks in the warehouse, made by posts or pillars, may be utilized as long as the three stack or row rule is not exceeded.

(3) A single storage location may not contain infestible items of different nomenclature or different contract numbers of the same item nomenclature.

(4) Damaged infestible products discovered in storage shall be removed immediately and disposed of, as appropriate.

(5) A DLA-TS entomologist shall be informed immediately of any products found to be infested or contaminated while in storage.

d. Rodent control in storage facilities.

(1) Facility rodent-proofing shall be accomplished, as necessary, to preclude rodent entry into the warehouse.

(2) Mechanical windup traps may be utilized in all storage facilities at all times and must be properly monitored and maintained.

(3) When evidence of rodent activity is present, the use of rodenticides and mechanical traps may be supplemented by the use of glue boards and snap traps. When local and host nation laws permit, glue boards may also be utilized for rodent surveillance purposes in all types of storage facilities.

(4) The use of single-dose anticoagulant rodenticides in tamper-resistant bait stations shall be coordinated with a DLA-TS entomologist, as will the use of liquid rodenticides.

e. Bird control in warehouse facilities.

(1) Bird control shall be accomplished by means of bird-proofing and the elimination of roosts and harborage areas.

(2) Bird repellents or toxicants shall only be utilized after coordination with a DLA-TS entomologist.

(3) When the elimination of bird activity is not feasible, precautions shall be taken to cover the tops of products that are subject to potential contamination.

(4) Contaminated covers shall be removed and disposed of before the product is issued or shipped.

f. Insect surveillance programs.

(1) Routine insect surveillance shall be accomplished according to the procedures set forth in DLAR 4155.37, Materiel Quality Control Depot Storage Standards, Appendix S.

(2) Incubation of suspect infestible subsistence items may be accomplished, as necessary, to validate customer claims of infestation or to verify latent insect infestation.

3. Infestible subsistence storage facilities guidelines.

a. In addition to routine insect surveillance, the storage facility shall utilize insect pheromone traps. Armed Forces Pest Management Board Technical Guide Number 27 (TG #27), provides guidance on pheromone traps. The specific traps and lures used shall be coordinated with a DLA-TS entomologist.

b. A residual pesticide, selected in coordination with a DLA-TS entomologist, shall be applied by means of crack and crevice or spot treatment. The broadcast application of residual pesticides is prohibited.

c. All storage areas shall be treated with an approved fogging material as per specific guidance from a DLA-TS entomologist. The frequency of treatment shall be based on each storage site's insect surveillance program, product inspection results, climatic conditions, and storage practices. The pesticide to be utilized, dosage rate, frequency of application, and equipment to be used shall be determined in coordination with a DLA-TS entomologist.

d. Fumigation shall be accomplished as follows:

(1) All fumigations shall be done using aluminum phosphide in accordance with Armed Forces Pest Management Board Technical Guide Number 11, Hydrogen Phosphide Fumigation of Subsistence with Aluminum Phosphide (TG #11), and the product label.

(2) If surveillance indicates infestation, in-transit fumigation of inter- depot transferred stock shall be accomplished.

(3) Clearance of in-transit fumigated rail cars, inter-depot or source- loaded, shall be accomplished by a certified pesticide applicator in accordance with TG #ll.

(4) In-place (stack) fumigation within a storage area shall be conducted only upon discovery of actual infestation. Following in-place fumigation and after clearance, a determination as to product fitness and issue status shall be made by veterinary food inspection personnel in accordance with Appendix S and this instruction.

(5) Meal, Ready-to-Eat rations and other operational rations shall not be fumigated without approval from a DLA-TS entomologist.

(6) All other fumigations shall be accomplished in accordance with guidance provided by a DLA-TS entomologist.

4. Operational rations storage facilities guidelines.

a. When operational rations are stored in conjunction with other infestible subsistence, the guidance contained in this instruction shall apply to the joint storage area.

b. When operational rations are stored in a separate warehouse, or a separate bay within a subsistence storage facility, and only operational rations are stored in the described area, the following program modifications will apply:

(1) Insect surveillance results will determine the need for space treatment. The frequency of treatment, when an infestation is discovered, will be determined in coordination with a DLA-TS entomologist.

(2) Operational rations will be fumigated only after coordination with a DLA-TS entomologist.

5. Clothing and textile storage facilities guidelines.

a. All stocks not of 100 percent manmade fibers shall be considered infestible for the purposes of this instruction.

b. The above general provisions of the IPM program shall apply with the following modifications:

(1) Residual Pesticide Applications. A residual pesticide, selected in coordination with a DLA-TS entomologist, shall be applied by means of crack and crevice or spot treatment if insect infestation is discovered. The broadcast application of residual pesticides is prohibited.

(2) Space Treatment. Storage areas shall be space-treated based on insect surveillance results and in coordination with a DLA-TS entomologist.

(3) Fumigation. Fumigation of clothing and textile stocks shall only be accomplished after contacting a DLA-TS entomologist for guidance.

(4) Moth-Killing Flakes. Naphthalene or paradichlorobenzene flakes or crystals should be replenished any time that an exterior shipping case or wrapper is removed for inspection prior to repacking or repackaging. Exception: This treatment is unnecessary if the item has been treated with a moth-proofing agent within the 9 months previous to the inspection.

6. Infestible wooden products guidelines.

a. All products containing wood, which has not been pressure or soak- treated with an approved wood preservative shall be considered infestible.

b. In addition, the following IPM program procedures shall be applied:

(1) Space treatment of wooden product storage areas will only be accomplished after coordination with a DLA Troop Support entomologist.

(2) The fumigation of insect-infested wood can be accomplished with any fumigant registered with the Environmental Protection Agency (EPA) for use with wood products. However, such treatments may not always be economically feasible. A DLA-TS or Military Service entomologist shall be consulted for specific recommendations prior to the initiation of wood products fumigation.

(3) Infestible wooden products can be treated by dipping or soaking in insecticidal baths. Proper treatment with selected chemicals can provide long-lasting fungus protection as well as protection from insects. When necessary, a DLA-TS or supporting Military Service entomologist should be consulted for details concerning these treatments.

(4) Where thermo-control facilities are available, use heat in lieu of chemical fumigation to destroy termites and other pests in infested crates, boxes, pallets, and scrap wood. With heat treatment, the infested wood is placed in a specially designed chamber and heated until the desired level of control is achieved.

7. General inspection guidelines.

a. All shipments of infestible products shall receive both closed and open package inspection at the time of receipt. Examination of seams, closures, indentations, flaps, wrappings, etc., on shipping containers, intermediate containers, and unit of issue containers shall be performed to determine the presence of infestation or contamination. Pallets should be clean and free of debris. Open-package inspections shall also be performed to determine if the actual product or item is infested or contaminated.

b. Infestible products shall also be inspected for pest infestation, both closed and open-package, during scheduled warranty and cyclic inspections, at time of issue, or when special inspections are determined to be necessary by either DLA-TS or the inspection authority.

c. Inspections of infestible subsistence for pest infestation shall be accomplished in accordance with the guidance contained in Appendix S and appropriate inspection authority directives.

d. Infestations discovered in DLA-owned infestible products shall be reported immediately to a DLA-TS entomologist.

8. Infestation reporting procedures for infestible subsistence

a. Food inspection personnel shall determine the extent of infestation (packaging, product, or both) and contact a DLA-TS entomologist within 24 hours of discovering the infestation.

b. Specimens of infesting insects from the affected product shall be submitted with a completed DD Form 1222, Request for and Results of Tests, to an appropriate identification laboratory in accordance with DLA-TS M 4155.6, Subsistence Inspection Manual, Subsection 218.2, Entomological Laboratory Identification Services. At this time the product shall be placed in Condition Code "J," pending results of the insect identification and subsequent pest control actions.

c. The responsible pest control activity shall be contacted by the warehouse manager or other accountable officer to arrange for appropriate pest control measures. If fumigation is necessary, it will be accomplished in a safe manner as quickly as possible after coordination with a DLA-TS entomologist. A certified pest control operator shall perform all aspects of the fumigation operation, including clearance of the fumigated product. No further inspections will be accomplished until the product has been properly cleared.

d. After appropriate pest control operations have been completed, the supporting food-inspection activity shall be requested to make a determination as to the serviceability of the affected product. Disposition instructions shall be provided by DLA-TS. This determination will be made in accordance with the instructions provided in Appendix S. DLA-owned infested subsistence in depots or activities shall not be shipped to another potential user regardless of the species or number of insects found in the product.

9. Infestation reporting procedures for other infestible products.

a. Infestations involving infestible clothing and textiles, medical items, and wooden products shall be reported to a DLA-TS entomologist within 24 hours of discovery. Infestations shall be reported, and insect specimens submitted, as described in subparagraph 8, above.

b. The responsible pest control activity shall consult a DLA-TS entomologist for control recommendations after confirmation of infestation of clothing, textiles and medical items. After completion of pest control procedures, inspection personnel shall confirm eradication of the infestation and notify a DLA-TS entomologist. Stock will be returned to issue unless extenuating circumstances exist which would make it unusable. This determination shall be made jointly between the inspection activity and a DLA-TS entomologist.

c. The responsible pest control activity will consult a DLA-TS entomologist for control recommendations after receipt of notification of wood product infestation. After completion of pest control procedures, inspection personnel shall confirm eradication of the infestation and notify a DLA-TS entomologist. Stock will normally be returned to issue unless determined otherwise by the inspection activity, a DLA-TS entomologist, and/or a consulting Military Service entomologist.

#### F. RESPONSIBILITIES

#### 1. HQ DLA

a. Assistant Executive Director, Logistics Policy (J-33) will:

(1) Monitor the implementation of this program at all activities storing DLAowned infestible materials.

(2) Review the recommendations of the DLA-TS entomologist on stored products pest management and issue implementation instructions, when appropriate.

(3) Coordinate with the HQ DLA Staff Veterinarian on all recommendations pertaining to food inspection activities.

(4) Coordinate with the DLA Staff Entomologist on requests for on-site

entomological surveys from DLA field activities storing infestible materials.

b. The DLA Staff Entomologist exercises overall staff supervision of pest management programs conducted at DLA activities and provides technical advice to the Assistant Executive Director of Logistics Policy.

## 2. DLA Field Activities

a. The Commander, DLA-TS will:

(1) Provide technical assistance upon request to all activities storing DLAowned infestible products and assure that all subsistence specifications and contracts, where applicable, contain requirements to protect against pest infestation.

(2) Assure the maximum utilization of appropriate integrated pest management techniques to protect infestible clothing and textile stocks, medical items, and wood products.

(3) Provide for continuous review and update of all aspects of the Program established by this Instruction and initiate all technical changes as required.

(4) Upon request, provide technical entomological guidance or assistance to the activities that store DLA-owned infestible products.

(5) Perform on-site reviews at each Continental United States (CONUS) and overseas location storing DLA-owned infestible products.

(6) Coordinate with customer activities storing DLA-procured infestible materials for resolution of customer-identified pest problems and documentation of pest loss information.

a. The Commanders of Defense Supply Centers, Defense Depots, and Defense Subsistence Offices storing infestible materials will fully implement the Program in accordance with this Instruction.

b. The Commanders of Military Service Depots storing DLA-owned infestible materials shall implement the Program in accordance with appropriate Interservice Support Agreements and this Instruction.

3. Consulting DOD Entomologist who has been designated under the provisions of an Interservice Support Agreement or Memorandum of Understanding will:

a. Conduct periodic (at least annual) Stored Products Pest Management Program reviews of the overseas Service Depot, DLA Storage Site, or Prepositioned Stock Point assigned and provide a written report as outlined in paragraph H.6.a.

b. Conduct an entomological evaluation of pest problems involving DLA- owned materials upon request by a DLA-TS entomologist or appropriate food inspector and provide a report of evaluation as outlined in paragraph H.6.a.

c. Upon request, identify insect pests found infesting DLA-owned materials.

4. The DLA-TS entomologist will:

a. In coordination with DLA Staff Entomologist, maintain and update the technical content of this Instruction in or implementation by J-33.

b. Notify storage sites when additional insect surveillance is necessary.

c. Notify storage sites when product incubation is necessary.

d. Monitor evaluations and recommendations made by consulting DOD entomologists concerning the Program.

e. Develop specific Integrated Pest Management Programs for the procurement and storage of Military Operational Rations and provide periodic on- site program reviews of participating contractor-operated processing, assembly, and storage facilities.

f. Provide DLA representation to the Armed Forces Pest Management Board Stored Products Committee.

g. Coordinate the use of any non-routine pesticide or pest management procedure (a pesticide or procedure approved for use at military installations) at a storage site with the DLA Staff Entomologist and the host Service entomologist.

G. EFFECTIVE DATE. This instruction is effective immediately.

### H. INFORMATION REQUIREMENTS

1. The responsible pest control activity for each facility storing DLA owned materials shall provide an information copy of the monthly DD Form 1532, Pest Management Report to DLA-TS -FTSC. Pest control activities not utilizing DD Form 1532 shall provide the appropriate information via local or Service unique means.

2. A summary Infestation Incident Report (enclosure 2) shall be prepared for each stored products infestation occurrence involving DLA-owned infestible material. The information will be compiled jointly by storage activity, inspection unit, and pest control personnel and submitted to DLA-TS -FTSC within 10 working days after the infestation occurrence.

3. Telephonic notification or message (DLA Troop Support PHILADELPHIA PA//DLA Troop Support -FTSC) reporting to a DLA-TS entomologist is authorized (see paragraph 4a).

4. Records of all stored products pest management procedures shall be retained by the responsible pest control activity for a period of at least 1 year from date of completion.

5. Product quality history records shall be maintained as described in Appendix S, DLAR 4155.37, Materiel Quality Control Depot Storage Standards, and will include documentation concerning all associated pest infestations and resultant control activities. All product fumigations shall be specifically documented.

6. Consulting DOD entomologists, as designated by Interservice Support Agreement or Memorandum of Understanding, shall provide written consultative reports as follows:

a. A written report detailing the annual (more frequently if required) Stored Products Pest Management Program review shall be provided by the consulting entomologist. The report will contain observations, significant findings, conclusions, and recommendations designed to correct deficiencies noted. The report will be submitted to DLA Troop Support - FTSC, 700 Robbins Avenue, Bldg. 6, Philadelphia, PA 19111- 5092, within 30 days of the date of visit.

b. A written summary report shall be submitted for each requested special problem evaluation.

c. Insect identification results shall be submitted to DLA Troop Support - FTSC via completed DD Form 1222.

d. The above-described reports are exempt from Reports Control per DLAR 5000.12, Management and Control of DLA Information Requirements.

7. All exceptions, modifications, additions, or deletions to this program will be evaluated by a DLA-TS entomologist, and coordinated when necessary, with the DLA Staff Entomologist. When deemed necessary by a DLA-TS entomologist, a specific Integrated Stored Products Pest Management Program will be prepared for any facility or site storing DLA-owned infestible material. When necessary, this program will be tailored to encompass unique situations encountered at any storage site storing DLA-owned infestible materials.

BY ORDER OF THE DIRECTOR

JOHN WOLOSZYN Chief, Supplier Support Division Supplier Operations, Subsistence

2 Encl

1. Representative Infestible Products List

2. Infestation Incident Report

COORDINATION: DLA Troop Support (FTSC), and with DLA Staff Entomologist.

## REPRESENTATIVE INFESTIBLE PRODUCTS LIST

A. Subsistence (any of the following product types not packaged in cans or hermetically sealed glass may be susceptible to pest infestation or contamination).

1. Flour 15. Spices and spiced mixes (except alt). 16. Dried/dehydrated fruits and vegetables 2. Pasta noodles 3. Rice 17.Nuts 18. Candy and confectioneries 4. Dry beans, peas, and lentils 19. Coffee and tea 5. Pet food 20. Coconut 6. Baking/bakery mixes 21. Dehydrated soup/mixes 7. Rolled oats 22. Pearl barley 8. Yeast 23. Hominy grits 9. Grain based food additives 24. Farina 10. Cereal and cereal mixes 25. Popcorn 11. Cookies and pastry products 26. Cheese 12. Crackers 13. Cocoa and cocoa beverage **27.** Operational rations powder 14. Dry milk products

B. Clothing and Textiles

- 1. Any clothing item not made of 100 percent manmade fibers.
- 2. Any textile product not made of 100 percent manmade fibers.

NOTE: Some medical supply items may fall into the above categories.

- C. Wooden Products
  - 1. Lumber and wooden building materials (untreated).
  - 2. Furniture.
  - 3. Ornamental and decorative wood.

NOTE: Paper products and books are infestible and should not be stored in subsistence storage facilities

Encl 2 DLA Troop Support I 4145.31

### INFESTATION INCIDENT REPORT

This enclosure may be reproduced and shall be used to report each infestation incident to DLA Troop Support - FTSC within 10 working days of the occurrence. The following information is required:

1. Date infestation discovered
2. Date product received
3. Source: Supplier or other depot
4. Method of shipment (truck/rail)
5. Material infested:
<ul> <li>a. Nomenclature</li> <li>b. National Stock Number</li> <li>c. Contract number / lot number</li> </ul>
d. Quantity
6. Name of pest(s) involved
7. Degree of Infestation
8. Pest control procedure(s) utilized
9. Additional comments:
10. Reporting installation / Inspector

Mail this completed form to DLA Troop Support -FTSC, 700 Robbins Avenue, Bldg. 6, Philadelphia, PA 19111-5092. Telephonic (DSN 444-3876, COM (215) 737-3876) or message (DLA Troop Support PHILADELPHIA PA//DLA Troop Support -FTSC) reporting is required.