INTEGRATED PEST MANAGEMENT PROGRAM FOR MONROE COUNTY INTERMEDIATE SCHOOLS

Prepared for: Monroe County Intermediate Schools

> Designed by: Rose Exterminator Co.



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Introduction

Integrated Pest Management (IPM) is a system that combines different methods into one program, which alters the environment to the point that it will not support a pest population at economically damaging or socially unacceptable levels. Such programs maximize effectiveness while minimizing reliance on any one method; specifically, this reduces both exposure to and reliance on pesticides.

Administration

The practice of integrated pest management requires careful administration. This program will represent a partnership between Rose Exterminator Co. and Monroe County Intermediate Schools, working together to suppress to insignificance the impact of pests upon the operation of the facility so that it may produce an environment of uncompromised quality. This partnership demands unobstructed communication between Monroe County Intermediate Schools and Rose Exterminator Co. A Pest Management Coordinator (Monroe County Intermediate Schools personnel) will have the responsibility to oversee the program for the plant and the authority to effect necessary changes. This program will facilitate communication through the use of:

- Pest Sighting Logs
- Inspection and Service Reports
- Report and Program Reviews

Pest Management Methods

Central to the concept of integrated pest management is the combining of several methods into one program. Each method makes the environment less likely to support a pest population and by using multiple methods you attack from several fronts. Some of the most common methods to be employed by this program are listed and described below.

Reservoir Reduction

Large reservoirs of pests or situations attractive to pests in close proximity to a building tend to increase pest entry. The techniques of reservoir reduction are wide and varied: they may include moving or removing a pest attractive feature, such as a dumpster; treating or cutting down a tree which gives rise to large insect populations; or mowing a weed field which may provide harborage for mice.

Limit Pest Attraction

Pests present in the building may have been attracted there by correctable factors such as lighting, landscaping, or scent. When such factors are identified, recommendations will be made to reduce the attraction and, thereby, the number of invading pests.

Exclusion

Many pests enter a building by walking or flying through cracks, holes, or other openings. The use of caulk, mortar, window screen, or similar sealing materials can eliminate or significantly reduce the pest entry.

Sanitation

Many infestations cannot occur unless sufficient food and water resources are available. By maintaining an adequate level of sanitation and monitoring sanitation practices, these resources can be kept to a minimum.

Harborage Reduction

Several important pests multiply in direct relationship to available harborage. By reducing the amount of harborage, these pest populations may be diminished or prevented. Sealing cracks and crevices, building maintenance, and improved storage conditions usually achieve harborage reduction.

Mechanical Control

A wide variety of traps exist for a number of different pests. Trapping may be done as a method of monitoring as well as exerting a control pressure on a pest population.

Chemical Control

Repellents and toxicants (pesticides) can be used to drive away or kill pests when population reduction becomes necessary. Insect growth regulators are also available for many insect pests as a slow but effective low-hazard method. Pesticides can achieve control quickly and easily, and sometimes are the only feasible method, but the benefits they provide are generally short term. Care must be taken when applying pesticides because most of them are broadspectrum in nature and may affect more than the target organism. All applications will be made by certified pesticide applicators. All products applied are carefully chosen to maximize efficacy and to minimize hazard. Each application will be made in accordance with all federal and state regulations.



Pest Management Strategies

Strategies or combinations of control methods are put together for each pest which may threaten the quality of the environment. The list of pests is devised based on the pest history of the facilities and those which may be reasonably anticipated in a facility such as Monroe County Intermediate Schools. If pests appear which are not addressed in these strategies, then strategies will be devised for those pests according to the needs of the facility and in according to IPM principles.

Commensal Rodents

The control of commensal rodents will be achieved through the following combination of methods:

Exclusion

Doors, walls, and other perimeter elements of construction will be sealed to prevent the entry of rodents. At least once per month an inspection of the exterior perimeter will be performed and a report of any conditions which might allow rodent entry will be reported in writing as well as verbally.

Sanitation

Sanitary levels will be maintained so that potential food sources for rodents will be limited. As each area is serviced, inspection will be made and any conditions which may contribute food or water to a potential rodent infestation will be reported in writing as well as verbally. The reduction of food and water will help to stress mice and cause them to forage and increase their exposure to other control measures.

Harborage Reduction

Construction, storage practices, and building maintenance will be coordinated so as to limit potential rodent harborage. As each area is serviced, inspection will be made and any conditions which may contribute harborage to a potential mouse infestation will be reported in writing as well as verbally. The reduction of harborage will help to stress mice and increase their exposure to other control measures.

Chemical Control

The natural population of rodents living outside the building will be reduced by the use of rodenticide baits; there shall be no rodenticides placed inside the plant at any time and the use of these baits is restricted to exterior areas. Tamper resistant bait stations will contain an extruded block rodenticide and will be secured to the ground or to the building wall where their location

will be plotted on a map. Each station will be serviced at least once per month and a service label contained inside each station will be dated as documentation of the services. Bait consumption will be recorded and used as a measure of exterior rodent activity.

Mechanical Control

Multiple catch mouse traps will be placed in areas likely to intercept any mice which are able to gain entry. Special attention will be given to sites of ingress such as doors, dock areas, and other permanent entry sites. These traps will be kept clean and in working order; trapped mice will be disposed of. A service label will be kept inside each trap and dated as a documentation of service. Trapped mice will be recorded as a measure of interior activity.

Pavement Ants

The control of Pavement ants will be achieved through the combination of the following methods:

Exclusion

Floors and walls will be maintained in a manner that minimizes the ant entry points. As each area is serviced, inspection will be made and any conditions which may allow ants to enter the facility will be reported in writing as well as verbally.

Sanitation

Sanitary levels will be maintained so that potential food sources for ants will be limited. As each area is serviced, inspection will be made and any conditions which may contribute food or water to an ant infestation will be reported in writing as well as verbally. The reduction of food and water will help discourage ants from entering the building.

Chemical Control

Should ants be found to be entering the building after exclusion techniques have been implemented, they will be eliminated using chemical methods. As a first choice, baits will be used. In addition, an exterior perimeter treatment of insecticides will be used to reduce the number of ant colonies near the building which might opt to forage inside. Exterior perimeter treatments will be performed only in the warm weather months.



Flies

Populations of flies can be controlled only after a proper identification is made and the breeding sites are found. In order to achieve control, the following methods will be used.

Reservoir Reduction

During the warm weather months, exterior areas will be inspected for reservoirs of flies. Any sites found to be contributing flies to the facility will be reported to plant management.

Limiting Pest Attraction

Potential breeding sites will attract flies and must be removed as soon as possible. Exterior inspections made during warmer months will seek for potential breeding sites. Any sites found will be reported verbally and in a written report.

Exclusion

Windows and doors will be kept shut when not in use. Screens will be maintained in good repair. Any holes capable of allowing fly entry found during inspection will be reported verbally and in writing.

Sanitation

The removal of breeding sites remains the most effective method of solving fly problems. Breeding sites and potential breeding sites found during inspections will be noted both on reports and verbally.

Mechanical Control

Insect Light Traps will be maintained in working condition and properly placed for the control of houseflies. Other traps for flies may be considered in the event of high populations which defy the methods previously mentioned.

Chemical Control

The use of chemical techniques against flies will be implemented only in the event that the previously mentioned methods are either already in place or too slow to protect the quality of the product. Chemical control techniques may include Ultra Low Volume (ULV) applications and fly baits. ULV applications must be done during down time and requires the posting of signs designating reentry times and procedures. Baits may only be used in certain areas and care must be taken to assure that there is no risk of translocation to production areas.



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Night Flying Insects

The control of night flying insects will be achieved through the combination of the following methods:

Limit Pest Attraction

As exterior lighting is installed or modified, the type and configuration of lighting will be chosen so as to limit the number of night flying insects attracted to the facility. Should the presence of night flying insects warrant such an action, the modification of existing lighting will be considered.

Exclusion

Doors, windows, and other entry sites of night flying insects will be closed, screened, or otherwise sealed. As each area is serviced, inspection will be made and any conditions which may allow the entry of night flying insects will be reported in writing as well as verbally.

Mechanical Control

Insect light traps (ILTs) will be used to trap night flying insects that enter the building. For this purpose, ILTs will be mounted relatively high in the building and will be maintained in working condition. To ensure proper operation, catch trays will be emptied at least twice per month and bulbs will be replaced every spring.

Miscellaneous Pests

The diversity of the insect world supplies us with a continuous stream of insects, which, from time to time, attain pest status. As these occasions arise, the following steps will be followed:

- 1. Identify the pest any obscure specimens not easily identified will be sent to our staff entomologist for identification.
- 2. Locate the source once identified, the source of the pest is identified.
- 3. Choose control methods those methods which will control the pest with the least negative impact on the environment and the most likely to preserve the quality of the product.

Chemical methods will be considered last but, if chosen, no product, technique of application, or application site will be used unless or until approval is obtained from the Pest Management Coordinator.

Services

Regular Service

The service technician will visit the Monroe County Intermediate Schools once monthly. The technician will check in with the facility office upon arrival and contact the designated people. The technician will review the Pest Sighting Log for any entries and initial to confirm his knowledge of the report.

Insect Control

An inspection for insect activity and conditions conducive to insect activity will be performed in designated areas. Any activity will be managed by utilizing the appropriate methods as outlined in Pest Management Strategies. Should insecticide use be required, all necessary precautions will be taken to eliminate the potential for damage to the product. Should a more intensive treatment be needed to eliminate an infestation, the Pest Management Coordinator will be contacted so that proper arrangements can be made. All activity and control measures will be recorded on the service report.

Insect monitors will be inspected on each visit and appropriate measures taken in case of accelerated or significant activity.

Insect light traps, if installed, will be inspected and serviced once each month with condition and activity recorded. All reports and activity logs will be reviewed with appropriate personnel on each visit.

Rodent Control

An inspection for rodent activity and conditions conducive to rodent activity will be performed in designated areas. Any activity will be managed by utilizing the appropriate methods as outlined in Pest Management Strategies. Interior multiple catch traps will be checked and serviced each service. Units will be cleaned and checked for proper function. Exterior bait stations will be checked once each month. Units will be cleaned and old bait replaced with fresh. Activity will be recorded on the Trap Catch Log, if in place, and control measures taken will be recorded on the service report. Damaged or nonfunctioning units will be noted. The appropriate personnel will review all reports and activity logs on each visit.



STANDARD PEST MANAGEMENT STRATEGY - 01 RODENTS

I. GENERAL

- 1. All rodent Control Programs Shall Consist Of:
 - A) Inspection
 - B) Control Measures
 - C) Recommendations to the Client

2. All Rodent Control Programs Shall Incorporate:

- A) Limiting Rodent Entry
- B) Limiting Available Harborage
- C) Limiting Available Food and Water
- D) Control Measures Including Traps and/or Baits

II. INSPECTIONS

- 1. Inspect for:
 - A) Pest Evidence
 - a) Droppings
 - b) Damage
 - c) Rodents (dead or alive)
 - d) Rub Marks and Trails
 - e) Gnawings
 - f) Burrows
 - B) Entry Sites
 - a) Correctable
 - 1) Inadequate door sweeps or seals
 - 2) Holes in exterior wall
 - 3) Broken or open windows
 - b) Permanent
 - 1) Incoming stock
 - 2) Open building construction
 - C) Potential Harborage

- a) Cluttered storage
- b) Unsealed elements of construction
- c) Exterior weeds around building
- d) Exterior trash and debris accumulations
- D) Food and Water Sources
 - a) Improper garbage handling
 - b) Spillage
 - c) Improper storage
 - d) Plumbing leaks and standing water

III. CONTROL MEASURES

- 1. Preventive Measures
 - A) Adequate numbers and proper placement of traps and/or bait stations shall be maintained to prevent incoming rodents from establishing a resident population.
- 2. Curative Measures
 - A) When evidence of rodent activity is found, determine if a resident population is likely.
 - B) If a resident population is likely, the technician must:
 - i) Place supplemental traps or baits in appropriate places.
 - Return within 1-3 days to check progress. For Home Service accounts return visits may be made at discretion of the technician.
 - 1) If further activity is found, continue curative efforts and alert supervisor.
 - 2) If no further activity is found, supplemental equipment should be removed.
 - iii) Once activity ceases, return to preventive program.
- 3. Equipment Service Requirements

All equipment must be checked at least once per month.





- A) Dust off inside and outside--carry a rag or brush with you for this purpose (do not contaminate it with insecticide). Damp rag for dried on dirt.
- B) Service date is to be placed inside all bait stations, normally on the inside cover.
- C) Change bait whenever:
 - a) Rodent activity is found in or around station.
 - b) It is dirty, dusty, wet, or otherwise contaminated.
 - c) It get old and loses attractiveness to rodents.
 - d) Bait must be changed at least every two months. If bait is present in Home Service accounts, it should be changed each visit.
- D) Tincats are to be replaced when they are no longer able to catch and/or hold mice.
- E) Glue boards will be replaced when they lose their tackiness (unable to catch or hold mice because of dust, grease, debris, etc.).
- F) Replace bait stations whenever they become:
 - a) Torn, broken, crushed, stained, contaminated with insecticides, etc.
- G) When you have serviced a trap or bait station, you are responsible for the following:
 - a) The equipment is clean inside and outside.
 - b) The equipment is placed in the most likely location for rodents to find it.
 - c) Date of service is recorded inside station.
 - d) Bait stations are inaccessible to children or other nontarget animals, or a tamper-proof bait station is properly used.
 - e) The bait is fresh enough to be attractive to rodents.
- 4. Bait Use
 - A) Rodent bait is to be placed in plastic "bait bags" for most situations. Bait may be meal, seed, or pellet formulations and must be placed in a bait station or directly into a rodent burrow which is then closed. Generally use 1 or 2 ounces for mice and 4 or more ounces for rats unless label dictates otherwise.

- B) Paraffinized blocks do not need to be placed in bait bags.
- C) Liquid baits (usually used for rat control only) are to be put In liquid bait fountians then placed inside bait stations.
- 5. Tracking Powder
 - A) Must be approved by supervisor or manager.
 - B) Should only be used when other methods are ineffective.

IV. RECOMMENDATIONS

- 1. The summary and results of each service must be communicated to the client.
- 2. Communication should be verbal; if a report has been written it should be explained verbally.
- 3. Efforts must be made to speak with client's manager or responsible party; if he/she is not present, the technician should leave the report (if written) and contact the appropriate person within a reasonable period of time.
- 4. Communications should include:
 - A. Pest activity found (if any)
 - i) Steps taken for curative measures
 - ii) When technician will return
 - B) Recommendations
 - i) Removing food, water, and harborage sources will increase effectiveness and prevent future immigratingrodents from establishing resident populations.
 - ii) Repairing structural deficiencies will reduce or eliminate rodent entry.
 - iii) The presence of rodent droppings may constitute a violation of health regulations and should, therefore, be removed.



STANDARD PEST MANAGEMENT STRATEGY - 02 OCCASIONAL INVADERS

GENERAL 1.

- 1. The control of occasional invaders shall include:
 - A) Inspection
 - B) **Control Measures**
 - C) Recommendations to the Client
- 2. The control of occasional invaders shall incorporate:
 - A) Limiting pest entry
 - Removal or treatment of breeding sites and reservoirs B)
 - Exterior perimeter treatments C)
 - Other control measures as necessary D)

п **INSPECTION**

- 1. Inspect for:
 - A) Pests
 - Interior a)
 - b) Exterior
 - B) Entry sites
 - a) Interior
 - Holes and openings to outside 1)
 - 2) **Basement** windows
 - 3) **Expansion cracks**
 - Exterior **b**)
 - Cracks in construction 1)
 - Siding and facia 2)
 - Window framing 3)
 - 4) Unscreened vents







- C) Breeding sites and reservoirs
 - a) Grade/wall junctures
 - b) Window wells
 - c) Leaf piles and debris
 - d) Wood or brush piles
 - e) Elements of landscaping

III. CONTROL MEASURES

- 1) Preventive Measures
 - A) Exterior
 - a) Exterior perimeter treatments shall be made using appropriate materials and methods to kill or repel pests
 - b) Woodpiles must not be treated with sprayables, but treatments may be made around or underneath them
 - B) Interior
 - a) Treatments shall be limited to exterior walls or other entry or interception sites within the building where pests are likely to occur
 - b) Sprayables must not be applied to wallpaper, finished wood trim, baseboards, carpeting, or other exposed surfaces of finished interior areas for the prevention of occasional invaders
 - C) Overwintering Insects
 - a) Preventive treatments must be made at an appropriate time of the year for target pest
- 2) Curative Measures
 - A) Curative measures will include all the elements of a preventive treatment and additional treatments to:
 - a) Breeding sites and reservoirs that will not be removed
 - b) Exterior interception sites when appropriate
 - c) Interior areas where pests are found or could reasonably be expected to enter

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3) Materials and Applications



- A) The technician is responsible to choose appropriate materials and methods of application that are well suited for the areas and surfaces to which they will be applied
- B) A clean rag will be carried to remove drips, spills, and other off-target applications
- C) Pregnant women, children, and pets should not be present until all materials have been applied and liquids have dried
- D) All label precautions involving building occupants shall be communicated to the client and shall be followed
- E) Organophosphate and carbamate dusts shall not be used to dust attics or crawl spaces if the area must be accessible to plumbers, electricians, or other service personnel

IV. RECOMMENDATIONS

- 1) The summary and results of each service must be communicated to the client
- 2) Communications must include:
 - A) Pest activity found (if any)
 - a) Steps taken
 - B) Recommendations for preventing future problems
 - a) Sealing entry sites
 - b) Removing breeding sites and reservoirs
 - c) Landscape alterations

STANDARD PEST MANAGEMENT STRATEGY - 03 COCKROACH CONTROL

1. GENERAL

- 1. All Cockroach Programs Shall Consist of:
 - A) Inspection
 - a) Visual/flashlight
 - b) Sticky traps
 - B) Control Methods
 - C) Recommendations to the client
- 2. All Cockroach Control Programs Will Incorporate:
 - A) Limiting available harborage
 - B) Limiting available food and water
 - C) The use of sticky traps
 - D) Control measures consisting of baits and/or contact insecticides

II. INSPECTIONS

- 1. Inspect for:
 - A) Pest evidence
 - a) Cockroaches
 - b) Fecal deposits
 - c) Cast skins
 - B) Potential harborage
 - a) Primary harborage sites around water and/or heat
 - b) Secondary harborage sites
 - c) Clutter

- d) Inaccessible areas
- e) Other conditions conducive to cockroach infestation
- f) Natural ingress points (storage rooms, locker rooms, break rooms)
- C) Food and water sources
 - a) Spillage
 - b) Improper garbage handling
 - c) Improper storage practices
 - d) Inadequate clean up procedures (food residues)
 - e) Leaking plumbing
 - f) Standing water
 - g) Sweating water pipes
 - h) Evaporation pans
- 2. Place and Maintain Sticky Traps
 - A) Sticky trap placement
 - a) Discrete locations out of public view
 - b) Placement should coincide with
 - 1) pest activity
 - 2) primary/secondary harborage sites
 - 3) areas where cockroaches are likely to be brought in
 - B) Sticky trap maintenance
 - a) Upon each service, sticky traps shall be read and pest activity interpreted
 - b) Roaches caught on sticky traps should be recorded, Chucked or removed
 - c) Sticky traps should be replaced when:
 - 1) they lose their tackiness due to dust, etc.
 - 2) they become crushed, damaged, or soaked
 - 3) they become so soiled they compromise the company's image
 - 4) they have too many pests in them
 - 5) in the technicians' opinion, it is appropriate

- d) Upon placement, sticky traps will be Chucked with:
 - 1) date of placement
 - 2) a number or other method of identifying their original location

III. CONTROL METHODS

- 1. Sanitation
 - A) Identify cockroach food sources
 - B) Identify free water sources
- 2. Harborage Reduction
 - A) Identify harborage sites in:
 - a) Elements of construction
 - b) Appliances and equipment
 - c) Corrugated cardboard
 - d) Stock, stored material, and miscellany
- 3. Mechanical Control

(see Section 2, Sticky Traps)

- 4. Chemical Control
 - A) All pesticides applied must be used according to label directions
 - B) Chemical choice will be based on:
 - a) Type of program
 - 1) Verifiable integrated pest management program
 - 2) Conventional pest management program
 - 3) Single application
 - b) Account Type
 - 1) Food handling establishment

- i) USDA inspected
- ii) not USDA inspected
- 2) Commercial non-food
- 3) Residential
- 4) Multiple-unit housing
- 5) Sensitive area facilities
 - i) Medical facilities, patient rooms
 - ii) Computer rooms
 - iii) Clean rooms

c) Existing conditions

- 1) Sanitation
- 2) Available harborage
 - i) Treatable harborage (elements of construction, equipment bases, etc.)
 - ii) Untreatable harborage (food products, food handling, surfaces, clothing, etc.)
- 3) Accessibility of harborage
 - i) High ceilings
 - ii) Inaccessible construction voids
 - iii) Clutter
- C) Application techniques
 - a) The technician is responsible to choose appropriate materials and application techniques that are well suited to the areas to which they are applied.
- **Note:** While spot treatments may be appropriate in some situations, it is not permitted to apply sprayables to wallpaper, finished wood trim, baseboards, carpeting, or other exposed surfaces of finished interiors for the purpose of controlling or preventing cockroaches.
 - b) A clean rag will be carried to remove drips, spills, or other off-target applications.

- c) Pregnant women, children, and pets should not be present until all materials have been applied.
- d) All label precautions involving building occupants shall be communicated to the client and shall be followed.
- D) Pesticides to be used for cockroach control include:
 - a) Baits
 - b) Contact residuals
 - c) Nonresiduals
 - d) Igrs
- 5. Preventive Measures
 - A) Preventive cockroach control consists of:
 - a) Sanitation as listed above (Predominately a client responsibility)
 - b) Harborage reduction as listed above (Predominantly a client responsibility)
 - c) Mechanical control (see Section 2, Sticky Traps)
 - d) Chemical control applied only to primary harborage sites (as appropriate) and to those areas where cockroaches are likely to be introduced
- 6. Curative Measures
 - A) Intensive treatments
 - a) Sanitation as above
 - b) Harborage reduction as above
 - c) Mechanical control as above
 - d) Chemical control
 - 1) Thorough coverage to appropriate areas as determined by inspection/flushing agents/sticky traps.
 - 2) If baits are being applied, then flushing agents/non-residuals should not be applied to those areas.

- It is usually necessary to gain access to harborage areas which are normally inaccessible.
- 4) Ideally, sticky traps should be placed 48 hours in advance of intensive treatment and replaced within 24 hours after intensive treatment. This will allow a monitored evaluation of treatment effectiveness and aid in the follow-up treatment.

B) Corrective Treatment

- a) Additional sticky traps should be put out in the affected area(s) as newly introduced cockroaches may still be seeking harborage.
- b) Increased levels of sanitation coupled with the introduction of baits can quickly prevent a reinfestation.
- c) If baits are not appropriate, a thorough inspection of the affected areas using a flushing agent coupled with crack and crevice and void treatments can also prevent a reinfestation.
- C) Follow-up Treatment
 - a) Best if performed within seven to ten days after intensive or corrective treatments.
 - b) Inspection and sticky traps from prior treatment will indicate areas of activity.
 - 1) If further activity is noted, continue corrective treatment and/or notify your supervisor
 - If no further activity is found, leave the additional sticky traps in place at least until the next service as a double check
- D) Treatment of Persistent Cockroach Problems
 - a) Place a generous number of sticky traps throughout the account. (See Section 2, Sticky Traps.)

Note: The term "corrective treatment" refers to treatments made in accounts in which cockroaches have been reintroduced.

- b) Make a graph of the facility and note sticky trap locations.
- c) Use a trap catch log to plot cockroach activity.
- d) Apply baits or contact residuals (preferably baits) in the manner described above as corrective treatments.
- e) Service frequency for persistent cockroach problems should be at least twice per month for best results.
- f) Analyze trap catch data to find clues to solving the problem.

E) Treatments in Adverse Accounts

Some accounts have persistent cockroach problems, poor sanitation, abundant cockroach harborage, and little or no cooperation from the client. These are regrettable circumstances and probably signify poor chances for success, but diligent service as described above will almost always have a dramatic effect on a cockroach population. If you are unable to achieve elimination due to conditions, at least you can achieve a dramatic reduction. In many cases regular (i.e. quarterly) intensive treatments may solve the problem or reduce the population to almost nothing. Some accounts have no such solutions. Consult your supervisor/district manager for procedures in such accounts.

IV. RECOMMENDATIONS

A)

- 1. The summary and results of each service must be communicated to the client.
- 2. Communication should be verbal. If a report has been written, it should be explained verbally.
- 3. Efforts must be made to speak with the account's manager or responsible party. If he/she is not present, the technician should leave the report (if written) and contact the appropriate person within a reasonable period of time.

- 4. Communication should include:
 - Pest activity found (if any)

- a) Steps taken as curative measures
- b) When technician will return
- B) Existing conditions conducive to infestation
 - a) Correctable food and water sources
 - 1) inadequate sanitation
 - 2) poor storage practices
 - 3) faulty plumbing and drainage
 - b) Correctable harborage areas
 - 1) building construction deficiencies (cracks, crevices, missing grout, etc.)
 - 2) unnecessary corrugated cardboard in primary or secondary harborage areas
 - 3) general clutter and inaccessible areas



STANDARD PEST MANAGEMENT STRATEGY - O4 GROUND NESTING ANTS

1. GENERAL

- 1. Pest management for ground nesting ants shall include:
 - A) Inspection
 - B) Control Measures
 - C) Recommendations to the Client
- 2. Pest management programs for ground-nesting ants shall incorporate:
 - A) Limiting pest entry
 - B) Limiting food sources
 - C) Control measures involving a combination of crack and crevice, void, spot, and exterior perimeter treatments and/or baits

II. INSPECTION

- 1. Inspect for:
 - A) Interior
 - a) ant trails
 - b) food sources
 - c) entry sites
 - B) Exterior
 - a) nests
 - 1) anthills
 - under movable objects (i.e. rocks, downspouts, spillways)





- b) trails
- c) entry sites

III. CONTROL MEASURES

- 1. Identification
 - A) Verify ground-nesting ants (if ants are present)

2. Interior

- A) Crack and crevice treatment (injectables or dusts)
 - a) Where ants are present
 - b) Where ants are likely to occur
- B) Void treatment (dusts)
 - a) Where ants are present
 - b) Where ants are likely to occur
- C) Spot treatment (sprayables) (if necessary and appropriate)
 - a) Sill plate and box header
 - b) Where pipes and conduits enter through walls
 - c) Expansion
 - d) Other areas where appropriate
- Note: While spot treatments and banding treatments may be appropriate in some situations, it is not permitted to apply sprayables to wallpaper, finished wood trim, baseboards, carpeting, or other exposed surfaces of finished interiors for the purpose of controlling or preventing ground nesting ants.
- D) Baits
 - a) Imbedded ducts
 - b) Where residual applications are not appropriate
 - c) As an alternative to residual application at technician's discretion

- 3. Exterior (may not be appropriate during winter months)
 - A) Nest treatment (sprayables)
 - a) Anthills
 - b) Nests under movable objects

Note: Woodpiles must not be treated, but it is permissible to treat under and around them.

- B) Exterior perimeter treatments may be made with appropriate materials and methods to kill or repel ants.
- C) Crawl Spaces
 - a) Banding and/or spot treatments may be made to:
 - 1) Interior wall/soil juncture
 - 2) Sill plates and box headers
 - 3) Pillars, pipes, and other appropriate areas

Note: If crawl space is used as a plenum, do not allow residual materials to enter heating/cooling systems.

IV. RECOMMENDATIONS

- 1. The summary and results of each service must be communicated to the client.
- 2. Communication must include:
 - A) Pest activity (if any)
 - B) Control measures performed
 - C) Recommendations for preventing future problems
 - a) Limiting food and water sources
 - 1) Exposed food
 - 2) Food spillage and residues
 - 3) Moisture problems
 - 4) Plumbing leaks







b) Sealing entry sites

- 1) Windows
- 2) Pipe and conduit openings
- 3) Cracks in foundation walls