

Amended on October 30, 2018

Department of Veterans Affairs
Veterans Health Administration
Washington, DC 20420

VHA DIRECTIVE 1850.02(1)
Transmittal Sheet
April 6, 2017

PEST MANAGEMENT OPERATIONS

1. REASON FOR ISSUE: This Veterans Health Administration (VHA) directive provides the requirements for establishing and maintaining an effective Integrated Pest Management (IPM) program within Department of Veterans Affairs (VA) medical facilities.

2. SUMMARY OF MAJOR CHANGES: Amendment, dated October 30, 2018, specifies training requirements for the Pest Management Officer (paragraph 4.c.(4)) and updates links to the VA Online Learning Center accessed through the Pest Management section of the EPS, VA Central Office Web site at: <http://vaww.vhaco.va.gov/EPS/> (paragraphs 4.b.(3), 4.c.(5), and 5.c.)

3. RELATED ISSUES: VHA 1850, Environmental Programs Service, dated March 31, 2017.

4. RESPONSIBLE OFFICE: The Director, Environmental Programs Service, is responsible for the content of this directive. Questions concerning this directive may be referred to the Director, Environmental Programs Service (10NA7) at 202-632-7781.

5. RESCISSION: VHA Handbook 1850.02, dated December 7, 2011, is rescinded.

6. RECERTIFICATION: This VHA directive is scheduled for recertification on or before the last working day of April 2022. This VHA directive will continue to serve as national VHA policy until it is recertified or rescinded.

Poonam Alaigh, M.D.
Acting Under Secretary for Health

DISTRIBUTION: Emailed to the VHA Publications Distribution List on April 17, 2017.

NOTE: *All references herein to VA and VHA documents incorporate by reference subsequent VA and VHA documents on the same or similar subject matter*

CONTENTS

PEST MANAGEMENT OPERATIONS

1. PURPOSE 1

2. DEFINITIONS 1

3. POLICY..... 2

4. RESPONSIBILITIES 2

5. CERTIFICATION AND TRAINING..... 8

6. RECORDS MAINTENANCE 10

7. SAFETY 10

8. INTEGRATED PEST MANAGEMENT OPERATING PLAN 15

9. LIGHT TRAPS 17

10. PESTICIDES COMPOUNDED WITH OTHER PRODUCTS 17

11. BAN USE OF HERBICIDE 2,4-DICHLOROPHENOXYACETIC ACID 17

12. FEEDING WILDLIFE 17

13. REFERENCES 17

APPENDIX A

INTEGRATED PEST MANAGEMENT OPERATING PLAN OUTLINEA-1

PEST MANAGEMENT OPERATIONS

1. PURPOSE

This Veterans Health Administration (VHA) directive provides the requirements for establishing and maintaining an Integrated Pest Management (IPM) Program, which promotes safe, efficient, and environmentally-preferred strategies, and prevents or controls disease vectors and other pests that may adversely affect health, impede operations, or damage property. Additionally, it provides the responsibilities for addressing bedbug issues within Department of Veterans Affairs (VA) medical facilities. **AUTHORITY:** Title 38 United States Code (U.S.C.) 7301(b).

2. DEFINITIONS

a. **Bedbugs.** Bedbugs are small, brownish, flattened insects that feed on blood. The main source for blood meals (i.e., “bedbug bites”) is humans, although other mammals and birds can serve as a source. The common bedbug, *Cimex lectularius*, is the species most adapted to living with humans. They are nocturnal and typically bite people while they sleep. No building structure or common source of transportation is immune to bedbug infestation. Bedbugs commonly hide in mattresses, carpets, behind electrical plates, peeling paint or wallpaper, electronics, and in furniture crevices. Although bedbugs can harbor pathogens in their bodies, there are no known documented cases of transmission to humans.

b. **General-Use Pesticide.** General-use pesticides are pesticides which may be legally purchased and applied by the general public without the need of any Federal, State, and local licensing requirement on the part of the user.

c. **Integrated Pest Management.** Integrated Pest Management (IPM) is a decision-making process which considers cultural, mechanical, biological, and chemical controls. Control mechanisms are selected as each situation warrants. Where chemical control is indicated, specific pest populations are targeted for treatment when they are most vulnerable rather than a general application. Through the use of appropriate control measures and proper application, IPM can result in a reduction in the use of pesticides, which may adversely impact human health and the environment.

d. **Licensed Pest Management Professional.** A licensed Pest Management Professional (PMP) (sometimes referred to as a certified PMP) is an individual who has met the skill and competence requirements for those categories of specialization established by the Federal, state, and local governments in which the PMP engages in the trade of pest control. **NOTE:** *A PMP can be certified in one or multiple categories.*

e. **Pest.** A pest is an organism that is regarded by humans as injurious or unwanted.

f. **Pest Control.** Pest control refers to the actions of engaging in, recommending, advertising, soliciting the use of, supervising the use of, or using, a pesticide or device for the identification, control, eradication, mitigation, detection, inspection, or prevention of a pest in, on, or around a building, water area, air, land, plant, structure, or animal.

g. **Pest Infestation.** Pest infestation is multiple sightings of or the presence of pests (e.g., insects, rodents, birds, etc.) in numbers or quantities large enough to be harmful, threatening, or obnoxious.

h. **Pesticide.** A pesticide is a chemical preparation used to kill or diminish pest activity.

i. **Restrictive-Use Pesticide.** Restrictive-use pesticides are legally purchased and applied only by licensed pest control applicators, or applied under the direct supervision of trained and licensed applicators.

j. **Rinsate.** Rinsate is a mixture containing water (or another liquid as required by environmental regulations) that results from rinsing a pesticide container, pesticide equipment, or other pesticide-containing materials.

k. **Safety Data Sheets.** Safety Data Sheets (SDS) are written or printed material concerning a hazardous chemical, which contains all information required by the Occupational Safety and Health Administration (OSHA) and Title 29 Code of Federal Regulations (CFR) 1910.1200(g). SDS provides workers and emergency personnel with the proper procedures for handling or working with a hazardous substance.

3. POLICY

It is VHA policy that each VA medical facility maintains an Integrated Pest Management (IPM) Operating Plan to ensure a safe and efficient IPM program. The purpose of IPM is to prevent or control disease vectors and other pests that may adversely affect health, impede operations, or damage property.

4. RESPONSIBILITIES

a. **Under Secretary for Health.** The Under Secretary for Health, or designee, is responsible for ensuring compliance with the requirements contained in Federal laws and regulations, Executive Orders, and VA and VHA directives and handbooks.

b. **VA Medical Facility Director.** The VA medical facility Director, or designee, is responsible for:

(1) Ensuring a pest-free environment that does not adversely impact the safety and health of employees, patients, and visitors; and

(2) Ensuring adequate resources are available to support prevention, education, and chemical and non-chemical initiatives.

(3) Ensuring the Pest Management Officer (PMO) completes training requirements as described in paragraph 4.c.(4) ***NOTE: If Environmental Management Service falls under another service or department within the VA medical facility or healthcare system (i.e., Facility Management), that service officer is the PMO. Training documentation shall be forwarded to Environmental Programs Service (10NA7) upon request. The VA***

Online Learning Center is accessed through the Pest Management section of the EPS, VA Central Office Web site at: <http://vaww.vhaco.va.gov/EPS/>. **NOTE:** This is an internal VA Web site and is not available to the public.

c. **Chief, Environmental Management Service.** The Chief, Environmental Management Service, or designee, is the VA facility PMO and is responsible for:

(1) Developing a local IPM policy that governs pest management activities.

(2) Developing and maintaining a current IPM Operating Plan to ensure the best technical approach to an integrated, economical, effective, and safe IPM program (see paragraph 8).

(3) Developing and implementing a systematic procedural plan as an addendum to the VA facility IPM Operating Plan that addresses bedbug issues in the following areas:

(a) Inspection;

(b) Pest identification;

(c) Chemical and non-chemical options;

(d) Sanitation;

(e) Staff and patient education; and

(f) Preventive measures.

(4) Completing the “Introduction to Pest Management”, “Bed Bug Basics and Beyond” and “Pest Management in a Healthcare Environment” web base course through the VA Online Learning Center bi-annually starting in FY 19. Additional training courses may be assigned as needed by Environmental Programs Service (10NA7) through the VA Online Learning Center. These training courses provide the foundational technical knowledge for managing an effective facility Integrated Pest Management Program. The PMO should attend an annual local state approved pest management conference or seminar to receive pest management updates on best practices, regulatory requirements and legislative initiatives affecting the state and local municipality.

(5) Ensuring VHA pest management personnel and contractors are trained and qualified in the area of Public Health Pest Control (see section 5,b.(3); Certification and Training, Category 8 – Public Health Pest Control), specifically bed bug prevention and treatment options. **NOTE:** In cases of prolonged and severe bed bug infestations, the use of subject matter experts is strongly encouraged. VHA pest management professionals can be assigned web base training through the VA Online Learning Center. The VA Online Learning Center is accessed through the Pest Management section of the EPS, VA Central Office Web site at: <http://vaww.vhaco.va.gov/EPS/>. **NOTE:** This is an internal VA Web site and is not available to the public.

(6) Ensuring safety equipment and application procedures are major considerations when a chemical pesticide is utilized (see section 7, Safety).

(7) Ensuring the PMP is provided reasonable workspace (separate from pesticide storage) for pest identification, research, consultations, and record keeping. At a minimum, the workspace must be habitable (e.g., telephone, heating, ventilation, and air conditioning).

(8) Attending training throughout the fiscal year for staying current with processing techniques, best practices and safety requirements. This training should be based on the pest- and pesticide-related issues associated with the VA medical facility, state, and local municipality. Additionally, the training should include best practices, updated regulatory requirements and legislative initiatives impacting pest management. At a minimum, the PMO must be annually updated on the following:

(a) The Federal Insecticide, Fungicide, and Rodenticide Act and its impact on local legislation associated with pesticides;

(b) Local regulatory requirements governing pesticide storage, usage and applications;

(c) Local and regional pest management issues that have the potential of impacting VA facilities financially and politically (e.g., wildlife and migratory bird issues, pesticide runoffs, African Honey Bees, bed bugs);

(d) General knowledge of chemical application processes and safety requirements in accordance with IPM practices;

(e) General knowledge of common pests (e.g., mice, rats, roaches, fleas); and

(f) The potential impact of emergent pests that have been identified by industry and government regulatory agencies to be of significant importance (e.g., bed bugs and mosquitoes). **NOTE:** *Contact state agricultural department or state pesticide regulatory division for approved training conferences and seminars within the state. Additionally, the National Pest Control Association conducts conferences and seminars through its local state chapters.*

(9) Implementing procedures intended to provide a safe, comprehensive, and completely integrated program by:

(a) Providing technical supervision over all employees practicing pest management at the facility, regardless of whether the employees are VA employees or contract personnel.

(b) Ensuring that all VHA PMPs achieve all necessary certification in categories covering those areas of pest management identified in sections 5.b. and 5.c. (Certification and Training). **NOTE:** *Certification documentation shall be forwarded to Environmental Programs Service (10NA7) upon request.*

(c) Maintaining records and cost accounting data. All employees devoting 51 percent or more of their time to pest management must be properly classified and journalized to cost center 8562.

(d) Ensuring compliance with the Federal, State, and local laws and regulations governing pest management activities. Pest management operations must meet all Federal requirements as identified in Public Law (Pub. L.) 92-516, Federal Insecticide, Fungicide and Rodenticide Act, dated November 28, 1975, as amended, and Executive Order 12088 (Federal Compliance with Pollution Control Standards) and appropriate OSHA standards regarding hazard communication, personal protective equipment, and exposure standards.

(e) Ensuring effective and efficient IPM is accomplished by licensed VHA staff or commercial PMP. Specific IPM tasks include, but are not limited to:

1. Inspections to identify all pest control requirements of the VA facility and its satellites;

2. Identification of the IPM procedures to be used for both preventive (scheduled maintenance) and corrective (as required) programs;

3. Environmental sanitation practices that restrict or eliminate food, water, or harborage for pests;

4. The selection and utilization of non-chemical methods of control where appropriate (i.e., traps, lights, sound devices, etc.);

5. Taking necessary steps to exclude pests from buildings and grounds;

6. The selection and use of the least toxic chemical that is effective when required to control or eliminate infestations;

7. Ensuring that proper storage, handling, and disposal of all pesticides and pesticide containers as required by 40 CFR, Part 165, Subparts C and D and 40 CFR Parts 262 and 273;

8. Evaluation of the control measures utilized through follow-up inspections.

9. Identification of all environmentally-sensitive areas (e.g., water sources, wetlands, or endangered species habitat) and actions planned to protect such areas from environmental contamination and other adverse impacts related to pesticide application;

10. Identification of the health and safety measures that must be taken to protect both PMP and the general public. This includes being in compliance with VHA Directive 7708, Pollution Prevention (P2) Program, or successor policy.

11. Ensuring each employee who applies pesticide as a part of their job has the exposure noted in their employee medical record;

12. Provisions for safety equipment, personal protective equipment, and clothing where required; and

13. Ensuring that VHA PMPs receive annual continuing education to maintain certification and to stay abreast of the "state-of-the-art" equipment and treatment techniques.

(f) Ensuring the IPM program includes, but is not limited to, the management of the following types of pests:

1. General arthropod pests (i.e., ants, fleas, beetles, bees, roaches, etc.);
2. Feral (wild) rodents (i.e., rats and mice, gophers, squirrels, etc.);
3. Feral birds (i.e., pigeons, starlings, blackbirds, sparrows, etc.);
4. Other feral vertebrate pests (i.e., bats, skunks, moles, snakes, dogs, cats, etc.);
5. Wood destroying organisms (i.e., termites, carpenter ants, fungi, etc.);
6. Stored food pests (i.e., weevils, beetles, moths, etc.);
7. Weeds and plants (i.e., dandelion, plantain, industrial weeds, aquatic plants, algae, etc.);
8. Insects of ornamental plants and shade trees (i.e., powdery mildew, leaf spot, aphids, leafhoppers, scales, etc.);
9. Insects of turf and lawns (i.e., sod worms, nematodes, etc.); and
10. Disease-carrying vectors (i.e., mosquitoes, flies, ticks, etc.) **NOTE:** *Controlling disease using germicides (i.e., Phenolic) and chemical sterilizations (i.e., Ethylene Oxide) are outside the focus of an IPM Program.*

(g) Coordinating pest management operations in research facilities with the Associate Chief of Staff for Research and Development and, when related to animal research facilities, the staff or consultant Veterinary Medical Officer.

(h) Determining the scope of pest management contractual services to be utilized and ensuring technical compliance with the contract.

(i) In coordination with the Facility Green Environmental Management System (GEMS) Coordinator/Manager, ensuring the management of pesticide programs in the VA facility is fully integrated into the facility's GEMS.

(j) Ensuring the pest control contractors at the VA facility are familiar with the facility's GEMS Program.

(k) Ensuring that contract PMPs' hazard chemicals and materials are not disposed of on VA property. **NOTE:** *The contractor is responsible for the management and disposal of all pesticides and materials used in the performance of service.*

(l) Ensuring that contract pest management companies providing service have the proper licensing for the service being performed.

(10) Selecting and placing light traps (see paragraph 9).

(11) Ensuring the proper utilization of all products compounded with pesticides (see paragraph 10).

(12) Ensuring all pest problems are addressed using a consistent process that includes:

- (a) Exclusion and/or Pest Isolation;
- (b) Habitat and Harborage Modification;
- (c) Physical Removal or Mechanical; and/or
- (d) Chemical Application (when appropriate).

(13) Reviewing, at a minimum on a monthly basis, all pest management activity documentation to ensure content accuracy, appropriate follow-ups and completions.

(14) Ensuring that all procedures regarding application of chemical are followed, including but not limited to:

(a) No applications will be made in any interior area without prior authorization from the PMO, or the appointed designee **NOTE:** *PMPs should have the latitude and flexibility to perform specific applications or tasks. Therefore, the PMO will discuss and document all areas of unique significance with PMPs at the beginning of the contract or the VHA PMP start date;*

(b) Exterior applications shall be scheduled for a time when staff, patients, or visitors will not be present in the treatment area;

(c) All staff working in the area(s) to be treated will be pre-notified of the application when in the interior, including the date, time, pest problem, and material to be applied;

(d) No treatment will be made to any room when patients are present unless approved by the PMO **NOTE:** *PMPs should have the latitude and flexibility to perform specific applications or tasks. Therefore, the PMO will discuss and document all areas*

of unique significance with PMPs at the beginning of the contract or the VHA PMP start date; and

(e) Extra care shall be made where pesticides are applied to special areas of concern and environmentally sensitive areas. IPM practices should be adhered to because they are particularly important in these areas.

5. CERTIFICATION AND TRAINING OF PEST MANAGEMENT PROFESSIONALS

a. All PMPs, VHA or commercial, must be licensed by the state and local municipalities where the work is being performed. As a minimum requirement, applicators must demonstrate skills, knowledge, and abilities that meet Federal, state, and local requirements. Skills, knowledge, and abilities include, but are not limited to:

(1) Recognizing common pests to be controlled and the damage caused by them.

(2) Reading and understanding the label and labeling information to include:

(a) The common name of pesticides applied;

(b) Pest(s) to be controlled;

(c) Timing and methods of application;

(d) Safety precautions; and

(e) Any specific disposal procedures.

(3) Applying pesticides in accordance with label instructions and warnings. This includes the preparation of the proper concentration of pesticide to be used under particular circumstances, and taking into account such factors as the area to be covered and the quantity dispersed in a given period of application.

(4) Recognizing local environmental situations that must be considered during application to avoid contamination of special facilities, especially those particular areas in medical research facilities (chemical laboratories, animal research units, etc.).

(5) Reducing the potential for pesticide resistance by rotating pesticides, which involves alternating among pesticide classes with different modes of action to delay the onset of or mitigate existing pest resistance. **NOTE:** *It is strongly recommended that non-chemical methods (e.g., sanitation or elimination of breeding areas) be explored prior to the consideration of chemical applications.*

(6) Recognizing common poisoning symptoms and the procedures to follow in case of a pesticide accident.

b. The categories that require certification are (refer to the listing of categories described in the implementing regulations, 40 CFR, Part 171.3, to Pub. L. 92-516):

NOTE: Since states may number the categories differently, cross-referencing these categories may be required.

(1) **Category (3) – Ornamental and Turf Pest Control.** Applicators must demonstrate practical knowledge of pesticide problems associated with the production and maintenance of ornamental trees, shrubs, plantings, and turf, including cognizance of potential toxicity due to a wide variety of plant material, drift, and persistence beyond the intended period of pest control. Due to the frequent proximity of human habitations to application activities, applicators in this category must demonstrate practical knowledge of application methods, which must minimize or prevent hazards to humans, pets, and other domestic animals.

(2) **Category (7) – Industrial, Institutional, Structural, Health Related Pest Control.** Applicators must demonstrate a practical knowledge of a wide variety of pests, including their life cycles, types of formulations appropriate for their control, and methods of application that avoid contamination of food, damage and contamination of habitat, and exposure of people and pets. Since exposure to humans, including babies, children, pregnant women, and elderly people, is frequently a potential problem, applicators must demonstrate practical knowledge of the specific factors, which may lead to a hazardous condition, including continuous exposure in the various situations, encountered in this category. Because health-related pest control may involve outdoor applications, applicators must also demonstrate practical knowledge of environmental conditions, particularly those related to this activity.

(3) **Category (8) – Public Health Pest Control.** Applicators must demonstrate practical knowledge of vector-disease transmission as it relates to, and influences, application programs. A wide variety of pests are involved, and it is essential that they be known and recognized, and the appropriate life cycles and habitats be understood as a basis for control strategy. These applicators must have practical knowledge of a great variety of environments ranging from streams to those conditions found in buildings. They must have a practical knowledge of the importance and employment of such non-chemical control methods as sanitation, waste disposal, and drainage.

c. Certification in other categories is necessary as individual facility conditions dictate. PMPs must be certified and recertified in accordance with individual state requirements. **NOTE:** Training is available from a variety of sources, such as: National Pest Management Association (NPMA), Armed Forces Pest Management Board (AFPMB), pest management training seminars, forums and conferences, state approved recertification pest management seminars and conferences, correspondence courses specializing in pest management from various university entomology departments, pesticide manufacturers, etc. VHA pest management professionals can be assigned web base training through the VA Online Learning Center. The VA Online Learning Center is accessed through the Pest Management section of the EPS, VA Central Office Web site at: <http://vaww.vhaco.va.gov/EPS/>. **NOTE:** This is an internal VA Web site and is not available to the public.

d. PMPs must not work outside of their individual license requirement.

6. RECORDS MAINTENANCE

a. The Chief, Environmental Management Service or GEMS Coordinator/Managers must ensure that records required in 40 CFR, Parts 171.11(c) (2) and 40 CFR 262.20 to 262.27, are kept and maintained for a period of two years or as otherwise mandated. Such records must be maintained whether staff or contractual personnel are providing services. Maintaining these records in accordance with 40 CFR, Parts 171.11(c) (2) and 40 CFR 262.20 to 262.27, must provide for the following:

(1) Data for VHA monitoring. Purchasing, inventory, and usage records must be maintained.

(2) Safety Data Sheets (SDS) and other data necessary to ensure legal and safe usage, effective selection, and economical management of pesticides and facility pest management programs. **NOTE:** *It is illegal to use a pesticide that is unregistered with the Environmental Protection Agency (EPA). EPA registration of pesticide active ingredients indicates the materials have been reviewed and approved for human safety and effectiveness when applied according to instructions on the label.* Pesticide registration data are available in the EPA Compendium of Registered Pesticides: Volume 1, Herbicides (730R74101A); Volume II, Fungicides and Nematicides (730R74101B); Volume III, Insecticides, Acaricides, and Anti-fouling Compounds (730R74101C); and Volume IV, Rodenticides and Mammal, Bird and Fish Toxicants (730R74101D). **NOTE:** *The EPA Compendium of Registered Pesticides can be found at the EPA National Service Center for Environmental Publications (NSCEP) Web site: <http://nepis.epa.gov/EPA/html/Pubs/pubtitleOPPTS.html>.*

(3) Hazardous waste manifests as required by Federal and State regulations for the disposal of pesticide wastes that are hazardous or toxic. Hazardous waste manifests should be maintained for a minimum of three years. VA medical facilities must ensure that they receive a Certificate of Destruction. Any other documents that verify the final dispensation of the material are required and are to be maintained in accordance with the medical facility's guidelines and policies for the management of hazardous and toxic materials.

b. The Safety Officer or GEMS Coordinator/Managers must be furnished, by the PMO, an inventory of the product names and amounts of pesticides present at each storage or mixing location. This inventory must be updated annually at the end of each fiscal year by the PMP along with appropriate SDS review.

7. SAFETY

Pest management in health care facilities is more complex than control practices in other types of institutions. The potentially serious adverse effects of pesticide exposure on patients in varied physical and attitudinal environments require that a cautious, conservative policy be adopted concerning all uses of pesticides. The use of any pesticide poses a potentially significant threat to human health. Therefore, the benefits of using pesticides must be examined in light of the potential environmental hazards

and adverse impacts on human health. Safety considerations must be paramount. Pesticide applications alone are not the primary remedy for addressing pest issues. It is important to consider alternative control methods (environmental sanitation, trapping, exclusion, etc.) as the first choice. Only after these methods have failed are pesticides to be considered. The use of safety equipment and proper application procedures are major considerations when a pesticide is utilized.

a. **Pest Management Activities.** Pest management activities must be performed by a licensed PMP, except in the case of the following: VA employees in an approved training program, under the supervision of a licensed VHA PMP, must be in compliance with Federal, State, and local requirement before participating in pest control activities. General-use pesticides (e.g., wasp-freeze, Black Flag, Raid, Roundup and Boric Acid) will not be used except by a licensed PMP to ensure public safety, reduced pesticide resistance and to ensure IPM practices are followed:

(1) Each pest management activity will be properly documented to include, but not limited to:

(a) Specific locations of reported activity;

(b) Inspection reports;

(c) Specific identification of pest, if applicable;

(d) Analysis of pest activity and potential causes, when applicable;

(e) Actions taken without the use of chemicals, when applicable;

(f) Listing of chemicals used by name, EPA registration number, percentage of active ingredient applied, and amount of chemical applied, when applicable;

(g) Method of application, when applicable;

(h) (Where required) Square footage of applications larger in size than spot application (defined as a surface treatment to an area of no more than two square feet); and

(i) Wind direction and speed and temperature, if outside (when applicable).

(2) The PMPs will use all safety equipment required by the label and SDS sheets for the product being applied.

(3) The in-house PMPs should have an initial medical examination to include, but not be limited to:

(a) A comprehensive medical and work history, physical examination, and blood analysis for liver function and determination of a cholinesterase and any other biological base line.

(b) Periodic examination should be scheduled as necessary, but is recommended at least every six months.

(c) Any time symptoms of toxicity are exhibited; an immediate medical examination should be performed.

b. Pest Control Equipment and Work Space.

(1) Only authorized, trained personnel are to operate pest control equipment.

(2) Cleaning and storage of pest control equipment must be done by authorized, trained personnel, only in accordance with the manufacturer's instructions.

(3) Maintenance and adjustment of pest control equipment must be performed in accordance with manufacturer's instructions by authorized, trained personnel.

(4) All equipment used in pest control activities must be marked "Contaminated with Pesticides."

(5) A deep sink should be used to wash small equipment and provide water for pesticide mixing.

c. Protective Clothing and Equipment.

(1) The following personal protective clothing and equipment must be provided to appropriate staff, when recommended by the SDS or facility safety risk assessment:

(a) Chemical resistant gloves, selected based on the chemical content of the pesticide used;

(b) Aprons;

(c) Rubber boots, impervious to liquids;

(d) Full face shield;

(e) Splash goggles;

(f) Full-Face respirators with cartridges approved for use with pesticides; and

(g) Coveralls.

(2) Coveralls contaminated with pesticides through spillage or during normal use must be placed in a durable plastic bag and visibly labeled with appropriate warnings, and the name of chemical contaminant. A copy of the SDS for the product must be attached to the exterior of the bag and returned to designated soiled uniform turn-in areas for replacement and laundering. Laundering must be done at the medical facility's expense; contaminated clothing must not be taken home to be laundered.

(3) All reusable chemical resistant protective equipment, including aprons, gloves, boots, splash goggles, face shields, and pesticide respirators must be washed daily after use and properly stored in lockers or other areas free of contamination.

(4) Respirators must be worn during pest control operations as required by the SDS, or as deemed appropriate by the responsible VHA Facility Respiratory Protection Program Coordinator.

(5) Respirators must be included in the facility's Respiratory Protection Program, including medical surveillance, fit testing, training, maintenance, and care. Respirator fit testing must be conducted by the Facility Respiratory Protection Program Coordinator, or designee, prior to first use, and follow-up fit testing frequency in accordance with OSHA requirements.

d. **Pesticide Storage.**

(1) All pesticides must be stored in buildings or rooms within buildings designated for this purpose; there must be proper ventilation and the pesticides protected in accordance with applicable National Fire Protection Association Standards.

(a) Pesticide storage rooms must maintain sufficient lighting to allow the observation of containers and their labeling.

(b) The pesticides must be stored in their original containers.

(c) The buildings and storage rooms must be kept locked when not in use.

(2) The pesticide storage room must be identified by legible signage that clearly indicates that pesticides are in storage, as follows:

(a) Sign(s) must include the word "Warning," "Danger," or "Pesticides" (lettering of the words one and a half inches in height) followed by wording that indicates pesticides are in storage; and

(b) Chemical Hazard Signage.

(3) During storage all pesticides must be segregated by type of pesticide. Labels on all containers must be visible at all times. Pesticides are only to be stored in facilities that meet the criteria described in 40 CFR 165.10.

(4) Pesticides must be stored in a dry place and in accordance with temperature requirements on the label.

(5) The toxicity information, including antidotes, for all types of pesticide poisoning should be kept readily available. The responsible program official and employee health physician(s) will maintain a listing of all pesticides available for use at the facility and their antidotes. **NOTE:** *The "Recognition and Management of Pesticide Poisonings", published by the Environmental Protection Agency gives healthcare providers a quick*

reference resource for the best toxicology and treatment information for patients with pesticide exposures.

e. **Pesticide Mixing.** All pesticides must be handled and mixed only by authorized and licensed personnel.

(1) Concentrate dispensing and liquid pesticide mixing must be done on a nonporous surface (e.g., cement, asphalt, etc.) that is capable of retaining any spillage that might occur. Non-porous surfaces, upon which concentrate dispensing and liquid pesticide mixing is accomplished, must not contain any drainage devices or appurtenances.

(2) Any pesticide contamination on the skin must immediately be washed off with soap and water. After washing, the individual must secure immediate medical attention.

(3) Emergency eye wash and deluge shower must be adjacent to the mixing site, unless devices inside the facility are accessible within 10 seconds from the outdoor mixing site and can be reached without obstructions, such as door or equipment. After using the eyewash or shower, the individual must secure immediate medical attention.

(4) Pesticide containers must be returned to their storage locations upon completion of mixing.

f. **Pesticide Application.** All pesticides must be applied in accordance with the label directions.

(1) Unlicensed VHA personnel may apply restricted-use pesticides under the direct supervision of a licensed VHA PMP, as part of an approved facility pest control training program.

(2) Pesticides purchased by VA are solely for VA use.

(3) Outdoor pesticide applications (e.g., liquids, dusts) must be conducted when wind speed is less than 10 miles per hour (mph) to prevent drift. An approved respirator must be worn whenever required by the label or deemed necessary by licensed POC. The outdoor operator must wear a respirator when pesticide dust is a hazard.

g. **Pesticide Spill Cleanup Kit.**

(1) A pesticide spill cleanup kit, appropriate to the type and amount of pesticide used or stored, must be located in each building where pesticides are stored. In addition, absorptive material to contain minor amounts of spilled liquid pesticides must be kept in each pesticide storage room.

(2) All items in the kit that are used must be replaced as soon as possible after use.

h. **Pesticide Container Disposal.**

(1) All pesticide containers must be triple rinsed with an appropriate solvent, which must include, but not be limited to, the diluents as prescribed by the pesticide label. The rinsate and container must be disposed of in a manner consistent with instructions found upon the pesticide label and in accordance with the requirements of local, state, and Federal agencies. Pesticide containers are not to be used for any purpose except for holding the pesticide shown on the label. The Chief Environmental Management Service or VA medical facility Director must be consulted by VA staff for approved storage location or disposal process for any of the aforementioned pesticide containers.

(2) Dry, granular pesticide containers (bags or sacks) must be emptied thoroughly and disposed of in a manner approved by the Safety Officer or GEMS Coordinator/Manager. Pesticide bags or sacks are not to be burned or stored near heat or open flame.

(3) The Safety Officer or GEMS Coordinator/Managers must be consulted by VA staff prior to disposal of any pesticides which are obsolete, have been banned, are unregistered, physically altered, or which otherwise cannot be used for the intended labeled uses.

i. **Pesticide Transportation.**

(1) When transporting pesticides, operators must have protective clothing and equipment with them.

(2) Pesticides are not to be transported in the cabs, passenger compartments, or trunks of vehicles. Pesticides are not to be left unattended or unsecured in the vehicle.

(3) No pesticide container is to be re-used for any other purpose except as provided on the manufacturer's label.

8. INTEGRATED PEST MANAGEMENT OPERATING PLAN

The service IPM operating plan, in its entirety, should be in one document and must conform to facility policies, standards, requirements, and applicable Federal, State, and local regulatory requirements. The IPM Operating Plan must be a comprehensive document describing the facilities' pest problems and the programs required to deliver economical and effective control of those pests. The plan must include: Administration of contracts and inter-service agreements; program funding; staffing; materials required to implement the plan; provisions for the safety of personnel, patients, and visitors; shop; vehicles; and record keeping. **NOTE:** *The IPM operations plan is not the same as the facility's pest management policy, which is usually a shorter document.*

a. The plan must include a summary (i.e., a section describing problems, risks, costs, resources, materials, equipment, and related topics) with attachments providing detailed information on pest management operations.

b. The VA facility Pest Management Operating Plan must:

- (1) Identify and prioritize all IPM requirements of the activity and tenants;
- (2) Identify the IPM procedures to be used for both preventive (scheduled maintenance) and corrective (as required) programs;
- (3) Identify program resources and staffing (i.e., applicator, supervisory, and inspection personnel);
- (4) Outline surveillance procedures for ongoing pest problems;
- (5) Identify all pesticides (with generic names) applied to the facility and antidotes for those pesticides;
- (6) Identify control procedures of special interest, and areas with specific application constraints;
- (7) Identify all environmentally sensitive areas (e.g., food service areas, surgical suites, respiratory treatment areas, water resources, endangered species' habitats, etc.) with the actions planned for their protection;
- (8) Identify the health and safety measures that must be taken to protect both pest control personnel and the general public, to include appropriate medical surveillance;
- (9) Develop an emergency IPM Operating Plan that identifies measures that would need to be taken to protect employees, the public, patients, and the environment in the event of an involuntary chemical discharge or spill;
- (10) Address Superfund Amendments and Reauthorization Act Title III (Community-Right-to-Know) requirements that apply to pesticides used and stored at the facility;
- (11) Identify how the Medical Facility IPM Operating Plan must be integrated into the facility GEMS;

c. Maintenance of the IPM Operating Plan is provided:

- (1) Through reviews and updates at two-year intervals, or
- (2) When there is significant change to:
 - (a) The IPM Operating Plan, or
 - (b) The methods and means of pesticide application at the VA facility.

d. IPM Operating Plan is required for each facility regardless of whether the facility is serviced by a contract or staff PMP to provide the service. **NOTE:** An IPM Operating Plan Template is provided on the EPS, VHA Central Office website at: <http://vaww.vhaco.va.gov/EPS/>. This template can be modified to include VA facility specific information. **NOTE:** This is an internal VA Web site and is not available to the public.

9. LIGHT TRAPS

The Chief, Environmental Management Service, is responsible for selection and placement of light trap devices. The use of these devices is acceptable in limited areas of the medical care facility. These devices will be part of scheduled inspections to ensure these units are clean and operable according to manufactures specifications.

10. PESTICIDES COMPOUNDED WITH OTHER PRODUCTS

The Chief, Environmental Management Service, must ensure the proper utilization of all products which are compounded with pesticides.

a. This applies to pesticides formulated and labeled for use as paint additives resulting in a paint-insecticide mixture, which must be applied by certified applicators when used on VA property as required.

b. This does not apply to the use of paints containing fungicides as mildew inhibitors, or the use of anti-microbial pesticides where application procedures on the label require no special measures.

11. BAN USE OF HERBICIDE 2,4-DICHLOROPHENOXYACETIC ACID

2,4-Dichlorophenoxyacetic Acid (2,4-D) is registered with the EPA as a pesticide and is widely used as a selective herbicide. **NOTE:** *However, there is the perception among Veterans that there is a relationship between 2,4-D, Dioxin and Agent Orange. Previous directives have banned the use of 2,4-D on all VA facility grounds.*

a. VHA continues the ban of the selective herbicide 2,4-dichlorophenoxyacetic acid for use on all VA facility grounds.

b. Any contracts for grounds or pest management services must fully disclose this ban to the potential provider and the contracting officer's representative must monitor the use of all pesticides used to ensure compliance.

c. Any and all existing stocks of 2,4-D must be disposed of in an appropriate manner and are not to be used on VA property.

12. FEEDING WILDLIFE

Feeding wildlife is prohibited on VHA property. Every effort should be made to inform patients, visitors and staff of this prohibition and potential hazards to the wildlife and humans that feed them if this prohibition is ignored. **NOTE:** *In some cases, outside bird feeders can cause secondary pest management issues. An environmental pest management assessment should be done to determine risk prior to the approval of outside bird feeders.*

13. REFERENCES

a. 40 C.F.R., 165.10.

b. 40 C.F.R., Parts 171.11(c)(2).

c. 40 C.F.R. 262.20 to 262.27.

d. VA National Center for Patient Safety (NCPS) Topics in Patient Safety (TIPS) Newsletter, May/June2004 Link available at:

http://www.patientsafety.va.gov/docs/TIPS/TIPS_MayJun04.pdf

e. EPS Bed Bug Management Guide,

<http://vaww.vhaco.va.gov/EPS/Directives/Bed%20Bug%20Guide2.pdf>

f. VHA Center for Engineering & Occupational Safety and Health (CEOSH) Employee Occupational Health Guidebook: 2014, Updated February 2016; Chapter 6.2.18 “Pesticides, Herbicides, Fungicides, Insecticides” Link available at:

http://vaww.ceosh.med.va.gov/01HP/02HP_Guidebooks/03_Collections/04HP_OccupationalHealth/NetHelp/EOHGB.htm#!WordDocuments/pesticidesherbicidesfungicidesandinsecticides.htm. **NOTE:** *This is an internal VA Web site that is not available to the public*

g. Environmental Protection Agency. “Pesticide Registration (PR Notice) Notice 2002-1” *Pesticide Registration (PR) Notices*. 2002.

http://www.epa.gov/PR_Notices/pr2002-1.pdf (November 30, 2010). **NOTE:** *This linked document is outside of VA control and may not be conformant with Section 508 of the Rehabilitation Act of 1973.*

h. Environmental Protection Agency. “Bed Bugs: Get Them Out and Keep Them Out” <https://www.epa.gov/bedbugs> (November 30, 2010).

i. Potter, Michael F. “Bed Bugs” *University of Kentucky College of Agriculture*. August 2008. <http://www.ca.uky.edu/entomology/entfacts/ef636.asp> (November 30, 2010).

INTEGRATED PEST MANAGEMENT OPERATING PLAN OUTLINE

The following is the prescribed formatting for the preparation of the Integrated Pest Management (IPM) Operating Plan. Any part of this format that does not apply at the facility must be annotated as "not applicable."

a. **Summary.**

b. **Integrated Pest Management Plan.** (standards, policies, and responsibilities)

(1) **Introduction.** This includes information regarding the:

- (a) Objective;
- (b) Plan maintenance; and
- (c) Facility.

(2) **Pest Management Problems.** This includes but is not limited to:

- (a) General household and nuisance pests;
- (b) Structural pests;
- (c) Weed control;
- (d) Stored product pests;
- (e) Health-related pests;
- (f) Pests of ornamental plants and turf;
- (g) Wood product pests; and
- (h) Miscellaneous pests.

(3) **Administration.** This includes:

- (a) The Quality Assurance Program;
- (b) Complaints and sightings;
- (c) Contracts;
- (d) Reports and records;
- (e) Training; and
- (f) Resources (current and proposed), to include:

1. Funding;
2. Staffing;
3. Materials-pesticides and equipment; and
4. Facilities.

(4) **Health and Safety.** This includes but is not limited to:

- (a) Requirements;
- (b) Shop;
- (c) Vehicles; and
- (d) Hazards, to include but not limited to:
 1. Pest control personnel; and
 2. The public.

(5) **Public Laws and Regulations.**

(6) **Coordination.**

(7) **Environmental Considerations.** This includes but is not limited to:

- (a) Environmentally sensitive areas;
- (b) Protected species;
- (c) Pollution control projects;
- (d) Pollution abatement procedures; and
- (e) Compliance with Federal, state, and local environmental requirements.

(8) **Pest Management Services Provided Other Activities.** (Outpatient Clinics, Regional Offices, etc.)

(9) **Signature Block with Review Date.**

c. **Attachments.** (Operational Information). To include but not limited to:

- (1) Facility map and floor plans;
- (2) Pest management recommendations;
- (3) Pest management maintenance record;

- (4) Pest management summary report;
- (5) Work schedule;
- (6) Applicable instructions, procedures, and special protocols;
- (7) Shop equipment and sources;
- (8) Lists of safety items;
- (9) Technical information manuals and references;
- (10) Pesticide spill prevention and clean-up plan;
- (11) Pesticide labels and antidotes;
- (12) Contracting standards and specifications; and
- (13) Copy of current contracts (where appropriate).