

INTEGRATED PEST MANAGEMENT IN FOOD PREMISES PART 2

Food Protection and Pest Management

A Guide to pest management in the food industry

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Contents:

Chapter 1. The Hazards from Pests in Food Premises

Chapter 2. Pests and Regulatory Food Safety

Chapter 3. The Food Industry and Pest Management

Chapter 4. The Regulator's Perspective of the Pest Management Industry

Chapter 5. HACCP (Hazard Analysis Critical Control Point) and its role in Pest Management

Chapter 6. Integrated Pest Management in Food Premises

Chapter 6. Integrated Pest Management in Food Premises Part 2

Continued from Part 1

5. Chemical Controls - Outside

Rodent Control. Open fields adjacent to the facility may be treated using preventive baiting methods. Burrows should be treated with an approved rodenticide. Areas where mice live should be baited. Bait stations may be placed along fence-lines and near landmarks where they may be easily noted on a map and located. Rodent bait stations should intercept rodents seeking to migrate into the building. Stations should be placed near potential sites of entry into the building, approaches to the building and at approximately 15.25m (50') intervals along the exterior.

Only securely anchored and sealed tamper-resistant stations should be used. Frequency of inspection depends on infestation.

Insecticide Applications. To prevent flies, spiders, cockroaches and other crawling insects from entering the facility, residual insecticide treatments may be necessary. Residual insecticides should be applied in cracks and crevices and on surfaces near doors, windows and other openings in accordance with label directions. Pesticide applications should reflect observations and monitoring rather than just preventive spraying.

Weed Control. Weeds around a facility provide harborage for insects and rodents prior to their entry into the warehouse. Populations of occasional invaders such as spiders, plant bugs, boxelder bugs, etc., may be kept down by controlling weedy vegetation around the facility with herbicides.

6. Chemical controls - Inside

Rodent Control. Rodent baits should only be used outside the facility. Many food distribution warehouses have maintained good control for many years using only traps inside. Most big food processors insist on this. It is usually necessary to use multiple catch traps, glue boards and possibly rat snap traps to achieve control. Traps must be checked at least three times a week by either the PCO or warehouse personnel. A location map should be kept indicating the location of all traps. The facility should have one copy to help in their work. Most major food processors do not permit the use of tracking powders anywhere inside a facility.

Insect Control. When highly susceptible products are stored, it may be necessary to utilize space sprays periodically during the warm months. This can present various contamination and safety problems which should be discussed with facility management and possibly the food processor, if most products are from one supplier. Some facilities have automated systems and do this work themselves. Pheromone traps should be used to monitor the level of control regardless of who does the space treatment. Pheromone traps that are placed too close to doors, windows or vents can attract more insects inside and give false readings. If in doubt, traps should be compared both inside and outside.

Routine spraying of the warehouse perimeter on the inside is probably not an effective control for stored product pests but may be needed if infestations are discovered.

Special attention to the base of steel shelving supports is needed since this area is hard to keep clean. Remove some of the debris with a knife or small hand held vacuum and check for insects. If stored product insects are present, proper cleaning is the first step and residual pesticides may be justified as spot applications after cleaning.

9. In supermarkets and food retailing facilities

The following items also need to be considered when providing pest management services for a supermarket.

Fly control is often an issue in many supermarkets. Good sanitation and proper placement of numerous electric light traps are the best methods for dealing with flies. Inspect and clean light trap catch pans.

Poor storage practices can hinder pest management efforts. The store management needs to become involved when this occurs and their help employed in correcting such situations when they are affecting the pest management program. Carefully inspect the "morgue" area, where returns and damaged goods are stored.

Harborages. Many supermarkets have "hidden" corners where pest activity can proliferate. These corners are usually found along walls where gondolas and/or coolers meet. These should be checked regularly for debris and pest activity.

Coolers. Many supermarkets have aisles of coolers and freezers for foods such as frozen vegetables and ice cream. The area underneath these coolers and freezers provides moisture and is a common place to find cockroach or rodent activity. Food gondolas located directly next to these freezers are also an area where cockroach activity can be found.

Gondolas which have kickplates along the bottom are difficult to clean or inspect. If these kickplates are present, the store management should consider removing them to allow regular cleaning. Removal of the kickplates also makes the area less attractive as a harborage for pests.

Compactors. Many supermarkets have an indoor box compactor for crushing cardboard boxes into bales for recycling or disposal. Invariably, some food materials and/or moisture is present in some of these boxes which offer harborage and food for pests.

Recycling. Some supermarkets are now accepting empty plastic and aluminum containers for recycling. The area where these are stored are likely places for cockroach activity and need to be inspected regularly. The soft drink bottle return area is a similar place requiring regular attention.

Stored product pests are sometimes a problem in supermarkets. When Indianmeal Moths or Mediterranean Flour Moths are a concern, pheromone traps can be used to monitor activity. Monitor area using pheromone traps or patches on service technicians notebook. Inspections will be necessary to determine which food items are infested. Heavily infested items should be disposed in the outside dumpster. Items which are suspected of being infested can be placed in a freezer for at least 72 hours. These pests are commonly found in the pet food and bird seed aisles.

Use of cockroach baits in the checkout stations is an effective method to address potential infestations.

Inspection of the outside of the facility is needed at least once per month. Poor sanitation, potential pest entry points, and potential pest harborages should be noted. Outside treatments may be necessary during the warmer months where an influx of outdoor pests is possible.

10. The 10 point summary for good pest control

An IPM program's goals are to use non-chemical means to control or limit pest infestations where possible and to minimize the use of pesticides.

Inspect-inspect-inspect. This is the key to an effective IPM program. Inspections provide the information from which prudent decisions are made as to how a pest infestation is managed or eliminated. Monitoring traps are useful tools.

High risk areas for pest activity need to be identified. The number and type of these areas may differ from store to store. High risk areas need to be inspected and serviced at least once per month.

All conditions which are currently contributing, or could potentially contribute, to a pest infestation need to be identified and addressed. Sanitary deficiencies are a major factor affecting pest activity in a supermarket. The store's management plays the major role in this part of the IPM program. How successful the service technician is in gaining the management's cooperation affects how much treatment may be necessary to solve pest infestations.

Communication is critical to meeting the goals of IPM. A good working relationship between the management and their employees greatly aids a service technician in providing the best possible service.

When treatment is necessary, target specific pesticides should be applied directly to pest harborages, minimizing pesticide use.

Inspection is the key to making this work. The moral is "find the source and solve the problem".

Insecticide baits can be effectively used in many locations.

Rodent control should be accomplished with traps where possible. Rodenticide baits should only be used in tamper-resistant stations. Traps and bait stations need to be maintained on a regular basis in certain areas. A diagram of the

location of these devices needs to be kept in the "pest sighting book."

Record the location of pest activity for future reference in a "pest activity log book."

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