



Department of Defense INSTRUCTION

NUMBER 4150.7

April 22, 1996

USD(A&T)

SUBJECT: DoD Pest Management Program

- References:
- (a) DoD Directive 4715.1, "Environmental Security," February 24, 1996
 - (b) Section 125 of title 10, United States Code
 - (c) DoD 5025.1-M, "DoD Directives System Procedures," August 1994, authorized by DoD Directive 5025.1, June 24, 1994
 - (d) "DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides," December 8, 1985¹
 - (e) through (p), see enclosure 1

1. PURPOSE

This Instruction:

1.1. Implements policy, assigns responsibility, and prescribes procedures for the Department of Defense Pest Management Program, as established under references (a), (b), and the Joint Service Regulation, "Joint Field Operating Agencies of the Office of The Surgeon General of the Army," August 16, 1988.

1.2. Authorizes the publication of DoD 4150.7-M, "DoD Pest Management Training and Certification," in accordance with reference (c).

1.3. Authorizes the publication of DoD 4150.7-P, "DoD Plan for the Certification of Pesticide Applicators," in accordance with reference (c).

1.4. Designates the Secretary of the Army as the DoD Executive Agent for the Armed Forces Pest Management Board (AFPMB).

¹ Available from the AFMB, Forest Glen Section/Walter Reed Army Medical Center, 20307-5001 Washington, DC.

2. APPLICABILITY AND SCOPE

This Instruction:

2.1. Applies to the Office of the Secretary of Defense (OSD), the Military Departments (including the Coast Guard when it is operating as a Military Service in the Navy), the Chairman of the Joint Chiefs of Staff, the Unified Combatant Commands, the Inspector General of the Department of Defense, the Defense Agencies, and the DoD Field Activities (hereafter referred to collectively as "the DoD Components"). The term "Military Services," as used herein, refers to the Army, the Navy, the Air Force, and the Marine Corps.

2.2. Applies to all DoD operations, activities, and installations worldwide including appropriated fund activities; non-appropriated fund activities; contracted activities; and Government-owned, contractor-operated facilities.

2.3. Applies to all DoD buildings, structures, lands, public works, equipment, aircraft, vessels, and vehicles.

2.4. Applies to all DoD vector control and pest management operations performed worldwide during peacetime, wartime, and military deployments including those done by contract.

2.5. Outside the Continental United States (OCONUS), applies consistent with applicable international agreements, Status of Forces Agreements, Final Governing Standards (FGS) issued for the host nations, or where no such FGS have been issued, the criteria in the Overseas Environmental Baseline Guidance Document.

2.6. Does not apply to:

2.6.1. The civil works function of the Army Corps of Engineers.

2.6.2. State-owned or State-operated (funded) installations or facilities that the National Guard uses part-time or full-time.

3. DEFINITIONS

Terms used in this Instruction are defined in enclosure 2.

4. POLICY

It is DoD Policy under DoD Directive 4715.1 (reference (a)) to:

4.1. Establish and maintain safe, effective, and environmentally sound integrated pest management (IPM) programs to prevent or control pests and disease vectors that may adversely impact readiness or military operations by affecting the health of personnel or damaging structures, materiel, or property.

4.2. Ensure DoD pest management programs achieve, maintain, and monitor compliance with all applicable Executive Orders and applicable Federal, State, and local statutory and regulatory requirements.

4.3. Incorporate sustainable IPM philosophy, strategies, and techniques in all aspects of DoD and Component vector control and pest management planning, training, and operations including installation pest management plans and other written guidance to reduce pesticide risk and prevent pollution.

5. RESPONSIBILITIES

5.1. The Under Secretary of Defense for Acquisition and Technology, through the Deputy Under Secretary of Defense (Environmental Security) (DUSD(ES)), shall:

5.1.1. Oversee the implementation of this Instruction and represent the Secretary of Defense for both internal and interagency matters on the DoD Pest Management Program.

5.1.2. Provide operational direction and supervision to the AFPMB.

5.1.3. Provide policy guidance and coordination for the DoD Pest Management Program.

5.1.4. Maintain and enforce the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)).

5.1.5. Monitor compliance with this Instruction, including the Components' use of the DoD Pest Management Program Measures of Merit (enclosure 3).

5.1.6. Coordinate pest management actions with the Assistant Secretary of

Defense for Health Affairs when human health is an issue.

5.2. The Director of Defense Research and Engineering, under the Under Secretary of Defense for Acquisition and Technology, shall, in coordination with DUSD(ES), ensure that an appropriate level of effort is provided in research, development, and transfer of technology to support DoD pest management requirements.

5.3. The Heads of the DoD Components shall:

5.3.1. Establish and maintain programs that conform to the policy, procedures, and requirements specified in this Instruction including the program elements in enclosure 4.

5.3.2. Emphasize IPM techniques in their pest management programs as a means to reduce pesticide risk and prevent pollution.

5.3.3. Exercise oversight and review of installation pest management programs from the Component's major command and headquarters level.

5.3.4. Maintain accurate and complete reporting and record-keeping of pest management operations and pesticide use.

5.3.5. Ensure that actions taken under the policy in section 4, above, are consistent with DoD Directive 4715.1 (reference (a)).

5.3.6. Implement programs to achieve, maintain, and monitor compliance with applicable Federal, State, and local statutory and regulatory requirements for pest management.

5.3.7. Ensure that Commanders of deployed forces enforce the use of all appropriate personal protection measures, including arthropod skin and clothing repellents and bed nets, to protect their troops from vector-borne diseases and rodent and arthropod health threats.

5.3.8. Ensure that any pesticide applications, excluding arthropod skin and clothing repellents, performed during military operations are recorded using DD Form 1532-1, "Pest Management Maintenance Report," or a computer-generated equivalent. The DoD Components shall establish a method to archive these records for permanent retention.

5.3.9. Ensure the implementation of IPM in Component pest management programs, operations, regulations, publications, pest management training, and pesticide applicator certification programs.

5.3.10. Coordinate pest management actions, as appropriate, with the Assistant Secretary of Defense for Health Affairs, with State and local governments, and with host-nation agencies involved with pest management when human health is an issue.

5.3.11. Ensure that the Component's DoD pest management consultants review installation pest management programs on-site at least every 36 months and annually review installation pest management plans for adherence to DoD policy.

5.3.12. Establish procedures to ensure that recommendations from on-site pest management program reviews and annual reviews of pest management plans will result in appropriate corrective action.

5.3.13. Designate Component senior pest management consultants as the primary points of contact for the Component's pest management program and for membership on the AFPMB in support of the Defense Environmental Security Council and inform the Executive Director, AFPMB, of these designated consultants.

5.3.14. Designate pest management consultants, as certifying officials under the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)), to certify the competency of the Component's pesticide applicators; establish procedures for designating and certifying specific DoD pest management consultants in aerial application pest control to approve pest management projects requiring aerial application of pesticides; and inform the Executive Director, AFPMB, of these designated consultants.

5.3.15. Implement pest management measures of merit (enclosure 3) and answer data calls for the measures of merit from the DUSD(ES).

5.3.16. Monitor pesticides available for purchase in DoD commissaries and Component exchanges to ensure the pesticides available for sale are least-hazardous pesticides that are compatible with DoD IPM programs and are pesticides that comply with applicable Federal, State, and local laws. DoD commissaries and Component exchanges OCONUS shall comply with subsection 2.5., above.

5.3.17. Cooperate with State and local government agencies involved with

pest management.

5.3.18. Participate in the development of the Defense Environmental Security Corporate Information Management (DESCIM) process for pest management and use the pest management information system when fielded.

5.3.19. Provide management support, resources, and a professionally qualified pest management staff sufficient to ensure effective implementation of pest management programs at all organizational levels.

5.3.20. Establish surveillance programs to assess potential adverse environmental or public health effects from pesticide use and to monitor the health and safety of persons who apply pesticides.

5.3.21. Monitor the use of IPM and reduction of pesticide use in installation pest management programs.

5.3.22. Ensure that Installations:

5.3.22.1. Develop, maintain, annually review, and revise their pest management plans consistent with the program elements in enclosure 4 and AFPMB Technical Information Memorandum (TIM) 18, "Installation Pest Management Guide," February 1987.

5.3.22.2. Implement pest management programs approved by pest management consultants and performed by certified pesticide applicators in accordance with the pest management plan written for each installation.

5.3.22.3. Establish pest management self-help programs for military housing when cost effective and when IPM monitoring indicates a need for a self help program.

5.3.22.4. Have all pesticide applications to DoD installations made only by properly trained and certified personnel in accordance with DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)) or by State-certified applicators.

5.3.22.5. Use pesticides in accordance with applicable laws including FIFRA (reference (e)), and the constraints of subsection 2.5., above.

5.3.22.6. Use only pesticides that have been approved by a DoD pest

management consultant. Consideration should be given to locally purchased pesticides to ensure conformance with State management plans for ground water protection and to facilitate use of recyclable pesticide containers when appropriate pesticides are not available in the Federal supply system. Pesticides may be procured locally if needed for an emergency, if required due to unique local situations, or if required in quantities so small that assignment of an NSN is not practical.

5.3.22.7. Maintain complete daily pesticide application and pest management operations records as required by FIFRA (reference (e)) and 7 U.S.C. 136i-1 (reference (f)) or for pest management measures of merit, using DD Form 1532-1 or a computer-generated equivalent. Produce a monthly summary, using DD Form 1532 or computer-generated equivalent, to provide data for regulatory, DoD, Federal, State, or local agency data calls; Component program review and oversight; and Measures of Merit. Installation commanders shall ensure these records are archived after 2 years for permanent retention.

5.3.22.8. Use pest management contracts when more cost-effective than in-house services. Ensure that firms and their employees performing contract pest management work on DoD installations, and in support of DoD operations overseas, comply with all certification, licensing, and registration requirements of the State or country where the work is performed. Ensure that the technical portions of contracts involving pest management reflect IPM methodology and are reviewed and approved by a DoD pest management consultant before solicitation.

5.3.22.9. Have quality assurance evaluators (QAEs), who have been trained in pest management at DoD-sponsored courses, inspect pest management operations and pesticide applications performed by contractors.

5.3.22.10. Report pest management operations and pesticide applications performed by contractors as required in paragraph 5.3.22.7., above.

5.4. The Secretary of the Air Force shall maintain a large-area, fixed-wing aerial pesticide application capability to control disease vectors, pest organisms, and vegetation and to treat oil spills in combat areas, on DoD installations, or in response to declared emergencies and shall provide sufficient training for aerial pesticide application air crews and ground support personnel.

5.5. The Secretary of the Army, as Executive Agent, shall provide administrative and logistic support, through the Surgeon General, for operation of the AFPMB.

5.6. The Secretaries of the Military Departments shall ensure that the Surgeons General shall nominate qualified candidates and provide uniformed military entomologists for the directorate positions of the AFPMB and provide technical support for the development, testing, and evaluation of pest management equipment as described below:

5.6.1. The Surgeon General of the Army shall provide three military entomologists to the AFPMB staff and conduct studies on engineering and durability of pest management equipment.

5.6.2. The Surgeon General of the Navy shall provide 2 military entomologists to the AFPMB staff and conduct studies on efficacy and military application of pest management equipment.

5.6.3. The Surgeon General of the Air Force shall provide 2 military entomologists to the AFPMB staff.

5.7. The Deputy Under Secretary of Defense for Environmental Security, through the Armed Forces Pest Management Board, shall:

5.7.1. Recommend policy, provide scientific advice, and enhance coordination among the DoD Components on all matters related to pest management.

5.7.2. Serve as the coordinating office for the DoD Undesirable Plant Management Program required by the Federal Noxious Weed Act (FNWA) (reference (g)).

5.7.3. Review and update DoD Environmental Security Measures of Merit for Pest Management.

6. PROCEDURES

6.1. The Component's pest management programs shall include the elements in enclosures E3, E4, E6, E7, and E8.

6.2. The AFPMB, reestablished by DoD Directive 4715.1 (reference (a)), consisting of a Council and Committee Structure, Directorate, and Defense Pest Management Information Analysis Center (DPMIAC) shall operate as described in enclosure 5.

7. INFORMATION REQUIREMENTS

The record-keeping and the reporting requirements prescribed herein are assigned Report Control Symbol DD-A&T(A&AR)1080. Existing data elements from DoD 8320.1-M-1 (reference (h)) shall be used in the reporting requirements to the greatest extent possible.

8. EFFECTIVE DATE

This Instruction is effective immediately.


Paul Kaminski
Under Secretary of Defense
for Acquisition and Technology

Enclosures - 8

1. References
2. Definitions
3. DoD Environmental Security Measures of Merit for Pest Management
4. DoD Pest Management Program Elements
5. AFPMB Functions, Organizations and Management
6. Requirements for Installation Pest Management Programs
7. Procedures for the Acquisition of Pest Management Equipment and Pesticides
8. Content of Installation Pest Management Plans, Suggested Format

E1. ENCLOSURE 1

REFERENCES, continued

- (e) Section 136 et seq. of title 7, United States Code, "Federal Insecticide, Fungicide, and Rodenticide Act 1976 (FIFRA)," as amended
- (f) Section 136i-1 of title 7, United States Code, 1990, Food, Agriculture, Conservation, and Trade Act of 1990"
- (g) Section 10 of title 7 (2801), United States Code, Federal Noxious Weed Act of 1974 et seq., as amended
- (h) DoD 8320.1-M-1, "Data Element Standardization Procedures," January 1993, authorized by DoD Directive 8320.1, September 26, 1991
- (i) Sections 4321 to 4370a of title 42, United States Code, "National Environmental Policy Act (NEPA) of 1969," as amended
- (j) DoD 4500.54-G, "DoD Foreign Clearance Guide," current edition, authorized by DoD Directive 4500.54, May 1, 1991
- (k) Memorandum of Agreement between the United States Department of Agriculture (USDA) and the Department of Defense for Conduct of Forest Insect and Disease Suppression on Lands Administered by the U.S. Department of Defense, December 1990 ¹
- (l) Section 1531 et seq. of title 16, United States Code, "Endangered Species Act of 1973," as amended
- (m) Department of Defense-United States Department of Agriculture/Animal Plant Health Inspection Service/Animal Damage Control Memorandum of Agreement on Animal Damage Control, April 1990¹
- (n) Section 1001 et seq. of title 16, United States Code, "Aquatic Nuisance Prevention and Control Act of 1990"
- (o) Executive Order 11850, "Renunciation of Certain Uses in War of Chemical Herbicides and Riot Control Agents," April 8, 1975¹
- (p) DoD Directive 5105.18, "DoD Committee Management Program," January 18, 1990

¹ Available from the AFMB, Forest Glen Section/Walter Reed Army Medical Center, 20307-5001 Washington, DC.

E2. ENCLOSURE 2

DEFINITIONS

E2.1.1. Certifying Officials. Professional DoD pest management personnel designated, in writing by the Components to the Executive Director, AFPMB, who review and certify that qualifications of DoD applicators meet the DoD standards in DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)).

E2.1.2. Component Senior Pest Management Consultant. The professional DoD pest management individuals, designated in writing by the Components to the Executive Director, AFPMB, who are the primary points of contact for the Component's pest management program including technical guidance, management oversight, and information requirements.

E2.1.3. Direct Supervision. Supervision that includes being at the specific location where pest management work is conducted; providing instruction and control; and maintaining a line-of-sight view of the work performed. Certain circumstances may temporarily remove the line-of-sight view of the application of pesticide from the supervisor such as topographic constraints, vegetation constraints, or building structural constraints. Under these temporary circumstances, the supervisor shall be responsible for the actions of the pesticide applicators. (See Uncertified Installation Pesticide Applicator, Definition E2.1.13.5., below).

E2.1.4. Disease Vector. Any animal capable of transmitting the causative agent of a human disease; serving as an intermediate or reservoir host of a pathogenic organism; or producing human discomfort or injury, including (but not limited to) mosquitoes, flies, other insects, ticks, mites, snails, and rodents. It is recognized that certain disease vectors are predominately economic pests that as conditions change may require management or control as a disease vector.

E2.1.5. Disinsection. The procedure of killing or removing insects from ships or aircraft to prevent their importation into another port or country.

E2.1.6. 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 education, habitat modification, biological control, genetic control, cultural control, mechanical control, physical control, regulatory control, and where necessary, the judicious use of least-hazardous pesticides.

E2.1.7. Monitoring. Thorough inspections or surveys conducted on a regular basis to determine the presence and prevalence of pests or disease vectors.

E2.1.8. Nuisance Pests. Insects, other arthropods, and other organisms that do not cause economic damage or adversely affect human health, but which cause minor annoyance on occasion.

E2.1.9. On-Site Supervision. Supervision that includes being physically located on the installation, but not necessarily at the specific worksite, during the work performance and being able to be contacted and at the worksite within 30 minutes.

E2.1.10. Personal Relief. Pest management control efforts made by DoD personnel or their family members at their own expense for control of pests consistent with DoD and Component pest management policy.

E2.1.11. Pest Management Quality Assurance Evaluator. A quality assurance inspector who is a DoD employee, trained in pest management, who protects the Government's interest through on-site performance evaluation of commercial pest management contracts or other contracts that involve the use of pesticides.

E2.1.12. Pesticide. Any substance or mixture of substances, including biological control agents, that may prevent, destroy, repel, or mitigate pests and are specifically labeled for use by the U.S. Environmental Protection Agency (EPA). Also, any substance or mixture of substances used as a plant regulator, defoliant, desiccant, disinfectant, or biocide. (See Restricted-Use Pesticide, definition E2.1.21.) The AFPMB does not review or approve disinfectants or biocides.

E2.1.13. Pesticide Applicator. Any individual who applies pesticides or supervises the use of pesticides by others.

E2.1.13.1. Certified Pesticide Applicator. Any individual who applies pesticides or supervises the use of pesticides, and who has been authorized to do so by successfully completing a training program approved by the EPA, followed by formal certification by the Department of Defense or a State, or for OCONUS the provisions of subsection 2. 5. of the main body of this Instruction.

E2.1.13.2. DoD-Certified Pesticide Applicators. DoD military or civilian

personnel certified in accordance with the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)).

E2.1.13.3. Installation Pesticide Applicators. DoD employees or contract personnel whose job responsibilities involve the application of pesticides on DoD installations and property.

E2.1.13.4. State-Certified Pesticide Applicators. Persons certified in accordance with FIFRA (reference (e)) by a State with an EPA-approved certification plan.

E2.1.13.5. Uncertified Installation Pesticide Applicators. DoD employees who are not certified under the Department of Defense or State plan during an apprenticeship period not exceeding 2 years and who must apply pesticides under the supervision of a DoD or State-certified applicator.

E2.1.14. Pest Management. The prevention and control of disease vectors and pests that may adversely affect the DoD mission or military operations; the health and well-being of people; or structures, materiel, or property.

E2.1.15. Pest Management Consultant. Professional DoD pest management personnel located at Component Headquarters, field operating agencies, major commands, facilities engineering field divisions or activities, or area support activities who provide technical and management guidance for the conduct of installation pest management operations. Some pest management consultants may be designated by their Component as certifying officials.

E2.1.16. Pest Management Coordinator. The individual officially designated by the installation commander to coordinate and oversee the installation pest management program and installation pest management plan. Pest management coordinators shall be certified as pesticide applicators if their job responsibilities require them to apply or supervise the use of pesticides.

E2.1.17. Pest Management Materiel. Equipment or pesticides used to monitor, prevent, or control pests and disease vectors. Equipment items include, but are not limited to, all pesticide dispersal equipment, traps, nets, and pest-attracting or pest-repelling devices.

E2.1.18. 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 plans are required as a means of establishing and implementing an installation pest management program.

E2.1.19. Pests. Arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds, and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

E2.1.20. Professional Pest Management Personnel. DoD military officers commissioned in the Medical Service or Biomedical Sciences Corps or DoD civilian personnel with college degrees in biological or agricultural sciences who are in a current assignment that includes pest management responsibilities exercised regularly. DoD civilian employees also shall meet Office of Personnel Management (OPM) qualification standards. Based on assignment, some professional pest management personnel are pest management consultants.

E2.1.21. Restricted-Use Pesticide. A pesticide that the Administrator of the EPA (in accordance with FIFRA (reference (e))), or a State regulatory agency determines to have the potential to cause unreasonable adverse effects on the environment or human health, when applied in accordance with its directions for use, and therefore requires additional regulatory restrictions.

E2.1.22. State. Any one of the 50 United States of America; the District of Columbia; the Commonwealths of Puerto Rico, the Northern Marianas, Virgin Islands; and the Territories of Guam and American Samoa.

E2.1.23. Surveillance. Thorough inspections or surveys made before or after pest management treatments to determine the presence and prevalence of pests or disease vectors.

E2.1.24. Technical Information Memoranda. Technical guidance prepared by the AFPMB on specific pest management and disease vector control topics. Technical Information Memoranda (TIM) are available from the AFPMB, Forest Glen Section/Walter Reed Army Medical Center, Washington, DC 20307-5001.

E2.1.25. Training. Formal or informal instruction in one or more subject areas concerning IPM and disease vector control to increase the expertise and measurable competence of pest management personnel in performance of specific IPM and disease vector control skills. Training methods are varied and include workshops, seminars,

conferences, symposia, training courses, apprenticeships, interactive models, satellite and video tele-training, correspondence courses, training support packages including video-based products, other distributive products, or materials.

E3. ENCLOSURE 3

DoD ENVIRONMENTAL SECURITY MEASURES OF MERIT FOR PEST MANAGEMENT

E3.1.1. Measure of Merit 1. Installation Pest Management Plans;

E3.1.1.1. By the end of FY 97, 100 percent of DoD installations will have pest management plans prepared, reviewed, and updated annually by pest management professionals.

E3.1.2. Measure of Merit 2. Pesticide Use Reduction;

E3.1.2.1. By the end of FY 2000, the amount of pesticide applied annually on DoD installations will be reduced by 50% from the FY 93 baseline in pounds of active ingredient. The goal for this measure of merit shall not be obtained by substituting more toxic pesticides that have lower application rates than the pesticide in use.

E3.1.3. Measure of Merit 3. Installation Pesticide Applicator Certification;

E3.1.3.1. By the end of FY 98, 100 percent of DoD's installation pesticide applicators will be properly certified (either DoD or appropriate State). Direct hire employees have a maximum of 2-years to become certified after initial employment. Contract employees should have the appropriate State certification when the contract is let.

E4. ENCLOSURE 4

DOD PEST MANAGEMENT PROGRAM ELEMENTS

E4.1.1. DoD Pest Management Program Elements. DoD Pest Management Programs shall include the following elements that are described in this enclosure:

E4.1.1.1. Installation Pest Management Plans.

E4.1.1.2. Integrated Pest Management.

E4.1.1.3. Installation Consultative Support, Pest Management Program Reviews, and Audits.

E4.1.1.4. Training and Certification of Pest Management Personnel.

E4.1.1.5. Pesticides and Pest Management Equipment.

E4.1.1.6. Contracting for Commercial Pest Management Services.

E4.1.1.7. Specialized Pest Management Operations.

E4.1.1.8. Pest Management and Disease Vector Control in Military Contingency Operations,

E4.1.2. Installation Pest Management Plans. Each installation shall have a pest management plan as described in enclosure 6. The plan shall list all program objectives, arranged in order of priority, according to potential or actual impact on health, morale, structures, materiel, or property. Installations that have more than 0.5 productive work-years of pest management work shall have their own plan. Installations with less than 0.5 productive work-years must have an individual plan, or be included in a supporting installation's pest management plan. Professional pest management personnel or certified pesticide applicators shall manage these installation programs.

E4.1.2.1. Component Role. The DoD Components shall ensure that each installation has a pest management plan and that the Component's pest management consultants maintain the program through technical assistance, program review, and program oversight. The Components shall ensure that Installation Commanders:

E4.1.2.1.1. Plan and budget for the development and maintenance of the pest management plan.

E4.1.2.1.2. Ensure that qualified personnel develop and update the pest management plan annually.

E4.1.2.1.3. Designate a DoD-certified or State-certified pesticide applicator as the pest management coordinator to implement the plan.

E4.1.2.1.4. Ensure that the pest management coordinator formally coordinates appropriate portions of the pest management plan with the senior medical officer, environmental coordinator, and senior engineering officer and ensure that these individuals sign the cover sheet of the pest management plan.

E4.1.2.1.5. Ensure that appropriate portions of the pest management plan are reviewed by the Natural Resources Program Manager for consistency with the Natural Resources Management Plan.

E4.1.2.1.6. Ensure that the pest management coordinator forwards the pest management plan to the cognizant component pest management consultant for review, technical approval, and signature on the cover sheet.

E4.1.2.1.7. Approve and sign the pest management plan for implementation.

E4.1.2.1.8. Ensure implementation of the pest management plan and oversight of the installation pest management program by the pest management coordinator.

E4.1.2.1.9. Ensure that all pest management operations performed on the installation, except those for personal relief, are recorded, and ensure that all records are properly maintained and are reported to the cognizant component pest management consultant.

E4.1.2.2. Content. Pest management plans shall be comprehensive, long-range, narrative documents, as outlined in enclosure E8, and shall:

E4.1.2.2.1. Describe all installation and satellite installation pest management requirements and programs, including those for contracts, natural resources, golf courses, and out leases, and identify minimum pest management

staffing requirements.

E4.1.2.2.2. Describe all IPM procedures required to monitor and control pests on the installation.

E4.1.2.2.3. Describe all IPM procedures for surveillance and control of disease vectors.

E4.1.2.2.4. Identify all resources, such as work-years, facilities, and equipment, required to support the installation pest management program.

E4.1.2.2.5. Identify all pesticides, including EPA registration numbers, approved by the respective Component pest management consultant for use in the installation pest management program.

E4.1.2.2.6. Describe all health and safety measures that will be taken to protect both pest management personnel and the general public from pesticide exposure and risk.

E4.1.2.2.7. Identify any planned measures to comply with DoD Memoranda of Agreement with State pesticide regulatory offices relating to use or application of pesticides.

E4.1.2.2.8. Describe pest management functions that can be done more economically through commercial contracts and provide or reference cost comparison analyses.

E4.1.2.2.9. Describe any pest management operation with special environmental considerations such as those that:

E4.1.2.2.9.1. Use a restricted-use pesticide.

E4.1.2.2.9.2. Use any pesticide application that may contaminate surface or ground water.

E4.1.2.2.9.3. Include 259 or more contiguous hectares (640 acres) in one pesticide operation.

E4.1.2.2.9.4. May adversely affect endangered or other protected species or their habitats.

E4.1.2.2.9.5. Involve aerial application of pesticides.

E4.1.2.2.9.6. Involve management or control of designated noxious weeds in accordance with 7 U.S.C. 10 (reference (g)) in cooperation with local control efforts.

E4.1.2.2.9.7. Involve permits for the use of experimental-use pesticides.

E4.1.2.2.10. Identify animal control efforts for feral cats, feral dogs, or wildlife.

E4.1.2.2.11. Identify active or potential vector-borne diseases and describe medical department collaboration with local and state agencies or host nations for vector surveillance and control matters.

E4.1.2.2.12. Identify golf course pest management operations.

E4.1.3. Integrated Pest Management

E4.1.3.1. Background. IPM is the method of choice for DoD pest management and disease vector control. IPM is a sustainable approach to managing pests and controlling disease vectors by combining applicable pest management tools in a way that minimizes economic, health, and environmental risks. IPM uses regular or scheduled monitoring to determine if and when treatments are needed and employs physical, mechanical, cultural, biological, genetic, regulatory chemical, and educational tactics to keep pest numbers low enough to prevent unacceptable damage or impacts. Treatments are not made according to a predetermined schedule; they are made only when and where monitoring has indicated that the pest will cause unacceptable economic, medical, or aesthetic damage. Treatments are chosen and timed to be most effective and least disruptive to natural controls of pests. Least hazardous, but effective, pesticides are used as a last resort.

E4.1.3.2. Process. IPM in the Department of Defense shall be based on seven steps that are routine procedures for addressing each pest problem. These steps are:

E4.1.3.2.1. Identification and assessment of pest or disease vector problems.

E4.1.3.2.2. Development of a written management plan or strategy that emphasizes natural controls and non-chemical tactics to deal with pest and disease vector problems.

E4.1.3.2.3. Establishment of an action threshold for each pest and disease vector problem to define when corrective action must be implemented.

E4.1.3.2.4. Use of a monitoring procedure, such as inspection, trapping, or surveillance, for each pest and disease vector.

E4.1.3.2.5. Application of corrective action when a threshold is reached for any pest or disease vector.

E4.1.3.2.6. Use of a documentation system to catalogue monitoring information and to document management problems.

E4.1.3.2.7. Verification and evaluation procedures to ensure that the IPM program is meeting stated risk reduction measures and that information exists to redesign the IPM plan where required.

E4.1.4. Installation Consultative Support, Program Reviews and Audits

E4.1.4.1. Consultative Support. The DoD Components shall ensure that installations receive state-of-the-art technical assistance in IPM.

E4.1.4.2. Command Program Reviews. To ensure adequate oversight of DoD Component Pest Management Programs, DoD Component pest management consultants or designated pest management professionals shall conduct on-site reviews of installation pest management programs at least every 36 months with the following exceptions:

E4.1.4.2.1. Installations requiring less than 0.5 work-years of pest management services shall be reviewed at the discretion of the cognizant pest management consultant.

E4.1.4.2.2. Installations that receive pest management support from another DoD installation shall be reviewed during the review of the supporting installation.

E4.1.4.2.3. Installations with documented pest management problems,

such as deficiencies from environmental compliance audits, State inspections, or Federal inspections, should be reviewed annually until the deficiencies are resolved.

E4.1.4.2.4. On-site review requirements can be met by formal program reviews, environmental audits or assistance visits.

E4.1.4.3. Environmental Compliance Audits

E4.1.3.1. The Components shall ensure that pest management consultants or designated pest management professionals are available, on request, to provide technical assistance for the pesticide portion of environmental audits, to provide follow-up assistance to audits, or to further evaluate audit findings.

E4.1.3.2. The Components shall ensure installations notify the appropriate pest management consultant whenever Federal, State, or local regulators ask to inspect pest management operations. As directed by the Components, pest management consultants shall provide technical coordination services for such inspections consistent with existing Memoranda of Agreement between the Department of Defense and State pesticide regulatory offices relating to use or application of pesticides.

E4.1.5. Training and Certification of Pest Management Personnel

E4.1.5.1. Personnel Qualifications. Installation pest management programs are comprehensive and include all pest management operations on an installation to support facilities engineering, non-appropriated fund, leased or out-leased activities, contract operations, materiel resources, etc. Therefore, the installation pest management coordinator shall have an appropriate position, educational background, and management skills to implement the plan for the Installation Commander. DoD pesticide applicators shall meet the job qualification standards specified by the OPM. Outside of the United States, DoD pesticide applicators shall comply with subsection 2.5. of the main body of this Instruction.

E4.1.5.2. Training and Certification. All installation pest management personnel who apply or supervise the application of pesticides shall be trained and certified within 2 years of employment in accordance with the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides, reference (d), or an EPA-approved State certification plan. Personnel who are undergoing apprenticeship training, but are not yet certified, shall apply pesticides only under the direct supervision of a certified pesticide applicator.

E4.1.5.2.1. IPM and pesticide application requirements may vary with installation mission, location, size, and environmental considerations. Some installations may have unique requirements. Training requirements for individual pesticide applicators may vary due to the pest management categories and complexity of the work to be performed. Therefore, the Component's senior pest management consultants shall determine the training and experience necessary to perform the pest management activities within their areas of responsibility. The minimum training for DoD installation pesticide applicators or contractors shall be that required by the EPA for certification in the applicable pesticide application categories. However, additional training beyond certification may be required due to the circumstances at a particular installation or the nature of the work to be done. These additional pest management training requirements may be fulfilled by successful completion of any DoD, other Federal agency, State, local, or private pest management training, provided the specific DoD requirements would be satisfied by the training.

E4.1.5.2.2. Both DoD-certified and State-certified pesticide applicators shall be recertified every 3 years in accordance with the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)) and FIFRA (reference (e)), respectively. Designated Component-certifying officials may administratively extend individual certifications for up to 6 months for cause.

E4.1.5.2.3. Contractor employees performing pest management work on a DoD installation shall be certified prior to the beginning of the contract under a State plan accepted in the State in which the work is performed. The contractor shall provide evidence of certification in all appropriate pest management categories. Additionally, the contractor shall provide evidence of training and experience equivalent to that determined by the Components as necessary to satisfy the performance requirements for the particular pest management function to be contracted. Successful bidders for contracts shall be afforded the opportunity to receive initial DoD pest management training on a space-available basis at the contractor's expense.

E4.1.5.2.4. QAEs, trained in pest management, shall monitor and evaluate contractor performance for pest management services, unless a DoD employee, certified in accordance with the DoD Plan for the Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)), is available to assist the QAE. If an installation's pest management contract efforts are less than 0.25 work-year, the presence of a trained QAE at the installation is recommended, but is not mandatory.

E4.1.5.2.5. The DoD Components shall encourage all eligible professional pest management personnel to obtain appropriate certification in accordance with reference (d) and FIFRA (reference (e)) and to obtain certification from applicable professional boards and professional certifying organizations. Professional pest management personnel shall be certified if their duties include:

E4.1.5.2.5.1. Making recommendations for the use of pesticides, applying pesticides, or directly supervising the application of pesticides.

E4.1.5.2.5.2. Conducting demonstrations on the proper use and techniques of pesticide application or the supervision of such demonstrations.

E4.1.5.2.5.3. Conducting field research that includes using or supervising the use of pesticides.

E4.1.5.2.6. DoD personnel and family members who apply pesticides under DoD installation self-help programs or for their own relief are exempted from the certification requirement. Requirements for operational and deployable military personnel are described in section E4.1.8. of this enclosure, below.

E4.1.6. Pesticides and Pest Management Equipment

E4.1.6.1. Procurement of Pest Management Materiel

E4.1.6.1.1. AFPMB shall approve all introduction, stockage, and deletion of pest management materiel managed by the Defense Logistic Agency (DLA) for use in DoD programs. Enclosure E7 provides specific procedures for AFPMB review and approval of pesticides and equipment.

E4.1.6.1.2. The DoD Components shall not procure or acquire pest management materiel that has not been recommended by the AFPMB or approved by the cognizant Component pest management consultant. National Stock Numbers (NSNs) shall not be assigned to pest management materiel for use by the Department of Defense that has not been approved by the AFPMB. Upon approval by the appropriate pest management consultant, pest management materiel may be procured locally if needed for an emergency, if required due to unique local situations, or if required in quantities so small that assignment of an NSN is not practical.

E4.1.6.2. Pesticide Storage Facilities. The design of pesticide storage facilities shall comply with standards described in MIL-HDBK-1028/8A, "Military

Handbook, Design of Pest Management Facilities,” November 1991. Existing facilities shall comply with all applicable regulatory standards and shall, where feasible, be modified to meet the standards for new pesticide storage facilities.

E4.1.6.3. Pesticide Disposal. Installation Commanders shall ensure that installation pest management programs are managed to ensure pesticides do not become hazardous wastes. The installation pest management coordinator shall ensure that excess EPA-registered pesticides are either returned to the DLA Materials Return Program, transferred to a DoD installation able to use the materiel, or transferred to the servicing Defense Reutilization and Marketing Office. The appropriate DoD pest management consultant shall, if requested, provide assistance in identifying installations where usable pesticides could be used. When the EPA publishes a proposed pesticide regulatory action involving pesticide label suspension or cancellation that affects the Department of Defense, the Components and installations shall comply with administrative procedures developed between the DLA and AFPMB. The Components shall use the guidance in AFPMB TIM 21, “Pesticide Disposal for Pest Control Shops,” October 1986, for pesticide disposal.

E4.1.6.4. Pesticide Safety. To ensure the safe use of pesticides, DoD personnel shall handle and apply pesticides in accordance with the product's label directions and AFPMB TIM 14, “Personal Protective Equipment for Pest Management Personnel,” May 1992; TIM 15, “Pesticide Spill Prevention and Management,” June 1992; TIM 16, “Pesticide Fires: Prevention, Control and Cleanup,” January 1981; and TIM 21, “Pesticide Disposal Guide for Pest Control Shops,” October 1986. DoD policy prohibits construction of buildings with heating, ventilation and air conditioning (HVAC) ducts located in and below the floor to prevent accidental contamination of the ducts with termiticides. Similarly, DoD policy prohibits post-construction treatment of structures with HVAC ducts without a waiver from the Component pest management consultant.

E4.1.6.5. Electrically Operated Devices. It is DoD policy to not use electromagnetic exclusion or control devices, ultrasonic repellent or control devices, and outdoor devices for electrocuting flying insects on DoD installations, except as noted in AFPMB TIM 25, "Devices for Electrocutation of Flying Insects," August 1988. However, indoor devices for electrocuting flying insects can be used when selected, purchased, located, and used in accordance with AFPMB Technical Information Memorandum 25. Pest surveillance traps and monitoring equipment, such as non-electrocuting mosquito light traps, shall be used as integral tools for IPM programs.

E4.1.6.6. Paints and Coatings Containing Pesticides and other Biocides. DoD policy prohibits use of paints containing insecticides on DoD property. This guidance applies to both interior or exterior paints that contain insecticides intended for application to broad structural surfaces such as walls, ceilings, and siding. It also applies to insecticides formulated and labeled for use as paint additives. Paints containing fungicides as mildew inhibitors may be used when application directions specify no special restrictions due to the fungicide. Approved marine anti-fouling compounds or coatings may be applied to protect surfaces of watercraft.

E4.1.6.7. Preventive or Scheduled Pesticide Treatments. DoD policy prohibits the use of regularly scheduled, periodic pesticide applications except in situations where the installation pest management plan clearly documents that no other technology or approach is available to protect personnel or property of high value. Installations shall not use preventive pesticide treatments unless the appropriate pest management consultant has given approval based upon current surveillance information or records documenting past disease vector or pest problems that require this approach.

E4.1.7. Pest Management Contracting

E4.1.7.1. Background. The Department of Defense shall use pest management contracts when cost-effective or when advantageous for non-routine, large-scale, or emergency services, especially when specialized equipment or expertise is needed. Contractors shall comply with State regulatory requirements in the State where the work will be performed regarding certification, licensing and registration of pest management companies and their employees. Outside of the United States, contractors shall comply with section 2.5. of the main body of this Instruction.

E4.1.7.2. Review and Approval. Pest management consultants shall review and approve contract documents for pest management operations including augmentation contracts to ensure that appropriate pest management standards and IPM are specified. Contracting offices shall award augmentation contracts only when the respective pest management consultant has verified that the contract will provide necessary services beyond the capability of any in-house staff. The Components shall encourage installations that lack expertise in pest management to request the services of a DoD pest management consultant to develop the technical portions of pest management contracts in accordance with DoD/AFPMB Guideline Performance Work Statement (GPWS) for Contract Pest Control, July 1986. Pest management consultants shall act as technical consultants during the performance of contracted

work.

E4.1.7.3. Quality Assurance.

E4.1.7.3.1. The Components shall ensure that QAEs, who inspect the performance of contractor-provided pest management services, are trained in pest management.

E4.1.7.3.2. Installation Commanders shall base pest management QAE staffing decisions on the following factors:

E4.1.7.3.2.1. The number of pest management operations requiring 100 percent inspection.

E4.1.7.3.2.2. The number of different functions being performed simultaneously.

E4.1.7.3.2.3. The scope of the contract including required productive work-years.

E4.1.7.3.2.4. The level of monitoring or surveillance required for each operation.

E4.1.8. Specialized Pest Management Operations

E4.1.8.1. Aerial Application of Pesticides. Documentation for aerial application projects shall be in accordance with DoD and Component environmental requirements including compliance with the requirements of the NEPA (reference (i)). The DoD Components shall ensure that a designated pest management consultant at the major command level or higher, who is certified in the aerial application pest control category, approves all proposed pest management projects that involve the aerial application of pesticides. Approval shall be obtained before aerial application operations commence. DoD Component pest management consultants shall collaborate, as appropriate, with the 910th Airlift Wing (Air Force Reserve) during the review and approval process for aerial spray projects to be completed by the 910th. Installation commanders shall ensure that installation personnel update documentation for project approval if subsequent aerial application operations are planned.

E4.1.8.2. Disinsection of Military Aircraft. DoD personnel shall disinsect military aircraft for disease vectors and agricultural pests only when:

E4.1.8.2.1. Required by a foreign nation as a prerequisite to entry as specified in the DoD Foreign Clearance Guide (reference (j)).

E4.1.8.2.2. Mandated by the U.S. Department of Health and Human Services or the U.S. Department of Agriculture.

E4.1.8.2.3. Directed by a command-level or higher authority who, consistent with Joint Service regulation, "Quarantine Regulations of the Armed Forces," January 24, 1992, has determined that the point of embarkment has active vector-borne disease.

E4.1.8.2.4. No passengers are on board (except when mandated by the DoD Foreign Clearance Guide (reference (j))).

E4.1.8.3. Forest Pests. The Components shall cooperate with the USDA, Forest Service, on applicable pest management programs including annual USDA funding for forest insect and disease suppression projects on DoD-controlled land in accordance with the MOA between the USDA and the Department of Defense (reference (k)) and Joint Service Technical Manual, "Weed Control and Plant Growth Regulation," May 24, 1989.

E4.1.8.4. Medically Important Pests. The DoD Components shall ensure that responsibilities for surveillance and control of medically important insects and other arthropods are clearly delineated in installation pest management plans and operational plans. Specific guidance on the surveillance and control of Lyme disease vectors is found in AFPMB TIM 26, "Lyme Disease-Vector Surveillance and Control," March 1990.

E4.1.8.5. Nuisance Pests. Installation pest management personnel shall not apply pesticides or other control procedures for nuisance pests unless such measures have been approved by the appropriate pest management consultant.

E4.1.8.6. Pesticide Applications in the Range of Endangered Species. The Components shall comply with regulations, including 16 U.S.C. 1531 *et seq.* (reference (l)), requiring Federal Agencies to ensure their actions will not jeopardize endangered or threatened species (ETS) or associated habitat. Installation Commanders shall ensure that their installation pest management plans identify areas within their installation that contain ETS and that personnel using pesticides on the installation know the potential impact that pesticide applications could have on ETS. DoD pest management plans shall comply with the ETS protection efforts of the U.S.

Fish and Wildlife Service (FWS) and FWS limitations on pesticide usage. To prevent consultations before every pesticide application or operation in the habitat of an ETS, pertinent sections of installation pest management plan shall be submitted to the regional FWS office for review and comment. After initial coordination, only changes to the plan shall be forwarded to the FWS for review. Further coordination with the FWS is not required unless the conditions of the pesticide application(s) are changed as indicated by county bulletins, pesticide labels, ETS status, or land use. If the FWS arrives at a finding of "may affect" the ETS, and the pesticide application is considered a firm DoD requirement by the Installation Commander and cognizant pest management professional, the Installation Commander shall request a formal consultation with the FWS. OCONUS installations shall comply with section 2.5. of the main body of this Instruction.

E4.1.8.7. Pests in Health Care Facilities. Components shall ensure that pest management in health care facilities are conducted according to the guidance in AFPMB TIM 20, "Pest Management in Health Care Facilities," October 1989.

E4.1.8.8. Pest Management in Child Care and Food Service Facilities. DoD Components shall ensure that responsibilities for surveillance and control of insects and other arthropods in child care and Food Service are clearly delineated in installation pest management plans and operations.

E4.1.8.9. Pest Management in Military Quarters and Housing

E4.1.8.9.1. Background. Installation Commanders shall ensure that residents of military quarters and housing practice good sanitation and correct minor nuisance pest problems. Quarters and housing occupants are responsible for controlling pests such as cockroaches, household infesting ants, and mice not originating in other quarters. Control of medically important pests, including venomous arthropods, which could affect human health, and structural pests which could damage property, shall not be an occupant's responsibility.

E4.1.8.9.2. Installation Role

E4.1.8.9.2.1. Installation Commanders shall ensure that installation pest management services are provided in military housing only when the pest threatens Government property or the occupants' health, and the occupants have been unable to control the pests through self-help efforts. Exceptions shall only be made with the concurrence of the appropriate pest management consultant.

E4.1.8.9.2.2. Installation Commanders may allow residents of military housing to contract with licensed pest management companies at their own expense.

E4.1.8.9.3. Self-Help Program

E4.1.8.9.3.1. The DoD Components shall establish installation self-help pest management for military housing when cost-effective and when IPM monitoring indicates the need for a self-help program. Self-help pest management materials issued to occupants of military housing may include cockroach and ant baits and/or traps, mouse traps, glue boards, and general-use pesticide aerosols with crack and crevice devices as recommended by the cognizant pest management consultant. Liquid pesticides should not be issued. The office designated to manage the installation's self-help program should coordinate procurement and storage of pest management materials with the installation pest management shop, hazardous material manager, and the DLA Supply Center.

E4.1.8.9.3.2. Installation Commanders shall ensure that self-help personnel provide written instructions and appropriate precautions, beyond those on pesticide labels, to military quarters and housing occupants to ensure proper pesticide application and safety.

E4.1.8.9.3.3. If pesticides are issued to occupants, records must be maintained as described in subparagraph 5.3.22.7. of the main body of this Instruction. These records should enable installation self-help personnel to validate the occupant's attempts to control target pests before providing installation pest management services. Pest management consultants should review these records during annual reviews to evaluate the efficiency of the installation's self-help program.

E4.1.8.10. Pest Management at Closing Installations. Because pests may cause serious damage to unused facilities, the Components shall ensure that pest management consultants provide guidance needed to protect all closing or closed facilities from pests from the beginning of deactivation until property disposal.

E4.1.8.11. Quarantinable Pests. The Joint Service, "Quarantine Regulations of the Armed Forces," January 24, 1992, contains policy for quarantine regulations applicable to the Armed Forces.

E4.1.8.12. Stored Products Pests. The DoD Components shall implement measures to minimize insect and vertebrate pest damage to subsistence, clothing and

textiles, medical, and other infestible stored materiel according to AFPMB TIM 27, "Stored Products Pest Monitoring Techniques," June 1992. The Components shall ensure fumigation of subsistence stocks follows the guidance provided in AFPMB TIM 11, "Hydrogen Phosphide Fumigation with Aluminum Phosphide," February 1987. Guidance for protecting Meal, Ready-to Eat Rations is available from Component pest management consultants. DLA Regulation 4145.31, "Stored Product Pest Management Program," June 8, 1990, provides pest management guidance on infestible stored products.

E4.1.8.13. Turf and Ornamental Pests. Installation Commanders shall implement measures to prevent unacceptable damage to shade trees, ornamental plantings, and turf (including golf courses) by insects, diseases and weeds. Further, they shall ensure that pesticide applications, if required, are based on specific identification of the target pest by trained personnel. The pest management plan shall identify recurring infestations. Installation Commanders shall ensure the installation pest management plan describes the use of IPM for turf and ornamental pests, and environmentally and economically beneficial land management practices, such as the use of native plants, to reduce pesticide use.

E4.1.8.14. Undesirable Plants. The DoD Components shall develop programs to comply with the FNWA (reference (g)). The Components shall:

E4.1.8.14.1. Designate an office or person adequately trained in the management of undesirable plant species to develop and coordinate the Component's undesirable plant management program.

E4.1.8.14.2. Plan, program, and budget to achieve, maintain, and monitor compliance with the FNWA (reference (g)).

E4.1.8.14.3. Ensure that installations complete and carry out cooperative agreements with State agencies regarding the management of undesirable plant species on installations.

E4.1.8.14.4. Establish integrated management systems to control or contain undesirable plant species targeted under cooperative agreements. The FNWA (reference (g)) does not require the Components to carry out programs on installations unless similar programs are being implemented on State or private lands in the vicinity of the installation.

E4.1.8.15. Vertebrate Pests. The Components shall manage vertebrate pests,

in accordance with the MOA between the Department of Defense and USDA/APHIS/ADC (reference (m)), and:

E4.1.8.15.1. Implement vertebrate pest management programs including wildlife aircraft strike hazard reduction programs to prevent interference with operations, destruction of real property, and adverse impacts on health and morale.

E4.1.8.15.2. Cooperate with Federal, State and local agencies that have implemented animal damage control programs on adjacent public and private lands.

E4.1.8.15.3. Identify the potential for secondary and non-target effects to other organisms and design programs to preclude or minimize the risks.

E4.1.8.15.4. Obtain all applicable Federal, State and local permits.

E4.1.8.15.5. Use guidance in AFPMB TIM 37, "Feral Cats," February 1996, for conducting feral cat control programs.

E4.1.8.16. Weed Control. Installation Commanders shall ensure that weed control is performed according to 16 U.S.C. 1001 (reference (n)) and Joint Service Technical Manual, "Weed Control and Plant Growth Regulation," May 24, 1989, on DoD installations. Herbicides will not be used in war except as provided for in E.O. 11850 (reference (o)).

E4.1.8.17. Wood-Destroying Organisms. The DoD Components shall ensure that:

E4.1.8.17.1. Pest management consultants review construction, repair, and termite control contract specifications for proper protection of wood where wood-destroying fungi and insects are present, and specify that termiticides, when needed, are applied at the highest EPA-labeled concentration and application rate.

E4.1.8.17.2. DoD-certified pesticide applicators or QAEs trained in pest management inspect contract applications of pesticides for the control of termites and other wood-destroying organisms.

E4.1.8.17.3. Trained personnel inspect wooden buildings and structures in the range of termites: annually in USDA geographic Region 1 or if Formosan or drywood termites are present; biennially in USDA Region 2; or triennially in Region 3 as determined by the cognizant pest management professional. Installation Commanders shall follow the guidance in AFPMB TIM 35, "Termite Inspection,"

February 1996, for these inspections.

E4.1.8.18. Wood Preservation. NAVFAC MO 312," Wood Protection," May 1990, provides information on wood preservation. Components shall ensure that DoD pest management professionals review construction specifications and procurement contracts to minimize losses to real property and materiel by specifying:

E4.1.8.18.1. Proper use of wood products treated with preservatives (pesticides) where required to protect against losses caused by wood-destroying fungi and insects.

E4.1.8.18.2. Inspection of treated wood products, performed by trained installation personnel. This inspection shall require as a minimum:

E4.1.8.18.2.1. Examination of treated wood products to determine the presence of the American Lumber Standard Committee accredited inspection agency quality marking. Quality markings indicate conformance with the appropriate American Wood Preservers' Association (AWPA) and American National Standard Institute standards. Quality markings indicate the product has been tested by the agency indicated, the date it was tested, the type use (above ground, ground contact, or marine contact suited), and the minimum amount of chemical preservative present. Unmarked material shall be tested by an independent third party. Certificates of Conformance from the treating company shall not be acceptable in place of physical inspection and testing.

E4.1.8.18.2.2. Random or planned sampling and testing.

E4.1.8.18.3. Programs to protect waterfront structures from decay and marine borers.

E4.1.9. Pest Management and Disease Vector Control during Military Contingency Operations, Readiness Training Exercises, and Deployments.

E4.1.9.1. Military personnel and contractors responsible for pest management and disease vector control during military contingency operations, readiness training exercises, and deployments shall apply pesticides consistent with the policies and procedures described in this Instruction.

E4.1.9.2. The application of pesticides for pest management and disease vector control during military contingency operations, readiness training exercises, and deployments shall be under the overall direction of personnel certified in accordance

with the DoD Plan for the Certification of Applicators of Restricted Use Pesticides (reference (d)). Individuals who apply pesticides in these situations shall be certified in accordance with reference (d) or shall be under the direct or on-site supervision of individuals certified in accordance with reference (d). Shipboard independent duty technicians and other military personnel who have received special training for limited site application of pre-selected pesticides during military operations or deployments are exempt from the certification requirement. However, these individuals shall be fully trained, including hands-on training for these specific applications. The Military Services shall develop specific site training programs for these individuals and a means to document who has received this training. At a minimum, the training shall include the safe use and proper application of the limited, pre-selected pesticides for the specific site for which these individuals are trained.

E4.1.9.3. Contractors who apply pesticides in these situations shall comply with the policy in subsection 2.5. in the main body of this Instruction.

E4.1.9.4. The Military Services shall ensure that pesticide use in these situations is recorded as stated in paragraph 5.3.4. of the main body of this Instruction.

E4.1.10. Reports and Records

E4.1.10.1. The DoD Components shall ensure that all DoD installations maintain complete daily records of pesticide applications and non-chemical pest management operations using DD Form 1532-1 or a computer-generated equivalent as stated in section 5.3.22.7. of the main body of this Instruction. These records shall account for all shop operations and shall provide a historical record of pest management operations and pesticide applications for each building, structure, or outdoor site.

E4.1.10.1.1. Records shall include information on kinds, amounts, uses, dates, places of application, and applicators names and certification numbers.

E4.1.10.1.2. The record shall include all pesticide applications performed on the installation, including work done on golf courses, by non-appropriated fund activities, by contract services, and as part of out leases and land management and forestry programs, as well as work performed by installation pest management shops.

E4.1.10.2. DD Form 1532, "Pest Management Report," or an equivalent computer product, shall be produced monthly using DD Form 1532-1 information and

shall be forwarded at least quarterly to major command headquarters for review and oversight.

E4.1.10.3. Pest management consultants shall use this data to evaluate the efficiency of the overall installation pest management program and pest management operations.

E4.1.10.4. Pesticides applied by installation personnel for their own relief are excluded from the recordkeeping requirement.

E5. ENCLOSURE 5

AFPMB FUNCTIONS, ORGANIZATION AND MANAGEMENT

E5.1.1. Functions. The purpose of the AFPMB is to recommend policy, provide scientific advice, and provide coordination among the DoD Components on all matters related to pest management. The AFPMB shall:

E5.1.1.1. Develop and recommend policy to the Under Secretary of Defense (Acquisition & Technology) for the DoD Pest Management Program.

E5.1.1.2. Coordinate pest management activities in the Department of Defense.

E5.1.1.3. Develop, issue, and maintain manuals and other guidance necessary to implement the technical requirements of FIFRA (reference (e)).

E5.1.1.4. Implement the DoD Plan for Certification of Pesticide Applicators of Restricted Use Pesticides (reference (d)) and develop comprehensive training guidance for DoD pest management personnel.

E5.1.1.5. Coordinate DoD contingency disease vector and pest management with the Chairman of the Joint Chiefs of Staff, the Combatant Commands and other contingency planning organizations.

E5.1.1.6. Serve as an advisory body to the DoD Components and provide timely scientific and professional pest management advice.

E5.1.1.7. Develop and distribute technical information and guidance on pest management to the Components by means of Technical Information Memoranda, Disease Vector Ecology Profiles and similar publications.

E5.1.1.8. Review and approve any introduction, stockage, and deletion of pest management materiel by the DLA in the DoD supply system. The AFPMB does not review or approve disinfectants or biocides.

E5.1.1.9. Operate the DPMIAC.

E5.1.1.10. Coordinate and develop requirements for pest management research, development, and testing in the Department of Defense:

E5.1.1.10.1. Provide technical coordination for the annual review of USDA pest management research of interest to the Department of Defense;

E5.1.1.10.2. Provide research requirements and recommendations to the Director of Defense Research Engineering, or designee, and to other organizations performing pest management research, development, and testing for the Department of Defense.

E5.1.1.11. Establish committees that shall function in accordance with DoD Directive 5105.18 (reference (p)) to facilitate the performance of AFPMB functions.

E5.1.1.12. Support the Defense Environmental Security Council and the Environmental Safety and Occupational Health Policy Board in the area of pest management.

E5.1.1.13. Perform other functions as assigned.

E5.1.2. Organization and Management. The AFPMB, a joint DoD activity comprised of the Council and Committee structure, the Directorate, and the DPMIAC, shall be organized and managed as follows:

E5.1.2.1. The Council, a part-time approval, coordination and advisory body of the AFPMB, shall be composed of 13 voting members appointed from the Military Departments and DLA. Each Military Department may appoint up to 4 members. The DLA may appoint one member. Members shall be professional pest management personnel whenever possible. Other DoD Components with operational pest management programs may request membership. Other DoD Components or Federal Agencies may be invited by the Council to participate in Council meetings when matters of common interest are under consideration. However, invited participants may not vote.

E5.1.2.1.1. The Council shall elect from among its membership a chair of the AFPMB and a vice-chair who will serve in the absence of the chair. They shall serve 2-year terms that may be extended by reelection. The chair shall preside over meetings of the Council and the Board; establish standing and ad hoc committees and task groups to assist the Council in performing its functions; and call at least three meetings annually to carry out the mission of the Board.

E5.1.2.1.2. The Council may develop procedural rules necessary to accomplish its mission.

E5.1.2.2. The Directorate shall be the full-time administrative and operational body of the Board. It shall be composed of an Executive Director; an Assistant Executive Director; a Contingency Liaison Officer (CLO); a Research Liaison Officer (RLO); the Chief, Defense Pest Management Information Analysis Center; and any professional, technical, and clerical personnel necessary for its operation and administration.

E5.1.2.2.1. The Executive Director shall be an active duty military medical entomology officer, preferably in the grade 0-6, nominated by the respective Surgeon General of the Military Departments, and appointed by the DUSD(ES) for a period of 4 years. When practical, appointees shall rotate in the order of the Army, Navy, and Air Force. The Executive Director shall supervise the Directorate, provide assistance to the Council as required, and perform other tasks the DUSD(ES) may assign. The Executive Director shall also serve as the Director of Defense Pest Management, Office of the DUSD(ES).

E5.1.2.2.2. The Assistant Executive Director shall be an active duty military medical entomology officer, with a minimum grade of 0-5. Length of tour, nomination, and appointment procedures shall be the same as for the Executive Director. The Assistant Executive Director shall serve in the absence of the Executive Director.

E5.1.2.2.3. The CLO shall be an appropriately trained active duty medical entomology officer, with a minimum grade of 0-5 and extensive field and staff experience. Length of tour, nomination, and appointment procedures shall be the same as for the Executive Director. The CLO shall serve as the principal contact between the AFPMB and the Chairman of the Joint Chiefs of Staff, Unified Combatant Commands, and Component service organizations lacking a staff medical entomologist. The CLO shall support the contingency, readiness, and deployment functions of the AFPMB. The CLO shall provide updated information on specific vector-borne disease threats in any country in the world in coordination with the DPMIAC, shall assist in the development of appropriate sections of operational plan medical annexes, and shall identify resources for surveillance and control of disease vectors for specific operations.

E5.1.2.2.4. The RLO shall be an active duty military medical entomology officer, with a minimum grade of 0-5, with experience in both research and administration. The length of tour, nomination, and appointment procedures shall be the same as for the Executive Director. The RLO shall coordinate the research and

evaluation function of the AFPMB and shall serve as the principal contact between the AFPMB and other Federal agencies' pest management research offices.

E5.1.2.2.5. The DPMIAC shall be the center for collection and analysis of scientific and technical integrated pest management and disease vector information. It shall, upon request, distribute this information to the DoD Components, the Chairman of the Joint Chiefs of Staff and Combatant Commands. It shall also assist committees, task groups, and the AFPMB Council; provide resource material; and develop pest management TIMs, bulletins, and other guidance for the DoD Components, the Chairman of the Joint Chiefs of Staff and Combatant Commands. Each of the Military Departments shall provide one medical entomology officer to the staff of the DPMIAC. Medical entomology consultants of the three Military Departments shall nominate personnel for approval by the Executive Director.

E6. ENCLOSURE 6

REQUIREMENTS FOR INSTALLATION PEST MANAGEMENT PROGRAMS

Pest Management Requirement (Productive Work-years)	Installation Pest Management Plan Requirement	On-site Program Review Requirement
Less than 0.49	Individual plan is not required, but requirements shall be included in supporting installation's pest management plan	Review interval determined by the pest management consultant that reviews the supporting installation's pest management plan
0.50 or more	Individual pest management plan is required	At least every 36 months

E7. ENCLOSURE 7

PROCEDURES FOR THE ACQUISITION OF PEST MANAGEMENT EQUIPMENT
AND PESTICIDES

E7.1.1. The AFPMB, shall:

E7.1.1.1. Operate as the single point of contact for, and maintain liaison with, other Government agencies in all professional and technical matters involving pest management materiel.

E7.1.1.2. Coordinate the introduction and standardization of pest management materiel.

E7.1.1.3. Continually evaluate pest management materiel that is in the Federal supply system.

E7.1.1.4. Coordinate with the appropriate commodity integrated material managers (CIMMs) for the introduction, revision, and deletion of pest management materiel.

E7.1.2. The appropriate CIMM shall submit cataloging actions only for pest management materiel that has been approved by the AFPMB. Unapproved materiel shall be referred to the AFPMB for consideration.

E7.1.3. The DoD Components shall request approval of stocking of pest management materiel through command channels to the AFPMB. Such requests shall include the necessary technical and supply management information. Once approved by the AFPMB, the request shall be given to the CIMM for cataloging action. Proposals from the Components recommending revision to and deletion of pest management materiel from the supply system shall be submitted to the AFPMB in the same manner. When pest management materiel is decentralized for procurement from local sources, procuring activities shall ensure that item identification changes are proposed when such materiel requires changes to the Federal item identification. Proposed item identification changes shall be processed through the AFPMB to the CIMM. When items no longer are available for procurement, procurement activities shall inform the AFPMB so that deletion and replacement recommendations, when appropriate, can be made by the AFPMB through the appropriate CIMM.

E7.1.4. Except as specifically authorized in this Instruction, the Components may

not procure or acquire pest management materiel that has not been approved by the AFPMB. NSNs will not be assigned to pest management materiel for DoD use that has not been approved by the AFPMB.

E7.1.5. When approved by the pest management consultant concerned, pest management materiel may be procured locally if needed for an emergency, required due to unique local situations, or used in quantities so small that assignment of an NSN is not feasible. Installations shall make every effort to use pest management materiel in the DoD Supply System before requesting local purchase authority. In answer to AFPMB data calls, the Components shall provide the AFPMB with memoranda listing all locally procured pest management materiel they have approved. The listings shall include the amount purchased, the proposed use, and any other information needed by the AFPMB. The AFPMB shall monitor the appropriateness of locally procured pest management materiel for use in the Department of Defense. When justified, the AFPMB shall request that an NSN be assigned to pest management materiel.

E7.1.6. The AFPMB shall base its decisions upon data from all available sources. When additional testing and evaluation are required, the U.S. Navy Bureau of Medicine and Surgery shall provide data from studies on user efficacy and military application of commercial equipment, and the U.S. Army Medical Department shall provide data from studies on pest management equipment engineering and durability.

E8. ENCLOSURE 8

CONTENT OF INSTALLATION PEST MANAGEMENT PLANS, SUGGESTED
FORMAT

Installation pest management plans shall include the following basic elements listed below as the elements apply to each individual installation:

1. Cover Sheet
 - a. Title
 - b. Installation Name
 - c. Approval and Technical Review (signatures):
 - (1) Installation Pest Management Coordinator
 - (2) Installation Environmental Coordinator
 - (3) Installation Medical Officer
 - (4) Senior Installation Engineer
 - (5) Component Pest Management Consultants
 - (6) Installation Commander
 - d. Date of Last Annual Review
 - e. Date of Last On-Site Review
2. Executive Summary
3. Installation Implementation Authority (Installation instruction, standard operating procedure, etc.), if applicable.
4. Introduction
 - a. Objective of the pest management plan

- b. Installation description and mission
- c. Responsibilities for conduct of the pest management program

5. Pest Management Requirements and Strategies for Applicable Pest/Disease Vector Categories (for each pest / disease vector category describe the IPM strategy as outlined on page 6-6.

- a. Disease Vectors and Other Health-Related Pests
- b. General Household and Nuisance Pests
- c. Structural Pests
- d. Weed Control
- e. Stored Products Pests
- f. Pests of Ornamental Plants and Turf
- g. Pests of Natural Resources
- h. Golf Course Pests
- i. Miscellaneous Pests
- j. Vertebrate Pests
- k. Other categories

6. Administration

- a. Job Orders
- b. Contracts
- c. Inter-Service Support Agreements
- d. Outleases
- e. Resources (Current and Proposed)

- (1) Funding
 - (2) Staffing
 - (3) Materials (Pesticides, Equipment, Supplies, etc.)
 - (4) Facilities
- f. Reports and Records
 - g. Training Plans
 - h. Coordination with Food Service Managers, Maintenance Personnel, etc.
 - i. Termite Inspection Plan
7. Health and Safety Measures
 - a. Requirements
 - b. Methods to Reduce Potential Hazards to:
 - (1) Pest Management Personnel
 - (2) Installation Personnel (including housing occupants)
 - (3) Public
 - c. Safety and Health Measures Associated with the Pest Management/Control Shops.
 - d. Safety and Health Measures Associated with Pest Management Vehicles
8. Public Laws and Regulations
 9. Coordination with other Organizations and Agencies
 10. Measures for Compliance with Memorandum of Understanding with State Pesticide Regulatory Office(s)
 11. Pest Management Operations with Special Environmental Considerations

- a. Operations using Restricted Use Pesticides
 - b. Operations with Potential to Contaminate Surface or Groundwater
 - c. Operations more than 640 Acres.
 - d. Operations in Areas with Endangered or Protected Species
 - e. Operations involving Aerial Application
 - f. Operations involving Designated Noxious Weeds
 - g. Operations involving Experimental-Use Permits
 - h. Operations involving Environmentally Sensitive Areas
12. Other Pest Management Plan Issues
- a. Applicable Pollution Control Projects
 - b. Applicable Pollution Abatement Procedures
 - c. Pesticides Sold in Commissaries and Exchanges
13. Pest Management Plan for Services Provided to other Activities or Installations
- a. On Installation
 - b. Off Installation
14. Annexes
- a. Installation Map
 - b. Annual Pesticide Procurement Approval Obtained from the Cognizant Component Pest Management Consultant prior to Procurement of Pesticides
 - c. Pesticide Inventory including pesticide name, manufacturer, unit of issue, concentration, quantity, NSN, etc.
 - d. Pesticide Labels, Material Safety Data Sheets, and Consumer Protection

Information Sheets for Preservative Treated Wood Products

- e. Operational Control and Maintenance Records from Previous Years
- f. Applicable Instructions and Procedures
- g. Contracting Standards, Specifications, and Statements of Work
- h. Manpower Surveys
- i. Shop Equipment and Sources
- j. List of Safety Items and Personal Protective Equipment
- k. Technical Information
- l. Spill Plan and Pesticide Clean-up Guidance
- m. Industrial Hygiene Surveys of Pest Management Shop
- n. Cost Comparison Analyses

IPM PLAN OR STRATEGY OUTLINE

1. Pest or Disease Vector Problem
 - a. Target life stage or stages
 - b. Reason this pest or disease vector is a problem
2. Ongoing Monitoring Plan
 - a. Responsible organization or official
 - b. Techniques and procedures
 - c. Location or locations (specify)
 - d. Schedule
 - e. Threshold for management and/or control
3. IPM Strategy and Methods
 - a. Responsible organization or official
 - b. Nonchemical controls (biological, cultural, mechanical, etc.)
 - (1) Techniques or procedures
 - (2) Method of application, if applicable
 - (3) Sites/locations to receive non-chemical control
 - c. Pesticide Applications
 - (1) Common name
 - (2) EPA Registration number
 - (3) Formulation
 - (4) Percent of active ingredient

- (5) Source or NSN
 - (6) Application concentration
 - (a) Finished formulation %
 - (b) Diluent
 - (c) Application rate
 - (e) Method of application
 - (7) Location or locations to be treated. For each specific site include units (such as square feet or acres) treated, number of applications, schedule of treatment, and climate or weather constraints.
4. Evaluation Procedures and Standards Used to Verify the IPM Strategy such as Acceptable Quality Levels (AQL) for in-house functions or Maximum Defect Rates (MADR) for contractor performance.
 5. Education Necessary for Installation Personnel to Support the IPM Strategy
 6. Sensitive Areas (with respect to each pest or disease vector) to be:
 - a. Avoided by either nonchemical or chemical controls.
 - b. Treated with caution.
 7. Special Health and Safety Measures Required.
 8. Control Procedures that Require Pest Management Consultant Approval or Coordination.
 9. Other Procedures such as Emergency Requirements for Control of Vector-borne Disease.
 10. Manpower Requirement for IPM Strategy (include method used to identify the personnel required).