



Department of Defense MANUAL

NUMBER 4150.07, Volume 2
May 23, 2013

USD(AT&L)

SUBJECT: DoD Pest Management Training and Certification Program: The DoD Plan for Non-Federal Insecticide, Fungicide, and Rodenticide Act Pesticide Applicators

References: See Enclosure 1

1. PURPOSE

a. Manual. This manual is composed of several volumes, each containing its own purpose, and reissues DoD 4150.7-M (Reference (a)). The purpose of the overall manual, in accordance with the authority in DoD Instruction (DoDI) 4150.07 and DoD Directive 5134.01 (References (b) and (c)), is to implement policy, assign responsibilities, and provide procedures for the training and certification of DoD pest management personnel in pesticide application.

b. Volume. This volume:

(1) Updates the DoD Training and Certification Program for pesticide applicators that do not meet the requirements of section 136 et seq. of Title 7, United States Code (U.S.C.) (also known and referred to in this volume as “The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA),”) (Reference (d)). Non-FIFRA is defined as all areas not under FIFRA jurisdiction. FIFRA jurisdiction includes: the 50 States and the District of Columbia; the Commonwealths of Puerto Rico, the Northern Marianas, and the Virgin Islands; and the Territories of Guam and American Samoa. This non-FIFRA training and certification information was originally contained in Appendix 4 of Reference (a).

(2) Assigns responsibilities and sets procedural requirements for non-FIFRA training and certification for pesticide applicators operating in areas outside the continental United States (OCONUS) not under the jurisdiction of FIFRA (e.g., Japan, Korea, and Europe).

(3) Establishes consistent requirements for pesticide applicator training.

(4) Maintains and enforces the standards for certification of non-FIFRA pesticide applicators in accordance with certification standards of Reference (b).

2. APPLICABILITY. This volume:

a. Applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to in this volume as the “DoD Components”).

b. Is not intended to conflict with, be used instead of, or supersede other DoD training directives or Office of Personnel Management qualification standards.

3. POLICY. It is DoD policy to:

a. Use integrated pest management (IPM) to prevent or control pests and disease vectors that may adversely impact readiness or military operations by affecting the health of personnel, or by damaging structures, materiel, or property in accordance with Reference (b).

b. Comply with all Executive orders and federal, State, and local statutory and regulatory requirements that apply to IPM in accordance with Reference (b). Although federal agencies maintain sovereignty pursuant to FIFRA, DoD voluntarily complies with the substantive portions of State pesticide and pest management laws and regulations when such compliance does not adversely impact DoD missions (Reference (b)).

c. Establish a highly qualified, well-trained cadre of environmental professionals and an environmentally cognizant DoD workforce, and promote the certification of professionals and technicians in their disciplines and specialties in accordance with DoDI 4715.10 (Reference (e)).

4. RESPONSIBILITIES. See Enclosure 2.

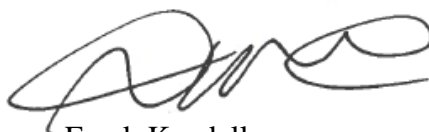
5. PROCEDURES. Enclosure 3 prescribes the procedures for non-FIFRA certification of pesticide applicators applying pesticides on DoD land or property in OCONUS areas not under FIFRA jurisdiction.

6. RELEASABILITY. **Unlimited**. This volume is approved for public release and is available on the Internet from the DoD Issuances Website at <http://www.dtic.mil/whs/directives>.

7. EFFECTIVE DATE. This volume:

a. Is effective May 23, 2013.

b. Must be reissued, cancelled, or certified current within 5 years of its publication in accordance with DoDI 5025.01 (Reference (f)). If not it will expire effective May 23, 2023 and be removed from the DoD Issuances Website.



Frank Kendall
Under Secretary of Defense for
Acquisition, Technology, and Logistics

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ENCLOSURE 1

REFERENCES

- (a) DoD 4150.7-M, "DoD Pest Management Training and Certification," April 24, 1997
(cancelled by Volume 1 of this manual)
- (b) DoD Instruction 4150.07, "DoD Pest Management Program," May 29, 2008
- (c) DoD Directive 5134.01, "Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L))," December 9, 2005, as amended
- (d) Section 136 et seq. of Title 7, United States Code (also known as "The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)," as amended)
- (e) DoD Instruction 4715.10, "Environmental Education, Training and Career Development," April 24, 1996
- (f) DoD Instruction 5025.01, "DoD Directives Program," September 26, 2012
- (g) DoD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007
- (h) Title 40, Code of Federal Regulations
- (i) Section 125 of Title 10, United States Code

ENCLOSURE 2

RESPONSIBILITIES

1. UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS (USD(AT&L)). The USD(AT&L):

a. Has overall responsibility for policy development, implementation, and surveillance of the DoD Pest Management Program in accordance with Reference (b).

b. In consultation with the DoD Component certifying officials, may deny, suspend, or revoke the certificate of any DoD employee who violates any provision of, or falsifies records in accordance with, this volume.

2. DEPUTY UNDER SECRETARY OF DEFENSE FOR INSTALLATIONS AND ENVIRONMENT (DUSD(I&E)). Under the authority, direction, and control of the USD(AT&L) and in accordance with Reference (b), the DUSD(I&E):

a. Oversees the implementation of this manual.

b. Directs and supervises operations of the Armed Forces Pest Management Board (AFPMB).

3. DIRECTOR, AFPMB. Chartered by the USD(AT&L), the Director, AFPMB:

a. Reviews pest management policy matters, proposes policy changes, and establishes non-FIFRA pesticide applicator training and certification requirements for the DoD in accordance with Reference (b).

b. Monitors compliance with this volume.

c. Reviews and approves the DoD Components' recommendations for pest management consultants (PMCs).

d. Reviews and approves the DoD Component recommendations for pesticide applicator certifying officials.

e. Maintains a list of approved pesticide applicator certifying officials and PMCs.

4. DoD COMPONENT HEADS. The DoD Component Heads:

- a. Implement the procedures in Enclosure 3. Supplementary procedures may be issued within the Component only as necessary to address unique Component requirements.
- b. Designate a senior PMC as the primary point of contact for the DoD Components' pest management training program in accordance with Reference (b).
- c. Nominate PMCs to serve as certifying officials to certify the competency of the DoD Components' pesticide applicators in accordance with Reference (b).

5. NON-FIFRA CERTIFYING OFFICIALS. In coordination with non-FIFRA DoD Component PMCs, non-FIFRA certifying officials:

- a. Ensure that non-FIFRA certification training meets the requirements of this volume.
- b. Assume lead responsibility for non-FIFRA pesticide applicator training in his or her area of responsibility.
- c. Recommend applicable region-specific non-FIFRA training requirements for their non-FIFRA area to designated training centers.
- d. Coordinate non-FIFRA pesticide applicator training with the designated training center, training site, and host-nation authorities.
- e. Determine whether candidate pesticide applicators have met DoD and DoD Component training standards.
- f. Issue non-FIFRA certification.

6. COMMANDING OFFICERS OF THE TRAINING CENTERS. The commanding officers of the training centers:

- a. Develop or review and approve plans of instructions for non-FIFRA training that meet training objectives identified by OCONUS PMCs for OCONUS areas not under the jurisdiction of FIFRA.
- b. Ensure that non-FIFRA training is conducted in accordance with this volume, international agreements, SOFAs, and country specific FGS or DoD 4715.05-G (Reference (g)) in countries where FGS do not exist.
- c. Ensure that non-FIFRA programs are tailored to fit language translation problems, site-specific pests, and host-nation considerations.

ENCLOSURE 3

PROCEDURES

1. GENERAL INFORMATION

a. Background

(1) The training and certification of DoD employees described in this volume underscores DoD's commitment to IPM and complies with DoD pest management policy, applicable international agreements, status of forces agreements (SOFAs), Final Governing Standards (FGS) issued for the host nations or, where no such FGS have been issued, the criteria in Reference (g).

(2) On DoD land or property in OCONUS areas not under the jurisdiction of FIFRA, training must be conducted in accordance with section 2, international agreements, SOFAs, and country specific FGS or Reference (g) in countries where FGS do not exist.

(3) This volume serves as the authoritative source for the DoD certification of pesticide applicators who require non-FIFRA certification.

(a) DoD will continue to recognize pesticide applicators who were certified pursuant to earlier editions of this manual.

(b) Recertification of previously certified applicators must be in accordance with applicable provisions of this volume.

(c) Certification for new categories will be granted only upon completion of training and demonstration of competency by passing written and performance tests.

(4) The senior PMC for each DoD Component in the non-FIFRA area is responsible for determining training requirements and for coordinating certification training with the applicable training center. Non-FIFRA training procedures for initial training and certification of pesticide applicators in non-FIFRA areas are described in section 2 of this enclosure.

b. Non-FIFRA Certification Training. Non-FIFRA certification training is approved by the designated area PMC using a curriculum developed by the applicable training center for OCONUS installations not under the jurisdiction of FIFRA. Training materials should include regional conditions, native pest problems, and host-nation requirements. Non-FIFRA training and certification is described in section 2 of this enclosure.

c. Host-Nation Non-FIFRA Pesticide Applicator Trainee Selection

(1) The first step in training is to select foreign national pest management personnel who meet training requirements and function efficiently and effectively in the framework of the

installation of a pest management program. It is preferred that pest management candidates be able to communicate in English both verbally and in writing. Before investing training resources, the installation staff should determine that the candidate has the potential and willingness to complete the training program and, when applicable, can achieve “pest control” category certification. For example, persons with sensitivity or allergy to pesticides, other chemicals, or insect stings should not be selected. On request, the DoD Component’s PMC may assist in the selection process. In accordance with FGSs, labels and Material Safety Data Sheets will be translated into host-nation language.

(2) For initial hire situations, it is recommended trainees for pest control positions be employed on a conditional agreement basis so that, if they are making unsatisfactory training progress, they may be replaced without difficulty. Similarly, if a vacancy in the existing pest control force is anticipated, it is good practice to select a replacement trainee 6 to 12 months in advance to maintain operational continuity.

d. Non-DoD and Host-Nation Contract Personnel Non-FIFRA Pesticide Applicator Training

(1) Contract pest control personnel who hold a valid U.S. State Pesticide Application Certificate may apply pesticides within the limits of that certificate. The contractor is responsible for validating the State certificate and ensuring the State certified pest control personnel both maintain their certification and apply pesticides only within the limits of that State certificate.

(2) Contract pest control personnel who apply pesticides on OCONUS installations or operational bases may attend formal training courses on a space-available basis. Training centers and training locations are identified at subparagraph 2d(2) of this enclosure.

(3) Contractors are required to ensure pest control personnel are trained and certified. Contractors may attend formal DoD training courses on a space available basis, fund the travel and expenses for a DoD Non-FIFRA training course, or fund individual training expenses for DoD training courses not offered locally. Training centers may require tuition reimbursement for contractor personnel trained. The certifying official may provide contractor personnel with a certificate of training and DoD non-FIFRA pesticide applicator certification on successful completion of non-FIFRA core and category pesticide applicator training requirements.

2. DoD TRAINING AND CERTIFICATION PROGRAM FOR NON-FIFRA PESTICIDE APPLICATORS

a. Developmental Training. Developmental training, which is not to exceed 2 years, is provided for previously untrained and inexperienced DoD personnel. During that period, all pesticide application is done under the direct supervision of a certified pesticide applicator. The training program must consist of two requirements: apprenticeship training and formal DoD training center-approved classroom training. Passing written examinations upon completion of formal training is required to achieve certification.

(1) During training, anticipated language problems may be partially overcome by maximizing hands-on training with equipment and materials used in pest management work. Hands-on training places instructors and trainees on a common ground and eases the burden of communication. If the trainee cannot adequately understand English, then it is the contractor's responsibility to provide translator and interpreter support as needed.

(2) Presentation of course instruction and examinations in the native language is encouraged. Trainees must demonstrate the ability to comprehend labels translated into the host-nation language, as a minimum.

b. Competency Examinations

(1) Certification Requirements. DoD employees desiring certification must demonstrate competency in specific standards, which are described in Appendix 1.

(2) Evaluation of Competency

(a) Written Requirements. A closed-book written examination will be required to determine competency in core (general standards) and applicable categories (specific standards) outlined in Appendix 1 and Appendix 2.

1. Testing will be based on examples of problems and situations applicable to the particular category or subcategory of the applicator's certification and areas of competency outlined in the general and specific standards of competency.

2. Examinations may include true/false, multiple choice, completion, and mathematical problem-type questions and will require a passing score of at least 70 percent. Sample examination questions are shown in Appendix 3.

(b) Performance Requirements. Written and performance testing must be conducted for the core (general standards) and the categories (specific standards) in which training and certification is desired. The categories are described in paragraph 2j of this enclosure.

1. The requirements for certification are satisfactory completion of training courses, written examinations, and demonstration of the ability to perform a procedure or use appropriate dispersal equipment.

2. After an individual is determined qualified, the training center will notify the applicable pest management certifying official that the individual completed formal training requirements for non-FIFRA certification in designated categories.

c. Issuing Certificates of Competency. The designated certifying official will issue a certificate of competency (DD Form 1826, "Pest Control Certificate of Competency" and DD 1826-1 "Pesticide Applicator", available at <http://www.dtic.mil/whs/directives/infomgt/forms/dd/ddforms1500-1999.htm>) to pest management personnel successfully completing certification requirements for the core and one

or more of the pest control categories and apprenticeship requirements. To identify certified personnel, certificates issued will use the uniform numbering system described in Appendix 4 to this enclosure.

d. Training and Certification

(1) Apprenticeship IPM Training. Trainees must participate in apprenticeship training under the supervision of a DoD-certified individual or, if not available, under the guidance of a pest management professional (PMP), for at least 1 year. A sample apprenticeship training plan is outlined in Appendix 2 to Enclosure 3 of Volume 3 of this manual.

(2) Formal Classroom Training. Formal classroom training will be provided at a non-FIFRA training center. Formal classroom training may be requested at OCONUS areas not under the jurisdiction of FIFRA when it is more cost effective to the DoD. The non-FIFRA training centers are:

Medical Education and Training Campus
ATTN: METC-ID-PHT
Anderson Hall, Bldg 1364 4th Floor, Rm 4-430
3488 Garden Avenue
Fort Sam Houston, TX 78234-1200

U. S. Army Medical Department Center and School
ATTN: MCCS-PM
Fort Sam Houston, TX 78234-6142

U.S. Army Public Health Command Region-Europe
ATTN: MCHB-AN
CMR 402
APO AE 09180

U.S. Army Public Health Command Region-Pacific
ATTN: MCHB-AJ-TM
APO AP 96343-5006

Navy Environmental and Preventive Medicine Unit Five
3235 Albacore Alley, Naval Station San Diego
San Diego, CA 92136-5199

Navy Entomology Center of Excellence
Naval Air Station, Box 43
Jacksonville, FL 32212-0043

Naval Facilities Engineering Command-Atlantic
Applied Biology, Code EV51
6506 Hampton Blvd
Norfolk, VA 23508-1278

Naval Facilities Engineering Command-Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134

366th Training Squadron
727 Missile Road
Sheppard Air Force Base, TX 76311-2254

910 AG/DOS (FIFRA Pest Control Category 11 only)
3976 King Graves Road
Youngstown-Warren Regional Airport
Air Reserve Station, Vienna, OH 44473-0910

(3) Course Content. Individuals will be required to complete course curriculums applicable to their duties, which must include core and specific category courses. All students are required to pass both portions of pest control training (core and category) to be DoD non-FIFRA certified. The core phase is a prerequisite and provides basic information common to all pesticide applicators. Category courses may be grouped to facilitate training and specialization. Those pest control categories may be addressed as separate blocks of instruction as the training situation dictates. Appendix 5 provides information and subject areas of the course curriculums.

(4) Written Examinations. The training centers will prepare written examinations that are based on course content and study materials made available to applicators. The actual number of examination questions for each subject will be directly related to the instructional hours and subject complexity, but 3 questions per lecture hour will be the minimum used by all the training centers. Separate examinations will be given for the core and each category section. (See Appendix 3 for sample examination questions.)

(5) Passing Scores. When a student receives passing test scores in the core phase and on individual categories, training centers must give the results to the designated certifying official. A grade of at least 70 percent on any examination is passing. Personnel with scores between 50 percent and 69 percent on the core phase exam may attempt a reexamination after 24 hours (at the discretion of the course director and the individual's supervisor) or may take up to 390 days to restudy and undergo reexamination. During the core phase, an individual who fails with a score of 50 percent or less will be disenrolled from the formal training course, and the major command PMC must be notified for applicable action. A passing grade on the core phase examination is a prerequisite for certification in any category.

(6) Reexamination

(a) Individuals who score between 50 and 69 percent:

1. Will be allowed to continue with category training and to retake the examination(s) failed. The reexamination may be administered by the educational center supporting the individual's installation.

2. May attempt a reexamination no sooner than 24 hours (at the discretion of the course director and the individual's supervisor) or may take up to 30 days to restudy and undergo reexamination.

(b) A second failure will result in a recommendation by the training center to the command consultant and/or area PMP to remove the individual from pest control duties.

(7) Training for Personnel from Other Services. Training centers providing training for personnel from other Services must forward those results to the respective DoD Component certifying official.

(8) Certification. Certification is valid for up to 3 years. The date for determining initial certification is set when initial classroom training is complete.

e. Recertification

(1) Triennial recertification training and testing is mandatory to maintain DoD certification. This training must be accomplished through attendance at an approved DoD course. During those courses, new information is provided to update the knowledge of the students and to review safety procedures. Since it is the objective of the DoD to maintain a fully trained pest control force, the courses must be made available to all certified applicators.

(a) A secondary requirement for those courses is to reevaluate the students' levels of competency in pest control through written examinations and hands-on performance.

(b) Only previously DoD Non-FIFRA-certified applicators can be recertified. Recertification will be in accordance with applicable provisions of this volume.

(c) Certification for new categories and subcategories will be granted only upon completion of training and demonstration of competency by passing written and performance tests.

(2) Certification is valid for 3 years from the date the certificate is issued. Recertification must be accomplished by the last day of the month in which the original certificate expires. The original certifying official may extend an individual's certification for cause on a one-time basis for a period of not more than 1 year with a memorandum of record. The original certifying official will document the extension in the records and the individual requesting the extension will maintain this memorandum as proof of the extension. To be certified, the individual must:

(a) Attend a DoD-approved recertification course that uses, as a minimum, the AFPMB standardized curriculums, which are described in Appendix 5.

(b) Take and pass a written examination with a score of at least 70 percent on the core, to include calculations and/or calibration, and all category examinations for which recertification is required.

(c) An individual who fails a recertification examination may be given up to 30 days from the date on which the examination was failed to study applicable materials. At the end of the study period, the pest management instructor or the installation training officer will administer a closed-book make-up examination.

1. A second failure will result in the individual not being certified in the category(s) failed. If a student fails a category twice, the only method they will have to obtain certification is to complete the resident basic training course. In either case, failure in the recertification examination will be cause for certificate revocation and for recommendation for removal from pest control functions.

2. Documentation of failures must be forwarded to the DoD Component's PMC.

(3) Applicator recertification courses must be consistent with the requirements of Appendix 5. Personnel attending recertification courses will only be allowed to test and qualify in those categories for which they already hold initial certification. New category training must be achieved as outlined in paragraph 2b of this section. Additional contact hours may be added at the discretion of the local training sponsor.

(4) Contract pest control personnel holding valid U.S. State pesticide applicators certificates must adhere to that State's recertification requirements. The contractor is responsible for maintaining pest control personnel state certification(s).

f. Certification Documents

(1) DoD non-FIFRA certificates will be issued for specific pest control categories to pesticide applicators who successfully complete the required training.

(2) Procedures for issuing DoD non-FIFRA certificates for pesticide applicators are given in Appendix 4.

g. Denying, Suspending, and Revoking Certification. Any DoD non-FIFRA pesticide applicator may have his or her certificate denied, suspended, or revoked. Situations that may be cause for certificate denial, suspension, or revocation include, but are not limited to:

(1) Misuse of a pesticide.

(2) Falsification of any records required to be maintained by the certified applicator.

(3) Pending investigations of pesticide-related episodes or accidents resulting in human or animal injury or environmental contamination, such as to water supplies, food, and foodstuffs.

(4) Conviction under any federal or host-nation pesticide or environmental law.

(5) Failure to maintain records that are required by federal, host-nation, or DoD and DoD Component regulations.

(6) Failure to comply with DoD and DoD Component pest management directives or regulations.

(7) Failure to use applicable safety equipment as identified by the pesticide label.

(8) Inability to perform work in a safe manner due to incompetence, carelessness, or physical or mental deficiency.

(9) Pending outcome of a criminal or civil action. (See paragraphs 2g(3) and (4) of this section.)

h. Suspension or Revocation of Certification

(1) Installation commanders must initiate a formal review if pesticide violations are suspected. Any certified applicator who violates any provision of a law or implementing regulations will have his or her certificate reviewed for possible suspension or revocation.

(2) Suspected violations, such as pesticide misuse or recorded falsification, must be reported through applicable command channels to the office of the certifying official. The certifying official will review the suspected violation and determine if further action is required.

(3) If no action is warranted, the installation commander must be notified in writing that a review of the suspected violation has been conducted and that it has been determined that a violation has not occurred.

(4) If the certifying official determines that a violation may have occurred, he or she will initiate action to temporarily suspend the certificate of the applicator(s) and forward the matter to the DoD Component's senior PMC for review.

i. Unauthorized Use of Pesticides. Only certified applicators or DoD persons working under the direct supervision of a certified applicator will use restricted-use pesticides.

j. Non-FIFRA Certification Categories. DoD offers non-FIFRA certification in six of the categories that are consistent with those described in subpart 171.3 of Title 40, Code of Federal Regulations (Reference (h)) to meet the specific requirements for DoD pesticide use (see Table 1). Training and certification in all of the DoD categories or subcategories may not be available to non-FIFRA pesticide applicators.

Table 1. Certification Categories

PEST CONTROL CATEGORY	DoD CATEGORY
Forest Pest Control	2
Ornamental and Turf Pest Control	3
Aquatic Pest Control	5
Right-of-Way Pest Control	6
Industrial, Institutional, Structural, and Health-Related Pest Control	7
Public Health Pest Control	8

3. DoD CONTINGENCY CONTRACTOR NON-FIFRA TRAINING

a. Background

(1) Training and certification of host-nation and third-country national contractor personnel described in this volume underscore DoD's commitment to IPM. This training also provides nation capacity building by training foreign nationals in the use of IPM and, consequently, the safe and effective use of pesticides.

(2) In OCONUS areas not under FIFRA jurisdiction, contractor training will be conducted in accordance with paragraph 3c of this section and Reference (b). Contractors may attend formal DoD training courses on a space available basis, fund the travel and expenses for a DoD Non-FIFRA training course, or fund individual training expenses for DoD training courses. Training centers may require tuition reimbursement for contractor personnel trained.

(3) In accordance with Title 10, U.S.C. (Reference (i)), AFPMB's Contingency Liaison Officer (CLO), in collaboration with the DoD Component that is responsible for the overall operation is responsible for determining training requirements, coordinating contractor certification training with the applicable training center, and certifying DoD contingency contractor pesticide applicators. However, if designated, the lead DoD Component or base operating systems-integrator to that area of operation may collaborate with the CLO instead. Non-FIFRA training procedures for initial training and certification of pesticide applicators in non-FIFRA areas are outlined in paragraph 3c of this enclosure.

b. Non-FIFRA Certification Training for Contractors. Non-FIFRA certification training for contractors is approved by the PMC using the same curriculum developed for DoD personnel by the applicable training center for OCONUS installations not under the jurisdiction of FIFRA. Training materials should include regional conditions, native pest problems, and host-nation requirements. Non-FIFRA training and certification is addressed in paragraph 3c of this enclosure.

c. Host-Nation and Third-Country National Non-FIFRA Contractor Pesticide Applicator Trainee Selection. Contractor trainee training is the responsibility of the contractor. The PMC may be consulted for guidance on specifics to the training.

(1) The first step in training is to select foreign national pest management personnel who may meet training requirements and function efficiently and effectively in the framework of a theater pest management contract program.

(a) It is preferred that pest management candidates be able to communicate in English both verbally and in writing. If the trainee cannot adequately understand English, then it is the contractor's responsibility to provide translator and interpreter support.

(b) Before investing training resources, the contractor should determine that the candidate has the potential and willingness to complete the training program and, when applicable, achieve "pest control" category certification. For example, individuals unable to demonstrate the ability to comprehend label directions written in English, or persons with sensitivity or allergy to pesticides, other chemicals, or insect stings should not be selected.

(2) Trainees for contract pest control positions will be employed on a conditional agreement so that, if they are making unsatisfactory training progress, they may be replaced without difficulty. Similarly, if a vacancy in the existing contract pest control force is anticipated, it is good practice to select a replacement trainee 6 to 12 months in advance to maintain operational continuity.

(3) The contractor trainee must be able to obtain appropriate theater security clearance to work independently with pesticides.

d. Non-DoD and Host-Nation Contract Personnel Non-FIFRA Pesticide Applicator Training

(1) Contractor pest control personnel who apply pesticides on OCONUS operational bases may attend formal training courses on a space available basis. Training centers and training locations are identified in subparagraph 2d(2) of this enclosure.

(2) Training centers may require tuition reimbursement from contractors. The certifying official may provide contractor personnel with a certificate of training and DoD non-FIFRA pesticide applicator certification on successful completion of non-FIFRA core and category pesticide applicator training requirements.

e. DoD Contractor Non-FIFRA Pesticide Applicator Training and Certification Program

(1) Developmental Training. Developmental training, which is not to exceed 2 years, is provided by the contractor for previously untrained and inexperienced contractor personnel. During that period, all pesticide application is done under the direct supervision of a certified pesticide applicator. The training program will consist of the two requirements: formal apprenticeship training followed by formal training center-approved classroom training approved

by the PMC. Passing written examinations upon completion of formal training is required to achieve certification.

(a) During training, anticipated language problems may be overcome by maximizing hands-on training with equipment and materials that will be used in pest management work. Hands-on training places instructors and trainees on a common ground and eases the burden of communication.

(b) Presentation of course instruction and examinations in the native language is encouraged. Trainees must demonstrate the ability to comprehend labels written in English, as a minimum.

(2) Competency Examinations

(a) Certification Requirements. Contractor personnel desiring certification must demonstrate competency in specific standards, which are described in Appendix 2.

(b) Evaluation of Competency

1. Written Requirements. A closed-book written examination will be required to determine competency in core (general standards) and applicable categories (specific standards) outlined in Appendixes 1 and 2. Testing will be based on examples of problems and situations appropriate to the particular category or subcategory of the applicator's certification and areas of competency outlined in the general and specific standards of competency. Examinations may include true/false, multiple choice, completion, and mathematical problem-type questions and will require a passing score of at least 70 percent. Sample examination questions are shown in Appendix 3.

2. Performance Requirements. Written and performance testing will be conducted for the core (general standards) and the categories (specific standards) in which training and certification is desired. The requirements for certification are satisfactory completion of training courses, written examinations, and demonstration of the ability to perform a procedure or use appropriate dispersal equipment. After an individual is determined qualified, the training center must notify the appropriate certifying official that the individual completed formal training requirements for non-FIFRA certification in designated categories. These designated categories are described in paragraph 2j of this enclosure.

(3) Issuing Certificates of Competency. Certificates will be issued to contractor pest management personnel by the PMC on determination that the candidate has successfully completed certification requirements. Personnel successfully completing certification requirements for the core and one or more of the pest control categories and apprenticeship requirements will be issued a certificate of competency (DD Form 1826 and DD 1826-1) (available at <http://www.dtic.mil/whs/directives/infomgt/forms/dd/ddforms1500-1999.htm>). To identify certified personnel, a uniform numbering system (described in Appendix 4) must be used in the issue of certificates.

(4) Contractor Personnel Training and Certification

(a) Apprenticeship IPM Training. Trainees must participate in apprenticeship training under the supervision of a certified individual, or if not available, under the guidance of a PMP, for at least 1 year.

(b) Formal Classroom Training. Formal classroom training will be requested at OCONUS sites under contingency non-FIFRA jurisdiction. See subparagraph 2d(2) of this enclosure for a list of the non-FIFRA training centers.

(c) Course Content. Individuals will be required to complete course curriculums applicable to their duties, which will include core and specific category courses. All students are required to pass both portions of pest control training (core and category) to be DoD non-FIFRA certified. The core phase is a prerequisite and provides basic information common to all pesticide applicators. Category courses may be grouped to facilitate training and specialization. Those pest control categories may be addressed as separate blocks of instruction as the training situation dictates. Appendix 5 provides information and subject areas of the training center course curriculums.

(d) Written Examinations. The training centers of the respective DoD Components must prepare written examinations based on course content and study materials made available to applicators. The actual number of examination questions for each subject will be directly related to the instructional hours and subject complexity, but three questions per lecture hour will be the minimum used by all the training centers. Separate examinations will be given for the core section and each category section. (See Appendix 3 for sample examination questions.)

(e) Passing Scores. When a student receives passing test scores in the core phase and on individual categories, training centers must give the results to the designated certifying official. A grade of at least 70 percent on any examination is passing. Personnel with scores between 50 percent and 69 percent on the core phase exam may attempt a reexamination after 24 hours (at the discretion of the course director and the individual's supervisor) or may take up to 30 days to restudy and undergo reexamination. During the core phase, an individual who fails with a score of 50 percent or less must be disenrolled from the formal training course, and the installation, designated certifying official, and the DoD Component's PMC must be notified for applicable action. A passing grade on the core phase examination is a prerequisite for certification in any category.

(f) Reexamination. Individuals who score between 50 and 69 percent will be allowed to continue with category training and to retake the examination(s) failed. Individuals with scores between 50 and 69 percent may attempt a reexamination after 24 hours (at the discretion of the course director and the individual's supervisor) or may take up to 30 days to restudy and undergo reexamination. Reexamination may be administered by the educational center supporting the individual's installation. A second failure will result in a recommendation by the training center to the CLO to remove the individual from pest control duties.

(g) Training for Personnel from Other Services. Training centers providing training for contractor personnel from other Services must forward those results to the CLO.

(5) Recertification

(a) Triennial recertification training and testing is mandatory to maintain DoD non-FIFRA certification. This training must be accomplished through attendance at an approved DoD course. These courses provide new information to update the knowledge of the students and to review safety procedures. They reevaluate the student's level of competency in pest control through written examinations and on-the-job performance. Since it is the objective of the DoD to maintain a fully trained pest control force, the courses must be made available to all certified contractor applicators.

(b) Non-FIFRA certification of the contractor personnel is valid for 3 years from the date the certificate is issued or until an individual is no longer working for the contractor supporting the DoD operation. Recertification must be accomplished by the last day of the month in which the original certificate expires. The original certifying official may extend an individual's certification for cause on a one-time basis for a period of not more than 1 year with a memorandum of record. The original certifying official will document the extension in the records and the individual requesting the extension will maintain this memorandum as proof of the extension. To be certified, the individual must:

1. Attend a DoD-approved recertification course that uses, as a minimum, the AFPMB standardized curriculums, which are described in Appendix 5.

2. Take and pass a proctored written examination with a score of at least 70 percent on the core to include calculations, calibration, and all category examinations for which recertification is required.

(c) Contractor personnel who fail a recertification examination may be given up to 30 days from the date on which the examination was failed to study applicable materials. At the end of the study period, the pest management instructor or the installation training officer must administer a closed-book make up examination.

1. A second failure will result in the individual not being certified in the category(s) failed. If a student fails a category twice, the only method they will have to obtain certification is to complete an approved certification course. In either case, failure in the recertification examination will be cause for certificate revocation and for recommendation for removal from pest control functions.

2. Documentation of failures must be forwarded to the command PMC.

(d) Applicator recertification courses must be consistent with the requirements of Appendix 5. Contract personnel attending recertification courses will only be allowed to test and qualify in those categories for which they already hold initial certification. New category

training must be achieved, as outlined in paragraph 2b of this enclosure. Additional contact hours may be added at the discretion of the local training sponsor.

(e) If a student fails a recertification category twice, the only method they will have to obtain certification is to complete the resident basic training course.

(6) Certification Documents

(a) DoD non-FIFRA certificates will be issued for specific pest control categories to contract pesticide applicators who successfully complete the required training. (See Appendix 2 for category certification standards.)

(b) Procedures for issuing DoD non-FIFRA certificates for contract pesticide applicators are given in Appendix 4.

(7) Denying, Suspending, and Revoking Certification. Any DoD non-FIFRA contractor pesticide applicator may have his or her certificate denied, suspended, or revoked. Situations that may be cause for certificate denial, suspension, or revocation include, but are not limited to:

(a) Misuse of a pesticide.

(b) Falsification of any records required to be maintained by the DoD non-FIFRA-certified applicator.

(c) Pending investigations of pesticide-related episodes or accidents resulting in human or animal injury or environmental contamination, such as to water supplies, food, and foodstuffs.

(d) Conviction under any federal or host-nation pesticide or environmental law.

(e) Failure to maintain records that are required by federal, host-nation, or DoD and DoD Component regulations.

(f) Failure to comply with DoD and DoD Component pest management directives or regulations.

(g) Failure to use appropriate safety equipment that is identified on the pesticide label.

(h) Inability to perform work in a safe manner due to incompetence, carelessness, or physical or mental deficiency.

(i) Pending outcome of a criminal or civil action. (See paragraphs 2g(3) and (4) of this enclosure.)

(j) Failure to maintain theater clearance.

(8) Contractor Personnel Suspension or Revocation of Certification

(a) The CLO will initiate a formal review if pesticide violations are suspected. Any DoD non-FIFRA-certified applicator who violates any provision of a law or implementing regulations will have his or her certificate reviewed for possible suspension or revocation.

(b) Suspected violations, such as pesticide misuse or recorded falsification, must be reported through applicable command channels to the CLO. The CLO will review the suspected violation and determine if further action is required.

(c) If no action is warranted, the functional commander will be notified in writing that a review of the suspected violation has been conducted and that it has been determined that a violation has not occurred.

(d) If the CLO determines that a violation may have occurred, he or she will initiate action to temporarily suspend the certificate of the applicator(s) and forward the matter to the DoD Component's senior PMC for review.

(9) Non-FIFRA Certification Categories. The three non-FIFRA certification categories in Table 2 are offered by the DoD to meet the specific requirements for DoD contingency pesticide use and are consistent with those described in subpart 171.3 of Reference (h).

Table 2. Pest Control Categories

PEST CONTROL CATEGORY	DoD CATEGORY
Right-of-Way Pest Control	6
Industrial, Institutional, Structural, and Health-Related Pest Control	7
Public Health Pest Control	8

Appendixes

1. Core (General) Certification Standards
2. Specific Certification Standards
3. Sample Examination Questions
4. Procedures for Issuing Non-FIFRA Certificates for Pesticide Applicators
5. Minimum Curriculum Requirements for DoD Non-FIFRA Certification and Recertification Training

APPENDIX 1 TO ENCLOSURE 3

CORE (GENERAL) CERTIFICATION STANDARDS

DoD employees desiring non-FIFRA certification will demonstrate practical knowledge of the principles and practices of IPM, and the safe use of pesticides. Testing will be based on examples of problems and situations applicable to the particular category or subcategory of the applicator's certification. (See Appendix 2 for category certification standards and Appendix 4 for sample examination questions.) As a prerequisite for certification in categories (specific standards), DoD employees must successfully pass a comprehensive examination covering these core (general standard) areas:

a. Pest Recognition. Recognizing common pests to be controlled and damage caused by them, including:

(1) Common features of pest organisms and characteristics of damage and/or characteristics needed for pest recognition.

(2) Recognition of relevant pests.

(3) Pest development and biology, as they may relate to problem identification and control.

b. Pesticide Labels. Label and labeling comprehension, including:

(1) Requirement and necessity for use consistent with the label.

(2) General format of labels and labeling.

(3) Understanding of product versus chemical and common names, signal words and symbols, and precautionary statements that commonly appear on the label and/or labeling.

(4) Classification of product (general use versus restricted use).

(5) Protective clothing and equipment requirements.

(6) Environmental hazard statements.

(7) Storage and disposal instructions.

(8) When to read different sections of the label and/or labeling.

(9) Directions for use section, to include crop, animal, and/or site; dosage instructions; timing and methods of application; mixing directions (if applicable); and pests to be controlled.

c. Environmental Considerations. Recognizing local environmental situations that must be considered during application to avoid contamination, including:

- (1) Weather factors that affect pesticide application and the expected effects.
- (2) Factors that affect pesticide drift.
- (3) Factors that affect pesticide runoff and other aquatic contamination, including formulation, site, amount of pesticide, soil type, rainfall, drainage, and direct application to waterways.
- (4) Presence of wildlife, bees, aquatic areas, and other sensitive non-target areas.

d. Pesticide Poisoning. Recognizing pesticide poisoning symptoms and procedures to follow in case of a pesticide accident, including:

- (1) Signs and symptoms of pesticide poisoning.
- (2) First aid, including recognition of pertinent information on the label and other procedures to be followed in case of a pesticide accident.

e. Pesticide Storage. Storage of pesticides and containers, including:

- (1) Applicable storage facility characteristics.
- (2) Storage facility supplies.
- (3) Proper storage and identification of pesticide containers.
- (4) Proper security for pesticides and application equipment.

f. Pesticide Disposal. Disposal of pesticides, containers, and rinsates, including:

- (1) Proper methods for disposing of excess pesticides.
- (2) Proper methods for disposing of pesticide rinsates.
- (3) Proper methods for disposing of used pesticide containers.
- (4) Consequences of improper disposal (including health, environmental, and legal precautions).
- (5) Legal responsibility, laws, and regulations (and liability information), including:
 - (a) Pertinent host-nation and U.S. Federal pesticide laws and regulations not previously discussed.

(b) Types of situations in which applicators may be held liable.

(c) Liability and/or penalties as yet another reason for following information on labels and/or labeling and other laws and regulations.

(d) The need for record keeping and methods for doing so.

(e) DoD regulations that affect pesticide applicators.

g. Pesticide Safety. Safety, including:

(1) Acute pesticide toxicity levels.

(2) Chronic effects of pesticide exposure.

(3) Concept of accumulative effects.

(4) Concept that risk is a function of both pesticide toxicity and exposure.

(5) Common routes of pesticide exposure (i.e., oral, dermal, and inhalation).

(6) Protective clothing and equipment, including body covering, goggles, aprons, gloves, hats, foot coverings, goggles or face shields, and respirators.

(7) Care and maintenance of protective clothing and equipment.

(8) Personal hygiene.

(9) Proper mixing and/or loading of concentrated pesticides.

(10) Closed handling systems.

h. Worker Protection. Reentry and worker protection, including:

(1) Definition and importance of reentry intervals.

(2) Types of reentry intervals.

(3) Warnings to workers and notices of reentry intervals.

(4) Content of warning to workers.

(5) Early reentry.

(6) Other worker protection rules.

- i. Pesticides. Pesticides, including:
 - (1) Classes and types of pesticides.
 - (2) Choosing the correct pesticide.
 - (3) Typical formulations (i.e., characteristics, advantages, disadvantages, and main uses).
 - (4) Pesticide compatibility.
 - (5) Adjuvant(s) and surfactants.
 - (6) Factors that influence effectiveness or lead to such problems as resistance to pesticides.

- j. Pest Control. Pest control strategies, including IPM factors, such as:
 - (1) Insect pests, including:
 - (a) Insect control strategies.
 - (b) Importance of accurate pest identification and consideration of the pest's life cycle to control strategies.
 - (2) Plant disease pests, including:
 - (a) Plant disease control strategies.
 - (b) Types of control strategies.
 - (c) Importance of timing in developing and applying disease control strategies.
 - (3) Weeds, including:
 - (a) Weed control strategies.
 - (b) Importance of timing in developing and applying weed control strategies.
 - (4) Mollusk control strategies (if applicable).
 - (5) Vertebrate control strategies.

- k. Application Equipment. Application equipment factors, such as:

(1) Typical pesticide spray equipment, including characteristics, advantages, disadvantages, and main uses.

(2) Nozzle patterns and materials.

(3) Sprayer selection, use, and care.

(4) Granular applicators, including characteristics, advantages, disadvantages, main uses, selection, use, and care.

(5) Cleanup of equipment after use.

l. Calibration. Calibration factors, such as:

(1) Mixing soluble and wettable powders.

(2) Mixing liquid concentrate formulations.

(3) Determining size of area to be treated.

(4) Preparations before calibration of sprayer.

(5) Selecting nozzle tips.

(6) Adjusting nozzle output.

(7) Swath width and equipment calibration.

(8) Field calibration of sprayer.

(9) Calibration of granular applicators.

m. Proper Transportation of Pesticides

(1) Compliance with regulations for movement of hazardous materials.

(2) Ensuring containers are in safe condition.

(3) Separation of pesticides from other items.

(4) Securing containers to prevent spills, loss, or unauthorized removal.

n. Groundwater Protection. Groundwater protection factors, such as:

(1) Character of groundwater.

- (2) Factors that affect groundwater contamination.
 - (3) Local groundwater conditions.
 - (4) Applicator practices that impact groundwater contamination, including the use of buffer zones.
- o. Endangered Species. Endangered species protection factors, such as:
- (1) Endangered species recognition.
 - (2) Habitat of species.
 - (3) Ways pesticides may harm endangered species.
- p. Applicator Responsibility. Applicator responsibilities, such as:
- (1) Use pesticides properly.
 - (2) Protect stored pesticide products for future use.
 - (3) Supervision of certified applicators.

APPENDIX 2 TO ENCLOSURE 3

SPECIFIC CERTIFICATION STANDARDS

1. DoD PEST CONTROL CATEGORIES. DoD non-FIFRA pest control categories 2 through 8 correspond to the Environmental Protection Agency categories 2 through 8 described in subpart 171.3 of Reference (h). DoD employees desiring certification must demonstrate competency in each category of pest control in which they seek certification.

2. STANDARDS OF COMPETENCY. Standards of competency required by the DoD are:

a. Category 2 – Forest Pest Control. Individuals to be certified in this category must successfully complete the core. They must also attend a training program and pass a written examination covering, but not limited to:

- (1) Forest management practices.
- (2) Fertilization programs.
- (3) Plant biology, physiology, and pathology.
- (4) Classification and mode of action of pesticides.
- (5) Biology and control of forest pests.
- (6) Natural resources utilization.

b. Category 3 – Ornamental and Turf Pest Control. Individuals to be certified in this category must successfully complete the core. They must also attend a training program and pass a written examination covering, but not limited to:

- (1) Vegetation and turf management practices.
- (2) Fertilization programs.
- (3) Plant biology and physiology
- (4) Classification and mode of action of herbicides.
- (5) Biology and control of ornamental and turf pests and diseases.
- (6) Weed control.
- (7) Natural resources conservation programs.

c. Category 5 – Aquatic Pest Control. (This category excludes applicators engaged in public health-related activities, which will be covered in Category 8.) Individuals to be certified in this category must successfully complete the core. They must also attend a training program and pass a written examination covering, but not limited to:

- (1) Plant biology and physiology.
- (2) Identification and control of aquatic weeds.
- (3) Classification and mode of action of herbicides.
- (4) Natural resources conservation programs.

d. Category 6 – Right-of-Way Pest Control. Individuals to be certified in this category must successfully complete the core. They must also attend a training program and pass a written examination covering, but not limited to:

- (1) Plant biology and physiology.
- (2) Identification and control of weeds.
- (3) Classification and mode of action of herbicides.
- (4) Natural resources conservation programs.

e. Category 7 – Industrial, Institutional, Structural, and Health-Related Pest Control. Individuals to be certified in this category must successfully complete the core. They must also attend a training program and pass a written examination covering, but not limited to:

- (1) Biology, identification, and control of common household pests.
- (2) Control of vertebrate pests.
- (3) Control of wood destroying organisms.
- (4) Biology and control of termites.
- (5) Biology and control of stored product pests.
- (6) Fumigation procedures.

f. Category 8 – Public Health-Related Pest Control. Individuals to be certified in this category must successfully complete the core. They must also attend a training program and pass a written examination covering, but not limited to:

- (1) Biology, identification, and control of vectors and pests of medical importance.
- (2) Identification and handling of venomous animals.
- (3) Control of vertebrate disease reservoirs, including rodent control techniques.

APPENDIX 3 TO ENCLOSURE 3

SAMPLE EXAMINATION QUESTIONS

1. GENERAL STANDARDS TEST FOR CORE. Use the label for Demand CS^R insecticide to answer questions a through c.

a. All registered pesticides have a statement on the label reading:

- (1) Danger – Poison.
- (2) Toxic to Bees.
- (3) Warning – Toxic.
- (4) Keep out of Reach of Children.

b. What is the acute oral toxicity (LD₅₀), which is indicated by the signal word?

- (1) 0-50 milligrams per kilogram (mg/kg).
- (2) 50-500 mg/kg.
- (3) 500-5,000 mg/kg.
- (4) Greater than 5,000 mg/kg.

c. From the label, which of the following is **not** a target pest?

- (1) Fleas.
- (2) Silverfish.
- (3) Honeybees.
- (4) Subterranean termites.

d. Which kind of pesticide prevents normal clotting of blood?

- (1) Surfactant.
- (2) Synergist.
- (3) Anticoagulant.

(4) Animal systemic.

e. If it is determined that a pesticide treatment is necessary, then the applicator should select a pesticide that will:

(1) Kill all insects in target area.

(2) Remain active for many years.

(3) Be effective while harming the environment least.

(4) Do all of the above.

f. Pesticides must be repackaged if containers are leaking. Which of the following must be put on the new container?

(1) Sign signifying type of poison.

(2) Complete label.

(3) Sign with name and percent of pesticide.

(4) Sign with word “danger” and name of pesticide.

g. A pesticide that is absorbed in one part of a plant or animal and transported to another part where it kills the pest is called a:

(1) Contact pesticide.

(2) Volatile pesticide.

(3) Residual pesticide.

(4) Systemic pesticide.

h. To spray weeds using a hydraulic sprayer, what type of nozzle and pressure do you need?

(1) Coarse nozzle and high pressure.

(2) Coarse nozzle and low pressure.

(3) Fine nozzle and high pressure.

(4) Fine nozzle and low pressure.

2. CATEGORY 3, ORNAMENTAL AND TURF PEST CONTROL

a. When spraying near human habitations, you should minimize the hazard of spray drift to humans, pets, and other domestic animals by reducing:

- (1) Pressure.
- (2) Volume.
- (3) Vehicle speed.
- (4) Diameter of nozzle openings.

b. If you find circles or arcs of dark-green grass with mushrooms around the outer edge, surrounding areas of light-colored or dead grass, what would you suspect?

- (1) Dollar spot.
- (2) Rotting roots or wood under turf.
- (3) Fairy ring.
- (4) Cottony blight.

c. Small, sometimes immobile, insects with sucking mouthparts and often with waxy body coverings are:

- (1) Spider mites.
- (2) Scale insects.
- (3) Thrips.
- (4) Sowbugs.

d. Mole damage to turf areas may be sharply reduced by:

- (1) Daily watering.
- (2) Soil tilling.
- (3) Elimination of food insects.
- (4) Soil compaction.

3. CATEGORY 5, AQUATIC PEST CONTROL

a. Water hyacinth is an example of a(n):

- (1) Emerged weed.
- (2) Submerged weed.
- (3) Free floating weed.
- (4) Floating, but rooted, weed.

b. The most effective and extensively used herbicide for algae control is:

- (1) 2, 4-D.
- (2) Dalapon.
- (3) Copper Sulfate.
- (4) Glyphosate.

c. The first step in controlling weeds growing in drainage ditches is to:

- (1) Select proper herbicide.
- (2) Identify the weed problem.
- (3) Calculate amount of herbicide required.
- (4) Determine the area to be sprayed.

d. To control coontails, you are to apply Aquathol Plus^R at the rate of 1 gallon for each acre foot. You determine that the surface area is 20 acres and the lake average depth is 12 feet. How many gallons of Aquathol Plus^R do you need?

- (1) 1.6.
- (2) 16.
- (3) 240.
- (4) 320.

4. CATEGORY 6, RIGHT-OF-WAY PEST CONTROL

a. Insecticidal and herbicidal equipment should not be interchanged primarily to protect the:

- (1) Public.
- (2) Operator.
- (3) Environment.
- (4) Desirable plants.

b. If a standard rate of two pounds active ingredient (AI) for each acre is given, how much 2,4-D amine salt product is needed per acre if the product contains 4 pounds AI per gallon?

- (1) 0.5 gallons.
- (2) 1.0 gallons.
- (3) 2.0 gallons.
- (4) 10 gallons.

c. Contact herbicides are most effective against perennial plants.

- (1) True.
- (2) False.

d. Sometimes the taste of plants is improved as a result of herbicide spraying. That presents a danger primarily to:

- (1) The operator.
- (2) Children.
- (3) Livestock.
- (4) Desirable vegetation.

e. Irrigation ditches and potable water supplies should be protected from persistent herbicides, such as picloram, by:

- (1) Using a mist machine.
- (2) Leaving a buffer zone .

5. CATEGORY 7, INDUSTRIAL, INSTITUTIONAL, STRUCTURAL, AND HEALTH-RELATED PEST CONTROL

- a. The domestic rodent that is most dependent on humans and is the most common is the:
 - (1) Roof rat.
 - (2) Norway rat.
 - (3) Prairie dog.
 - (4) Ground squirrel.

- b. Which cockroaches are commonly found in sewer lines and in damp and dirty basements?
 - (1) Oriental and American cockroaches.
 - (2) German and Brown-banded cockroaches.
 - (3) Brown and Australian cockroaches.
 - (4) Smoky-brown and Oriental cockroaches.

- c. The most important factor in the control of cockroaches is:
 - (1) Selection of the proper dispersal equipment.
 - (2) Correct timing of applications.
 - (3) Sanitation.
 - (4) Selection of the correct insecticide.

- d. Effective control of cat or dog fleas can only be achieved if:
 - (1) The outside and underside of the house are treated.
 - (2) The animals and premises are treated at the same time.
 - (3) Outdoor residual treatment is carried out.
 - (4) The animals are sprayed or dipped with the proper insecticide.

6. CATEGORY 8, PUBLIC HEALTH PEST CONTROL

- a. Which one of these diseases is transmitted to man through infected bird droppings?
 - (1) Typhus fever.
 - (2) Arthropod-borne encephalitis.
 - (3) Histoplasmosis.
 - (4) All of the above.

- b. The vector responsible for the transmission of plague and murine typhus is the:
 - (1) German cockroach.
 - (2) Oriental rat flea.
 - (3) House mouse mite.
 - (4) Lone Star tick.

- c. In a plague endemic area, your initial control measures should be directed against the:
 - (1) Rodents.
 - (2) Wild birds.
 - (3) Ectoparasites.

- d. Why should an insecticide dust be used in a rodent control program?
 - (1) To kill the fleas carried by rats.
 - (2) To increase the rat killing power of poisoned baits.
 - (3) Many insecticides are effective rodent killers.
 - (4) To control flies that feed on dead rodents.

- e. The primary consideration in housefly control is:
 - (1) Residual spray.
 - (2) Use of aerosols.

(3) Sanitation.

(4) Malathion sugar baits.

f. The disease most commonly transmitted by mosquitoes in the United States is:

(1) Plague.

(2) West Nile virus.

(3) Malaria.

(4) Yellow fever.

g. Which of the following possible control methods would be the proper choice for efficient mosquito control in a pond used for recreational fishing and boating?

(1) Standing water should be eliminated by drainage or filling.

(2) Pond should be stocked with mosquito feeding fish.

(3) Ultra-low volume (ULV) application should be made on a weekly basis.

(4) Mosquito larvicides should be applied on biweekly basis.

h. If you are sent to the housing area on post to control Aedes aegypti, the yellow fever mosquito, which of these techniques would be most effective?

(1) Ditching and filling breeding sites.

(2) ULV spraying of the area.

(3) Emptying and removing artificial containers.

(4) Dusting the breeding sites.

APPENDIX 4 TO ENCLOSURE 3

PROCEDURES FOR ISSUING NON-FIFRA CERTIFICATES
FOR PESTICIDE APPLICATORS

1. The designated certifying official will issue a certificate to pest management personnel on determination that the individual has successfully completed certification requirements. Installation civilian, third-country national, and local national pesticide applicator personnel must successfully pass the core and one or more of the non-FIFRA pest control categories and apprenticeship requirements to be issued a DD Form 1826.

2. When an individual has completed initial formal training at one of the training centers, the commanding officer of the training center will provide an identification number for the certificate. To uniquely identify certified personnel, a numbering system must be used in the issuance of either an 8 ½" x 11" DD Form 1826 or a wallet size DD Form 1826-1.

a. Certificate numbers must contain three or four elements:

(1) The first element, consisting of two or three letters, is a designation of where the individual was originally trained. The designations are:

- (a) OA – U.S. Army Medical Department Center and School, Fort Sam Houston, TX.
- (b) OAE – U.S. Army Public Health Command Region-Europe.
- (c) OAP – U.S. Army Public Health Command Region-Pacific.
- (d) OM – Medical Education and Training Center, San Antonio, TX.
- (e) ONA – Naval Facilities Engineering Command-Atlantic, Norfolk, VA.
- (f) ONJ – Navy Entomology Center of Excellence, Jacksonville, FL.
- (g) ONP – Naval Facilities Engineering Command-Pacific, Pearl Harbor, HI.
- (h) ONS – Navy Environmental and Preventive Medicine Unit Five, San Diego, CA.

(2) The second element is a sequential three-digit number assigned by the initial training center indicating their order of certification.

(3) The third element is a two-digit number indicating the calendar year in which initial certification was received.

(4) The fourth element is a four-digit number indicating the month and calendar year of current recertification. That element is not required on certificates for pesticide applicators during their first 3 years of DoD certification.

b. For example, the certificate number OAE-001-77-0179 indicates that the certificate holder was initially certified at the Army school at U.S. Army Public Health Command Region-Europe, was the first person certified by that center in 1977, and was recertified in January 1979.

3. The words, “NON-FIFRA CERTIFICATION” must precede the listing of certification categories on each DD Form 1826 and 1826-1 issued for non-FIFRA certification. Categories of certification must be indicated on each certificate. On the DD Form 1826, the pest control certification categories must be listed. On the wallet size DD Form 1826-1, invalid categories must be lined out before issue. Where facilities are available, it is desirable to laminate the DD Form 1826-1 after completion.

4. DD Form 1826-1 must be issued bearing the same information as the DD Form 1826. Certified individuals must carry this card while in the performance of their duties.

5. Certificate numbers vacated by revocation, resignation, or for any other reasons will not be reissued.

6. Certificates will bear the name of the individual without any additional titles, except for supervisors. In situations where it is desirable to identify the certified individual as a “pest control inspector,” or “planner-estimator,” a standard recognition title will be used.

7. Certificates will expire 3 years from the last day of the month in which the certificate is issued. The certifying official may extend an individual’s certification for cause for a period of not more than 1 year.

8. DoD Component PMCs will maintain a current list of their Component pesticide applicator certifying officials, to be provided upon request to the Director, AFPMB, who will maintain a current compiled list of DoD certifying officials.

APPENDIX 5 TO ENCLOSURE 3MINIMUM CURRICULUM REQUIREMENTS FOR DoD NON-FIFRA
CERTIFICATION AND RECERTIFICATION TRAININGTable 3. Minimum Curriculum Requirements for Core Certification Training

TITLE	HOURS REQUIRED
1. INTRODUCTION TO DoD IPM	0.5
2. LAWS, REGULATIONS, AND REPORTING REQUIREMENTS	5.0
a. Federal Laws Regulating Pesticide Use	
b. DoD Documents	
c. Label and Labeling	
d. Records and Reports	
3. PESTICIDE CALCULATIONS	6.0
4. PESTICIDE SAFETY	9.0
a. Harmful Effects	
(1) To the Applicator	
(2) To the Environment	
(3) Areas of Special Concern	
(a) Groundwater	
(b) Rare and Endangered Species	
b. Protecting the Applicator	
(1) Programs for the Protection of Pesticide Applicators	
(2) Personal Protective Equipment	
(3) Medical Response to Pesticide Poisoning	
c. Protecting the Environment	
(1) Preventing Spills	
(a) Mixing and Loading	
(b) Pesticide Transportation	
(c) Pesticide Storage	
(2) Spill Remediation	
(3) Pesticide Disposal	
(4) Equipment Calibration	
d. Pest Management Shop	
5. INTRODUCTION TO PESTS	4.0
6. IPM	9.5
a. Introduction	
b. Non-Chemical Methods	
(1) Cultural Management and Biological Management	
(2) Genetic Management	
(3) Regulatory Management	
(4) Mechanical and Physical Management	

Table 3. Minimum Curriculum Requirements for Core Certification Training, Continued

TITLE	HOURS REQUIRED
c. Chemical Methods	
(1) Attractants	
(2) Repellents	
(3) Plant Growth Regulators	
(4) Pesticides	
(a) Defining Pesticides	
(b) Modes of Entry	
(c) Families of Pesticides	
(d) Formulations	
(e) Selecting Pesticides and Formulations: Case Studies	
d. Addressing Unsuccessful Pest Management Programs	
(1) Reviewing Non-Chemical Elements of the Program	
(2) Reviewing Selection and Application of Pesticides	
(3) Pesticide Resistance	
e. IPM Case Studies	
7. EQUIPMENT OVERVIEW	1.5
8. ADMINISTRATIVE PROCEDURES (REVIEWS, COMPETENCY EXAMS, ETC.)	4.5
TOTAL HOURS	40.0

Table 4. Minimum Curriculum Requirements for Combined Certification Training in Categories 2, 3, 5, and 6

TITLE	HOURS REQUIRED
1. Introduction to Non-Chemical Integrated Vegetation Management	1.0
2. Plant Biology and Physiology	1.0
3. Plant Health Maintenance Programs; Ornamental and Turf	3.0
4. Classification, Use and Mode of Action of Herbicides, Fungicides, and Nematicides	3.0
5. Health Hazards of Herbicides, Fungicides, and Nematicides	1.0
6. Diseases of Turf, Ornamentals, and Trees; and Nematode Management	3.0
7. Pests of Turf, Trees, and Ornamentals	3.0
8. Aquatic Weeds; Identification and Management	1.5
9. Natural Resources Conservation Program	2.0
10. Pesticide Use Problems	4.0
11. Forest Pest Management	0.5
12. Vegetation Management Equipment	3.0
13. Administrative Procedures (Reviews, Competency Exams, etc.)	6.0
TOTAL HOURS	32.0
Topics 1, 2, 4, 5, 10, 12 and 13 are required for Category 6. OCONUS PMCs, following coordination with OCONUS certifying officials and training centers may modify the curriculum based on regional pest management objectives.	

Table 5. Minimum Curriculum Requirements for Combined Certification Training in Categories 7 and 8

TITLE	HOURS REQUIRED
1. Fleas	2.0
2. Cockroaches	2.5
3. Stored Pest Products	2.5
4. Ticks and Mites	2.0
5. Flies Other than Mosquitoes	3.0
6. Mosquitoes	4.0
7. Venomous Animals	1.0
8. Vertebrate Pests	1.5
9. Rodents	2.0
10. Equipment	12.0
11. Ants	1.0
12. Other Household Pests	0.5
13. Wood Preservation	1.0
14. Other Wood Destroying Organisms	2.0
15. Termites	5.0
16. Administrative Procedures (Reviews and Competency Exams, etc.)	6.0
TOTAL HOURS	48.0
<p>OCONUS PMCs, following coordination with OCONUS certifying officials and training centers, may modify the curriculum based on regional pest management objectives. Topics 1 through 16 are required for Category 7. Only topics 1 through 12 and 4.0 hours administrative time are required for Category 8.</p>	

Table 6. Minimum Curriculum Requirements for Core Recertification Training

TITLE	HOURS REQUIRED
1. Environmental Protection, Integrated Pest Management	2.0
2. Pesticide Safety	1.0
3. Pesticides	1.0
4. Laws, Labels, and Labeling	1.0
5. Formulations, Calculations, and Applications	1.0
6. Records	1.0
7. Equipment	1.0
8. Administrative Procedures (Reviews and Competency Exams, etc.)	1.0
TOTAL HOURS	9.0

Table 7. Minimum Curriculum Requirements for Combined
Recertification Training in Categories 2, 3, 5, and 6

TITLE	HOURS REQUIRED
1. Plant and Turf Diseases	2.0
2. Insect Pests of Plants	2.0
3. Vegetation Management (Weeds and Aquatics)	2.0
4. Seminar and/or Problems and Discussion	2.0
5. Administrative Procedures (Reviews and Competency Exams, etc.)	1.0
TOTAL HOURS	9.0

Table 8. Minimum Curriculum Requirements for Combined
Recertification Training in Categories 7 and 8

TITLE	HOURS REQUIRED
1. Household Pests	1.0
2. Stored Pest Products	0.5
3. Ticks and Mites	0.5
4. Mosquitoes	1.0
5. Flies Other than Mosquitoes	0.5
6. Venomous Organisms	0.5
7. Rodents	1.0
8. Other Vertebrates	1.0
9. Termites ¹	1.0
10. Other Wood-Destroying Organisms	0.5
11. Wood Preservation	0.5
12. Administrative Procedures (Reviews, Competency Exams, Etc.)	1.0
TOTAL HOURS	9.0
Topics 1 through 12 are required for category 7 recertification.	
Topics 1 through 8 and 12 are required for category 8 recertification.	

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

AFPMB	Armed Forces Pest Management Board
AI	active ingredient
CLO	contingency liaison officer
DoDI	Department of Defense Instruction
DUSD(I&E)	Deputy Under Secretary of Defense for Installations and Environment
FGS	Final Governing Standards
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
IPM	integrated pest management
LD ₅₀	lethal dosage
mg/kg	milligrams per kilogram
OCONUS	outside the continental United States
PMC	pest management consultant
PMP	pest management professional
SOFA	status of forces agreement
ULV	ultra-low volume
U.S.C.	United States Code
USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics

PART II. DEFINITIONS

Unless otherwise noted, the following terms are defined in Reference (b).

certified pesticide applicator

certifying official

contingency liaison officer. Defined in DODI 4150.07.

contractor applicator

direct supervision

DoD-certified applicator

DoD employee

DoD Integrated Pest Management Program

DoD property

FGS. A comprehensive set of country-specific substantive provisions, typically technical limitations on effluent, discharges, etc., or a specific management practice.

IPM

non-FIFRA. Non-FIFRA is defined as all areas not under FIFRA jurisdiction. FIFRA jurisdiction includes: the 50 States and the District of Columbia; the Commonwealths of Puerto Rico, the Northern Marianas, and the Virgin Islands; and the Territories of Guam and American Samoa.

pesticide

pests

PCM

PMP

restricted-use pesticide. Defined in Reference (d) and discussed in part 152.160-175 of Reference (h).

State

training