WESTERN CONNECTICUT STATE UNIVERSITY

INTEGRATED PEST MANAGEMENT PLAN
GENERAL PEST CONTROL

PROCEDURE E-112

Issued 9/6/02
Revised 11/14/18

Please direct any questions or comments about the applicability of this document to Pano Koukopoulos, Director of Environmental & Facilities Services

The Department of Environmental Protection has developed this model plan to assist with the development of comprehensive integrated pest management programs at state departments, agencies, and institutions as outlined in Connecticut General Statutes, Section 22a-661. Integrated Pest Management (IPM) is defined as the use of all available pest control techniques, including judicious use of pesticides, when warranted, to maintain a pest population at or below an acceptable level, while decreasing the unnecessary use of pesticides.

The primary goal of IPM is to reduce the amounts of pesticides applied by using alternative methods of pest control which may include structural maintenance, sanitation, and mechanical or biological control. These methods will help to eliminate conditions that are favorable to pest infestation, making their survival more difficult.

Please consult with your pest control provider or the DEP Pesticide Management Program for technical assistance, if needed.

Section 22a-661 of the Connecticut General Statutes states:

a. Each state department, agency, or institution shall use integrated pest management at facilities under its control if the Commissioner of Environmental Protection has provided model pest control management plans pertinent to such facilities.
b. Each state agency which enters into a contract for services for pest control and pesticide application may revise and maintain its bidding procedures to require contractors to supply integrated pest management services.
c. The Commissioner of Environmental Protection shall annually review a sampling of state department, agency, or institution pest control management plans required by regulations adopted under section (e) of this section and may review any application of pesticides to determine whether a state department agency or institution acted in accordance with subsection (a) of this section.
d. The Commissioner of Environmental Protection may provide model pest control management plans which incorporate integrated pest management for each appropriate category of commercial pesticide certification which is offers. The Commissioner shall, within available resources, notify municipalities, school boards, and other political subdivisions of the state of the availability of the model plans for their use. The Commissioner of Environmental Protection shall consult with any state agency head in the development of any such plan for properties in the custody or control of such agency head.
e. The Commissioner of Environmental Protection, in consultation with the Commissioner of Public Health, shall adopt regulations in accordance with the provisions of chapter 54 establishing requirements for the application of pesticides by any state department, agency, or institution. Such regulation shall include provisions for integrated pest management methods to reduce the amount of pesticides used. Notwithstanding the provisions of this section and any regulations adopted under this section, a pesticide may be applied if the Commissioner of Public Health determines there is a public health emergency or the Commissioner of Environmental Protection determines that such application is necessary for control of mosquitoes.
f. The Commissioner of Environmental Protection shall develop and implement a program to inform the public of the principles of integrated pest management and to encourage its application in private properties.

Pests to be Controlled

Pest control services which can be performed in the General Pest Control category includes cockroaches, ants (other than carpenter ants), winged termite swarmers emerging indoors, incidental/occasional invaders, including bees and wasps entering from out of doors, and flies and other arthropod pests. Populations of these pests that are located immediately outside of a specified building and pose a possible infestation problem to that building are included.

General

Western Connecticut State University will be inspected by name of the pest control company for the purpose of identifying potential problem areas that may be contributing to pest infestation within the facility, making recommendations for corrective measures that should be implemented, and developing a comprehensive Integrated Pest Management (IPM) plan. The IPM plan will utilize all methods of pest control which may include structural maintenance, sanitation, monitoring for pest populations, mechanical and biological control, and the judicious use of pesticides. These methods will help to eliminate food, moisture, and harborage for pests, making their survival more difficult. Pesticides will not be applied on a routine basis, however, they may be used as a tool to maintain pest populations at or below an acceptable level. The selection of pesticides that may be used will be based on a predetermined hierarchy which will utilize least toxic products as first choice. Proper implementation of this program will reduce the volume, toxicity, and frequency of application of pesticides, thereby reducing the risk of potential exposure of building occupants who may be sensitive to their use.

The company and John Butkus, Maintenance Grounds Supervisor, shall meet to discuss areas that have been problematic or sensitive, i.e., areas where there is a history of high pest pressure. Areas that are sensitive to pesticide use will also be discussed, i.e., day care areas, work area of sensitive employees, etc.

Once these areas have been identified, the company and John Butkus will discuss various pest control options and determine the speed of control necessary, as well as threshold/action levels, based on pest population and species.

Recommendations

The company will submit recommendations for corrective measures in writing to John Butkus prior to the application of any pesticides. He is responsible for scheduling and coordinating structural maintenance of the facility and will act on the recommendations as soon as possible. He will report in writing which recommendations will not be followed and state the reasons if no action is to be taken, is required by RCSA Sec. 22a-661-1(c). Otherwise, all IPM methods that are recommended will be followed.

Pest control services will be supervised by name and certification number, and performed by name and certification number(s) of name of pest control company and business registration number. The IPM program will begin on date with six weekly visits in order to start the program. Subsequent service calls will be preformed twice a month or as needed, depending upon pest pressure. Service calls will be scheduled on day of week and approximate time and will include a visual inspection of potential problem areas and monitoring devices, application of pesticides where pest populations exceed their threshold levels. Records will be completed at the

conclusion of each service call and will include written recommendations or corrective measures that need to be made by building maintenance personnel. A member of the custodial staff should be available to allow the pest control technician to access areas that may be locked.

Records

The pest control technician will indicate pest problem areas and provide written recommendations for structural, sanitary, or procedural modifications on a Pest Control Service Record and Pest Inspection Report form or substantially similar substitute. These forms will be kept in a file that will be maintained by the Maintenance Office. He will act as a liaison between the pest control company and department supervisor(s) and will be responsible for notifying the appropriate personnel of corrective actions that are needed, i.e., sanitation.

Pest sighting report logs provided by John Butkus will be reviewed by the pest control technician at the beginning of each service call. The log will be maintained in the Maintenance Office and will serve as a tool to facilitate communication between all personnel and the pest control technician. All pest sightings should be reported in the logs and should include specific information as to the location and type of pest, if known. Whenever possible, a sample of the insect will be provided to the pest control technician for identification purposes.

Monitoring

Service call/monitoring inspections will be limited to list specific areas that will be inspected, i.e., kitchen, kitchen storage, dish room, laundry room, cafeteria, employee lounge, custodial closets, locker rooms, laundry room, main office, hallways on ground and main floors, boiler room, and the perimeter of the building, unless pest activity or sightings in other areas have been reported in the past sighting log.

Glue boards will be used for the duration of the IPM program to monitor pest populations and activity. They will be placed in areas where pest activity has been identified or is likely to occur. The dates of installation and servicing will be indicated on each monitor and the pest control technician will create diagrams or maps indicating their placement. The diagrams will be maintained as part of the pest control company's service record. Visual inspections of the glue boards will help the pest control technician to identify specific areas of infestation, if any, and assess the need for further action. The glue boards will be placed as follows: list specific areas, i.e., kitchen and dish room – 29 traps, kitchen storage – 8 traps, laundry room – 2 traps, cafeteria – 1 trap under the vending machine, employee lounge – 3 traps, men's locker room – 2 traps, women's locker room – 2 traps, laundry – 2 traps, custodial closets – 2 traps, main office – 6 traps, and boiler room – 8 traps. The pest control technician may also use flushing agents such as _____ or _____ as an inspection tool during monitoring visits.

Pests

Cockroaches

Due to the fact that the German cockroaches can reproduce rapidly, they have been attributed to causing asthma, and are known to translocate bacteria and viruses to food and preparation surfaces, their control will be a high priority. Other cockroach species are also of concern and measures will be taken to reduce or eliminate their populations whenever possible.

Close and careful attention should be given to eliminating conditions that are conducive to pest infestation. All pests need food, moisture, and harborage. By eliminating one or more of these, it is more difficult for pests to survive. Also, pests reproduce at a slower rate when conditions are not conducive for their survival.

Food, paper goods, and other supplies should be visually inspected upon arrival for cockroach infestation. Cockroaches will often hide in the corrugation of cardboard boxes. Supplies should be unpacked and stored properly and their shipping cartons disposed of as soon as possible.

Sanitation and elimination of moisture sources is also an important factor in cockroach control. Areas where food is prepared and consumed should be swept or vacuumed daily. Particular attention should be given to areas underneath counters and appliances. Food residue should be washed off of any preparation surface or equipment. Grease residues should also be eliminated as much as possible, as it is a food source and will render some pesticides ineffective. Bulk foods should be stored in tightly covered bins . Moisture sources should be eliminated as much as possible by repairing faucets, drying sinks and counters at the end of each day.

Sample for Light to Moderate Cockroach Population

If 3-5 cockroaches are observed during any monitoring visit in any one area, bait such as _____ or _____ will be placed according to the produce label recommendations. The bait will be utilized along with glue boards for monitoring purposes and will be replaced as needed during regular monitoring inspections.

**Note – Pesticide baits could be used for monitoring purposes in situations where no cockroaches have been observed, but the likelihood of infestation is greater, i.e., institutional kitchen. The amount of bait consumed will indicate pest activity and will be the first step to control the population.

Sample for Moderate Cockroach Population

Due to moderate to heavy infestation of cockroaches (6-10 cockroaches observed in one area), an intensive crack and crack and crevice treatment will be performed using _____ or_____. Bait stations will be placed throughout the infested area once the crack and crevice application has been completed. Glue boards will also be used for monitoring purposes. Bait stations may be applied in adjoining rooms where conducive conditions may also exist. The infested area will be reinspected weekly and baits and glue boards will be replaced as needed. If the pest population has not decreased after six weeks have passed, retreatment may be performed. Every effort must be made by the facility to eliminate conditions that are conducive to infestation.

**Note – It is imperative that recommendations made by the pest control company be implemented as soon as possible. The recommendations are likely to include improving sanitation, modifying storage practices, or caulking cracks or voids where cockroaches may hide.

Samples for Heavy Cockroach Infestation

Due to heavy cockroach infestation (10+ cockroaches observed in one area during inspection), an intensive crack and crevice treatment will be performed using _____ or _____. A _____ or

_____ dust may also be applied to ceiling, wall, and/or floor voids. Treated voids should be patched/plugged/caulked as soon as possible to eliminate harborage sites. Consideration will be given to applying a _____ fogging insecticide in conjunction with the other pesticides listed . Glue boards will be placed appropriately for monitoring purposes. The area will be monitored weekly and retreatment may be performed if the cockroach population remains high. Once the intensive treatments have been completed, _____ or _____ bait will be placed in the area according to pesticide label directions. The infested area will be reinspected weekly and baits and glue boards will be replaced as needed.

Implementation of these pest control methods will require written consent of the responsible individual (COR).

**Note – This type of treatment, particularly fogging, may only be appropriate in areas where there is an absolute zero tolerance for infestation and speed of control is essential, i.e., hospital operating room.

Ants

Ants and many other pests can be excluded by caulking and patching cracks and voids in the walls, floors, and sidewalks. Branches of trees and shrubs should be trimmed away from the building to eliminate pest access. Organic matter, wood debris, and other trash should be raked away from the foundation whenever possible. If ants are seen within the building ,they will usually be foraging for food. The pest control technician will properly identify the pest ant species and any conditions that may be conducive to infestation. Proper identification will enable the pest control technician to determine appropriate measures of control for the particular ant species. Also, the pest control technician will attempt to locate nest location(s). Written recommendations will be made to correct conducive conditions. Depending upon the ant species and where they are seen, bait stations such as _____ or_____ may be utilized within the building.

Ants outside of the building may be treated using baits such as _____ or _____, however, steps should be taken to eliminate conducive conditions as much as possible.

A crack and crevice application of a _____ or _____ dust may be made in walls or other voids only if it has been determined that ants are nesting in a particular location.

Occasional Invaders and Bees/Wasps

Pesticide applications will not be performed to control occasional invaders unless they present an immediate health hazard or are unduly disruptive. The pest control technician will identify the pest and make recommendations to correct conditions that are conducive to infestation. Pests that are occasional invaders may include drain flies, fungus, gnats, earwigs, spiders, sowbugs, and centipedes. They can usually be controlled by improving sanitation and removing organic debris which will reduce their food supply. Elimination of moisture sources is also helpful.

Pests that may pose an immediate health threat such as bees and wasps will be treated using a _____ or spray product _____ or _____ dust may be used where nests are located underground or in a wall void.

Complaints of unseen biting insects will be investigated, however, no pesticide will be applied unless the pest has been identified and no other pest control options are available.

Stored Product Pests
Stored product pests can usually be controlled with proper sanitation, storage, and inventory control. Products should be stored in clean airtight containers. The products should be checked frequently for signs of infestation and disposed of if infested.

A crack and crevice application of _____ or _____ may be applied if it is determined by the pest control technician and COR that residual control would be beneficial.

Pesticide Plan
Pesticides may be applied if pest populations exceed an acceptable level. Priority is given to those pesticides having the lowest toxicity, taking into consideration the method and frequency of application and the risk of exposure to building occupants. Pesticides selected for possible use are as follows:

First Choice (Products having the lowest toxicity and/or least risk of exposure based on the formulation, method, and frequency of application.)

Flushing Agents
a)
b)
c)

Baits
a)
b)
c)
d)
e)

Dusts
a)
b)

Crack and Crevice Sprays
a)
b)
c)

Rodenticide (Outdoor use only)
a)
b)

Second Choice (Products having moderate toxicity and/or risk of exposure based on the formulation, method, and frequency of application.)

Crack and Crevice Sprays
a)
b)
c)

d)
e)
f)

Third Choice (Products having moderate to high toxicity and/or risk of exposure based on the formulation, method, and frequency of application.)

Use of any third choice pesticide product requires written approval of COR prior to application.

Spot Treatments (Surface treatment to an area no larger than 2 square feet.)
a)
b)

General Sprays or Fogs
a)
b)
c)

Rodenticides (Interior Use)
a)
b)

An appraisal of this IPM program will be conducted bimonthly by responsible individual (COR) and name of PCO representative. A determination will be made as to the effectiveness of the program and revisions will be made to correct potential problems.