Guidance for Managing Structural Pests using IPM

What is a structural pest?

Structural pests are pests that are found inside a building, directly around the outside of a building, or that can invade buildings. Some pests can be managed by municipal staff and others are best managed by professionals.

Pests that can be managed by municipal staff and/or a structural pest control company:

- Ants
- Cockroaches
- Spiders
- Flies
- Rats
- Mice
- Pigeons

Pests that are best managed by professionals:

- Bees
  - To remove a swarm or hive within a wall, call a structural pest control company
  - To relocate a swarm, call the Mt. Diablo Beekeeper's Association at (925) 458-3900 (http://www.diablobees.org/swarmlist/)
- Yellowjackets
- Bed bugs
- Large rat infestations
- Large numbers of pigeons
- Wood destroying organisms, such as termites, wood boring beetles and wood rot (Note: to manage these organisms, a pest control company must have a Branch 3 license in addition to the Branch 2 license that is needed for the pests mentioned above.)

Pests that the Contra Costa County Mosquito and Vector Control District can assist municipalities with:

- Rats and mice
- Skunks
- Yellowjackets that are nesting in the ground: if you can find and mark the location of the nest, the District will remove it for you

Contra Costa Mosquito and Vector Control District
155 Mason Cir
Concord, CA 94520
(925) 685-9301
To submit an online service request: http://contracostamosquito.com/service_request.htm

For fact sheets and guidance on how to handle the pests mentioned above, see Appendix B.

Keys to managing structural pests

- To survive, pests need
  1. Food
  2. Water
  3. Shelter

- To get into a structure, they need access in the form of holes, gaps, cracks, open doors, etc.

If even one of these factors can be reduced or eliminated, the environment will support fewer pests. Diligent food sanitation practices along with building repair and maintenance focused on closing pest access points are the keys to successful structural pest management. These are all things the municipality must do in-house.

Tips for Contracting with a Structural Pest Control Service Provider (exterminator)

Integrated Pest Management (IPM) Certification

Note that the Municipal Regional Permit (MRP) from the Regional Water Quality Control Board requires that the pest control service provider be IPM certified or that the contract include specific IPM language.

The existing IPM certification programs in the U.S. are the following:

EcoWise Certified—an independent 3rd party certification program, http://www.ecowisecertified.org/

GreenShield Certified—an independent 3rd party certification program, http://www.greenshieldcertified.org/

GreenPro—an industry certification program, http://www.npmagreenpro.com/

IPM Contract Language

If you do not hire an IPM certified company you must include IPM language in your contract. For sample structural IPM contract language, see Appendix A.

Communication with the Pest Control Service Provider

You must have a defined pathway for complaints about pests in buildings to reach the structural pest control company.

- Ideally only one or two people at each building or site should be responsible for collecting complaints about pests.
- The complaints should be relayed to one municipal staff person (or at most 2) who is responsible for contacting the pest control company.
    - This person must understand the contract with the service provider.
    - Ideally, the person should screen the complaints to decide if they should go to the pest control company for immediate service or if they can wait until the regularly scheduled service for the building. Depending on your contract with the service provider, you may have to pay extra for immediate service.
    - In the beginning, staff may not have the skill or experience to effectively screen complaints, but they can always call the pest control service provider to consult.
    - Only one or two municipal staff should be allowed to contact the service provider directly in order to avoid confusion.

Checklist for the Pest Control Service Provider's Initial Site Visit

The structural pest control company you hire should perform an initial site visit at each one of the buildings they will be servicing. This visit should include the following:

- An introduction to the person responsible for complaints about pests in the building with a discussion about how the company's service will work; make sure everyone is clear about how to report a complaint
- A thorough inspection of the site to
    - Understand the pest management history at the site

- Determine any conditions in the building that might lead to pest problems/invasions
  At least the following should be inspected:
  - ✓ Food preparation/storage areas
  - ✓ Lunch/break rooms
  - ✓ Public waiting areas
  - ✓ Utility rooms/janitors' closets
  - ✓ Waste handling areas/bins/compactors/garbage chutes
  - ✓ Entry and exit doorways
  - ✓ Outdoor storage areas

- A written report on pest conducive conditions at each building that should be remedied either by the municipality or the service provider
- A written report stating the regular service schedule for each building
  - Service frequency will vary with each building: buildings with food preparation facilities may need to be inspected every week while an office building with good sanitation may need only a quarterly visit or may be serviced on an "on call" basis.

Choosing Pesticides to Use on Municipal Property

- You may wish to include text such as the following in your contract with the pest control company:

  It is the [Municipality's] policy to follow an integrated pest management approach and to give preference to prevention and to non-pesticide solutions whenever and wherever possible. When chemical controls are deemed necessary, [Service Provider] will, as a general rule, use least-toxic pesticides, such as soap and water, plant oils and extracts, and low toxic insect baits. The least amount of pesticide needed to achieve the desired result will be applied in the most precise manner available.

- To help you with choosing less hazardous pesticides appropriate for use in structural pest management, use the following resources:
  - EcoWise Certified Pesticide Criteria with Examples: http://ecowisecertified.org/ecowise_about_who.html (Click on the link marked "Materials Criteria/Examples"
  - City of San Francisco Reduced Risk Pesticide List: http://www.sfapproved.org/pest-control-for-city#list
  - Be sure to check section C.9 of the MRP for pesticides that the Waterboard considers problematic.
  - See Appendix D for an example of a list of pesticides for municipal buildings.

Choosing pesticides for LEED Certified buildings

The following language should be inserted in your pest management contract if you have any LEED Certified buildings in your municipality:

> Pesticides applied in the [Municipality's] LEED Certified buildings are restricted to the following: *any pesticide product where all active ingredients and known inert ingredients meet Tier III of San Francisco's hazard criteria.*

For San Francisco's Reduced Risk Pesticide List, visit http://www.sfapproved.org/pest-control-for-city#list

See Appendix D for an example of a list of pesticides for LEED Certified buildings.

Hiring a structural pest control service provider for occasional or unusual problems

This can be handled in different ways, but it is important to be as specific as you can about what you want from the service provider. Frequently people use "pest control" as the scope of work; however, pest control is the outcome of some kind of treatment by the pest control service provider and not a scope of work. A general scope of work that could cover an IPM approach for most pest problems would include the following:

1. A thorough inspection of the area where the problem has been found, along with a written report of the inspection that includes identification of the pest
2. A consultation on the options available for remedying the situation; the options must include non-chemical strategies if they are available and appropriate, and less hazardous chemical strategies. For example, non-chemical strategies include:
    a. Doing nothing
    b. Providing education to building occupants and/or the public
    c. Sanitation measures
    d. Pest proofing and building repair
    e. Physical controls such as vacuuming, trapping, erecting barriers, altering temperature and humidity
    f. Cultural controls such as instituting policies that will result in reducing the availability of food, water and harborage for pests; altering landscape maintenance practices that create conducive conditions for pests
3. An estimate of the costs for each option
4. Implementation of the selected options for the target pest, after consultation with the municipality
5. Recommendations for follow-up actions for the municipality or the company
6. Recommendations for preventive measures the municipality can employ
7. Recommendations for pest monitoring activities to be carried out by either the municipality or the company

Hiring a pest control service provider by the hour

This is one way to get occasional service when you have a problem that municipal staff cannot handle. Be sure to convey to the company that you want the 7 points mentioned above to be covered in their service.

Establishing a preferred vendor contract with a pest control company

This process is more involved and will take more initial work by municipal staff, but you may get a better price and better service. This may be more appropriate for a larger city that might have more problems that need the attention of a professional.

The municipality would develop a request for proposal (RFP) that includes some scopes of work for various pests (the next section, "Pest Management Strategies for Specific Pests," could help in developing the scopes) and send it out to a number of pest control companies asking them to bid on and to improve the scopes of work.

This encourages competition and allows the municipality to improve their scopes of work.

The company that wins the bid would be a "Preferred Vendor" and would develop a relationship with the municipality, but would not be guaranteed any work.

Important Information for Municipal Staff Who Handle Structural Pest Management

Legal issues

- Municipal staff do not need a license to apply general use pesticides (as opposed to "restricted use" pesticides) on land or in buildings that the municipality owns or controls, but staff must have yearly, documented pesticide safety training. The County Department of Agriculture regularly inspects municipal safety training records.
- The municipality must report their pesticide use electronically to the County Department of Agriculture monthly.
- When municipal staff use pesticides on parks, rights of way (such as roadsides and medians), golf courses, or cemeteries, the municipality must have a written recommendation from a licensed Pest Control Advisor.

For questions about pesticide safety training and pesticide use reporting call the County Department of Agriculture in Concord at 925-646-5250.

Training requirements for municipal staff who apply pesticides

1. Staff must attend pesticide safety training at least yearly and must be trained on all pesticides they might apply using the labels and MSDSs for each pesticide.
2. The municipality must have a written training program. See http://www.co.contra-costa.ca.us/2206/Pesticide-Regulation and click on "Safety Training" for a Pesticide Safety Training agenda that is acceptable to the County Agricultural Commissioner. This form can be used as the written training program.
3. The training must cover the California Department of Pesticide Regulation Pesticide Safety N Series Numbers 1, 2, 4, 5, 7, and 8. (See: http://www.cdpr.ca.gov/docs/whs/psisenglish.htm)
4. Each staff person's training must be documented, and a copy must be kept in their personnel files for at least 2 years. See http://www.co.contra-costa.ca.us/2206/Pesticide-Regulation and click on "Training Records" for a training record form that is acceptable to the County Agricultural Commissioner.

For questions about pesticide safety training, call the County Department of Agriculture in Concord at 925-646-5250.

Common pests that municipal staff can most likely handle on their own

- Rats and Mice
- Ants
- Cockroaches
- Spiders

A new mobile app allows you to turn your smart phone or other mobile device into a mobile field guide to help you identify urban pests. The three volume iPest series from the University of Florida Extension is designed for anyone dealing with urban pests including pest management professionals and building managers. The app provides photos of pests (mostly insects), indicates identifying features, and provides a brief summary of biology and behavior.

For more information see http://entomology.ifas.ufl.edu/baldwin/webbugs/ipest.htm

Appendix A: Sample IPM Contract Language and Annual Contractor Certification

Appendix A1: Model Language for a Landscape IPM Contract

The Contra Costa Clean Water Program would like to acknowledge that the language provided here was adapted from the Palo Alto Parks IPM Contract Language.

Contract Specifications for [Municipality]
Landscape Integrated Pest Management Program

The goal of the **[Insert Municipality]** IPM policy is to reduce the amount and toxicity of pesticides used on **[City/Town]** property in order to protect water quality and human health and to avoid ecotoxicity. Preferred pest management techniques include an emphasis on pest prevention, which includes growing healthy plants in healthy soil; regular monitoring of landscaped areas to catch problems early; encouraging naturally occurring biological controls, using alternative plant species or varieties that resist pests; using cultivation, pruning, fertilization, and irrigation practices that reduce pest problems; altering pest habitat and landscape design to reduce pest development (among other strategies). Pesticides will be used to prevent or control damaging pests only when necessary and will be selected and applied in a manner to minimize risks to humans, non-target organisms, and water sources, including stormwater.

A. Within 45 days and annually on the anniversary of this agreement, the Contractor shall submit to the **[City's/Town's _____ Division]** an **Integrated Pest Management (IPM) Plan** that complies with the **[Insert Municipality]** IPM Policy. The IPM Plan will include a list of the pesticides that the Contractor proposes to use on municipal property, should the need arise. Authorization of all potential products to be used by the Contractor will be completed by municipal staff before service commences. The IPM Plan shall be reviewed annually for updates and modifications with **[_____ Division]** Staff. Frequent and thorough site inspections, on foot, will be needed to ensure no major infestations occur. **[_____Division]** staff will provide site-specific historical data for known infestations. Contractor shall provide a label and a Material Safety Data Sheet (MSDS) for any chemical that will be used.

B. No pesticides of any kind will be used on designated Pesticide Free Parks. The Contract Manager will provide a list of pesticide free parks.

C. Pest control shall be performed only by qualified, trained personnel, under the supervision of a State licensed professional, using materials approved by municipal staff. Any pesticide shall be applied with extreme care to avoid any property damage, and any hazards to people, pets, wildlife, or water sources in the area or adjacent areas, or any property damage. Application shall be in strict accordance with all governing regulations. The Contractor must provide, within 30 days of the Notice to Proceed, their Maintenance Gardener Pest Control Business License from the California Department of Pesticide Regulation, and the names and license/certification numbers of any individuals responsible for or applying pesticides in accordance with this agreement. Bay Friendly landscaping Certification is highly desirable for all personnel who will work on municipal property.

D. All pest infestations shall be reported to the **[Insert title of municipal staff person]**. Records of all pest control operations stating dates, locations, times, methods of application, chemical formulations, applicators names and weather conditions shall be made and retained in an active file for a minimum of three (3) years.

E. A written report of all applications shall be provided to the **[_____ Division]** on a monthly basis. The Contractor must use a form created by **[Municipality]** staff. It is also the responsibility of the Contractor to file monthly chemical use reports with the County Agriculture Department.

F. All chemicals requiring a special permit for use must be registered with the county Agricultural Commissioner's Office and a permit obtained with a copy to the [_____ **Division**].

G. All regulations and safety precautions listed in the "Pesticide Information and Safety Manual," published by the University of California and the Pesticide Safety Information Series (PSIS) published by the California Department of Pesticide Regulation shall be adhered to.

H. Spraying is not permitted during heavy traffic (vehicle, bicycle, or pedestrian) periods or when winds create uncontrollable material drift.

I. Pesticides may not be used within 250 feet of any playground area or creek.

J. Temporary notice shall be posted during and after a site has been sprayed. All areas sprayed shall be flagged and signed

K. Contractor agrees to control gophers, squirrels, moles and other rodents causing damage to [**City/Town**] Property included in this contract. Traps are the only acceptable form of rodent control. Rodenticides for gophers, ground squirrels, or other rodents may not be used. In the event of visible evidence of such pests, contractor will restore the area to its proper condition if the damage is current and prevention is within the contractor's control.

L. Contractor shall replace any plant material that has suffered severely due to lack of proper pest management techniques, if such pest control is possible and practicable

M. All treated areas must be monitored during and after pesticide application until material has settled and treatment area is completely dry. No unprotected person, pet, or wildlife may enter a treated area until all re-entry intervals have been satisfied.

N. Weeding

All areas, including but not limited to: shrub beds, flower beds, groundcover beds, tree wells, paved areas, sidewalks, cracks, stairways, pavers, expansion joints, decomposed granite paths, picnic areas, playgrounds, under bleachers/benches, must be kept weed free at all times. Weeds shall be removed whenever the appearance becomes unsightly or when requested to do so by [_____ **Division**] staff.

O. Staking and Guying

Maintain and replace stakes and guys with equal material. Maintain and replace plant ties to provide support without chafing of bark. Additional stakes and/or guys shall be placed from time to time to correct misshaping caused by wind. Stakes and guys shall be removed upon request of [**Insert title of municipal staff person**].

P. Fertilization

Fertilizers shall not contain pesticides. The Contractor shall fertilize shrub, ground cover, and planter bed areas as needed, taking into consideration that the [**Municipality**] wants to avoid the excess plant growth that contributes to increased maintenance needs and green waste. The Contractor shall fertilize trees as requested.

Q. Nurturing Soil Health

Leaf drop shall become part of the mulch layer in the tree, shrub, or groundcover areas in an attractive manner and away from high traffic areas. Leaf drop shall not be allowed to enter stormdrains.

Mulch shall be maintained under all trees and shrubs and on bare soil with a minimum 3-inch layer of organic material that is no closer than 4 to 6 inches from the base of any plant. To the greatest extent practicable, the Contractor shall not procure mulch products that originate from forest products. When possible, the

Contractor shall give preference to mulch products that are produced on-site, or from regionally generated plant debris including that made at the [**Municipality**].

R. Replacement of Material

Remove dead and damaged plants and replace with material of equivalent, condition and variety and of appropriate size, subject to approval of the [**Municipality's _____ Division]**. Labor shall be provided by the Contractor in a timely manner. Plant material shall be provided by the [**Municipality's _____ Division**] unless damage is caused by Contractor's negligence (i.e. chemical damage, mechanical damage, water stress.)

Damage not resulting from Contractor's negligence, such as vandalism, vehicle, or weather shall be reported promptly to the **[Insert title of municipal staff person]** together with an estimate of materials needed for correction. The [**City/Town**] will provide all necessary materials. Labor shall be provided by the Contractor in a timely manner.

Prior to beginning maintenance the Contractor and the [**Municipality's**] representative shall inspect and inventory all plants, trees and shrubs to determine their number and condition.

Appendix A2: Model Language for a Structural IPM Contract

Contract Specifications for [MUNICIPALITY]
Structural Integrated Pest Management Program

1. **PREMISES COVERED BY THSE SPECIFICATIONS**
   See Attachment A

2. **GENERAL**

   A. Description of Program: This contract will be part of a comprehensive Integrated Pest Management (IPM) program for the premises listed herein. IPM is a decision-making process for achieving long-term, cost-effective, and environmentally sound pest suppression and prevention. Pest populations are kept low enough to prevent intolerable damage or nuisance. IPM employs a wide variety of technological and management practices, including the following:
   - Structural and procedural modifications to reduce food, water, harborage, and access used by pests;
   - Other non-pesticide strategies such as monitoring for pest presence and trapping for pest management;
   - Pesticide compounds, formulations, and application methods that present the lowest potential hazard to humans, non-target organisms, and the environment; and
   - Coordination among all facilities management programs that have a bearing on the pest control effort.

   B. IPM Service Requirements:
   1. The Contractor shall furnish all supervision, labor, materials, tools, and equipment necessary to accomplish the monitoring, trapping, pesticide application, and pest removal components of the IPM program.
   2. The Contractor shall provide to the building location contact and the Facilities Manager written, detailed, site-specific recommendations for structural and procedural modifications to aid in pest prevention as soon as the conditions are identified. In addition, the Contractor will provide a prioritized monthly summary report of all recommendations for structural and procedural modifications that the [MUNICIPALITY] has not implemented yet, to the Facilities Manager and the IPM Coordinator.
   3. The Contractor shall report to the building location contact, the Facilities Manager, and the IPM Coordinator any evidence or conditions conducive to pest infestation that is not covered in the contract, at the time such condition is first noticed.

   C. Contractor Responsibilities:
   1. The Contractor shall be responsible for the implementation of the pest control program required by this contract and for fully complying with the applicable Federal, State, and local pesticide laws and regulations within the legal jurisdiction that the premises covered by this contract are located.
   2. [You can note here any meetings the Contractor is required to attend regularly, and any other responsibilities.]

D. Contractor IPM Certification: The Contractor must maintain IPM certification by EcoWise Certified (www.ecowisecertied.org), Green Shield Certified (www.greenshieldcertified.org), *OR* GreenPro (www.npmagreenpro.org). If the Contractor is using GreenPro certification, the branch office that will provide the [MUNICIPALITY's] pest control services must be specifically certified and must either have gone through a field audit or be preparing to go through a field audit. The Contractor must submit written verification of this from GreenPro.

E. Contractor Personnel: The Contractor is responsible for providing personnel who have been trained and certified by the State of California to handle and apply the classes of pesticide products necessary to implement the pest control program required by this contract. Contractor shall hold a valid California Branch II Operator's License. The Contractor shall provide only qualified pest management personnel with experience in the conduct of IPM programs.

1. *IPM Service Technicians*: Technicians shall hold California Branch II Field Representative's Licenses and have at least five (5) years experience prior to assignment on municipal property. [MUNICPALITY'S] preference is for a single primary technician to handle the service. The Contractor can name an alternate to provide service when the primary technician is ill or on vacation, and another technician to provide after-hours and weekend services.
2. *Contract Supervisor*: A supervisor and an alternate must be identified in the service. The supervisor must have the Contractor's authority to act on matters pertaining to the performance of services required under the contract. This individual shall assure safety and carry out coordination and continuity of the program routine. The supervisor and alternate shall both have a working knowledge of this contract, the detailed Pest Management Plan, and the schedule for each site. The supervisor and alternate must both meet, at a minimum, the qualifications identified under "IPM Service Technicians".

2. PESTS INCLUDED AND EXCLUDED

A. The Contractor shall adequately suppress the following pests:
1. Indoor populations of rodents, insects, arachnids, and other arthropods;
2. Outdoor populations of potentially indoor-infesting species that are within the property boundaries of the specified buildings and that are invading the structure or are very likely to invade;
3. Nests of stinging insects within the property boundaries of the specified buildings; and
4. Individuals of all excluded pest populations that are incidental invaders inside the specified buildings, including winged termite swarmers emerging indoors.

B. The following vertebrate pests that require special service are included in the contract: Birds, bats, snakes, and all other vertebrates.

Cost for service for these pests will be estimated by the Contractor when any of these pests is found invading Municipal facilities.

C. Populations of the Following Pests are Excluded from this Contract:
1. Termites and other wood-destroying organisms;
2. Mosquitoes; and

3. Pests that primarily feed on outdoor vegetation.

3. INITIAL BUILDING INSPECTIONS

The Contractor shall complete a thorough, initial inspection of each building or site (see Attachment A for complete list of buildings included in the contract) by [DATE] which is 20 days prior to the starting date of the contract. The purpose of the initial inspections is for the following to occur:

A. The Contractor to evaluate the pest control needs of all locations;
B. The Contractor to identify problem areas and any equipment, structural features, structural deficiencies, personnel practices, or management practices that are contributing or may contribute to pest infestations;
C. The Municipality and the Contractor to determine the frequency for servicing each site;
D. The Municipality and the Contractor to discuss facilitation of Contractor access to all necessary areas of the facility or site;
E. The Municipality to inform the Contractor of any sites that require after-hours or weekend service;
F. The Municipality to inform the Contractor of any sensitive areas at each facility that have particular restrictions, and inform the Contractor of areas that require special safety precautions in order to service the facility; and
G. The Contractor to provide the name(s), qualifications (at least Branch II Field Representative License with 5 year experience), and cell phone number(s) of the technician(s) who will provide service to the [MUNICIPALITY].

4. INTEGRATED PEST MANAGEMENT PLAN

The Contractor shall submit to the IPM Coordinator and the Facilities Manager, for approval, a Pest Management Plan for the [MUNICIPALITY] Structural IPM Program no later than sixty (60) days after the completion of the initial site inspections. Upon receipt of the Pest Management Plan, the MUNICIPALITY will render a decision regarding its acceptability within five (5) working days. If aspects of the Pest Management Plan are incomplete or disapproved, the Contractor shall have five (5) working days to submit revisions.

The Contractor shall be responsible for carrying out work according to the approved Pest Management Plan. The Contractor shall receive the concurrence of the IPM Coordinator and the Facilities Manager prior to implementing any subsequent changes to the approved Pest Management Plan, including additional or replacement pesticides and changes to on-site service personnel.

The Pest Management Plan is one (1) document covering all municipal buildings and shall consist of six parts, as follows:

A. *Proposed Methods for Monitoring and Detection*: The Contractor shall describe methods and procedures to be used for identifying sites of pest harborage and access, and for making objective assessments of pest population levels throughout the term of the contract.

B. *Standard Operating Procedures for Non-Chemical and Chemical Pest Control Methods for Key Pests*: The Contractor shall include in the Pest Management Plan the [MUNICIPALITY'S] standard operating procedures (SOPs) for the major pests encountered in and around structures. If the Contractor wishes to alter aspects of the SOPs, this must be discussed with and approved by the IPM Coordinator.

In addition:

1. On Attachment B, Pest Control Equipment List, the Contractor shall provide an electronic list of the brand names and methods of use for pesticide application equipment, rodent bait stations, insect and rodent trapping devices, pest monitoring devices, pest detection equipment and any other pest control devices or equipment that may be used to provide service.
2. On Attachment C, Proposed Pest Control Materials list, the Contractor shall provide an electronic list of the brand names, active ingredients, and method of use for all pesticides the Contractor proposes to use.

   The Contractor shall also supply current labels and Material Safety Data Sheets for each pesticide listed.

   Authorization of all potential products to be used by the Contractor will be conducted before service commences.

C. *Service Schedule for Each Building or Site*: The Contractor shall provide complete service schedules that include weekly or monthly frequency of Contractor visits, specific day(s) of the week for Contractor visits, and approximate duration of each visit. The [MUNICIPALITY] shall inform the Contractor of sites that require servicing to be performed when the building or area is vacated after regular working hours or on weekends.

D. *Description of any Structural or Operational Changes that would Facilitate the Pest Control Effort*: The contractor shall provide a written document describing site-specific solutions for all initial observed sources of pest food, water, harborage, and access.

E. *Name and Contact Information for Pest Control Technicians Who Will Provide Service for Each Site*: The Contractor shall provide the name(s), and cell phone number(s) of the technician(s) who will provide service to specific sites.

5. RECORD KEEPING AND REPORTING

A. On-Site Pest Control Notebook: The Contractor shall be responsible for maintaining a pest control notebook or file for each building or site specified in this contract. These records shall be kept on-site and maintained on each visit by the Contractor. Each notebook or file shall contain at least the following items:

1. *Pest Management Plan*: A copy of the Contractor's approved Pest Management Plan for municipal buildings, including
   a. Contractor's Pest Control Equipment List and the Pest Control Materials List that has been approved by the municipality;
   b. Labels and MSDS sheets for all pesticides on the Pest Control Materials List; and
   c. Contractor's service schedule for the building.
2. *Copies of Service Tickets*: A clearly legible copy of each service ticket, signed and dated by an appointed building location contact, documenting

a. Identification of pest(s) found;
b. Location(s) of infestations;
c. All actions taken at the site, including
    i. The number and type of non-chemical pest control methods/devices employed; and
    ii. The brand name, active ingredient(s), EPA Registration Number, locations, and amount of formulation of any pesticide applied; and
d. Any site-specific recommendations for structural and procedural modifications or sanitation measures to aid in pest prevention.

B. Pesticide and Pest Control Device Reporting: The Contractor shall provide the IPM Coordinator with a monthly summary of pesticides and pest control devices that were used. This information shall be recorded by building and date on a form that will be provided to the Contractor when the contract is awarded. The form must be emailed to the IPM Coordinator at [EMAIL ADDRESS] by the 15th of each month for the previous month's work, or as otherwise approved by the IPM Coodinator.

6. POSTING FOR PESTICIDE USE

The Contractor shall be responsible for following the [MUNICIPALITY's] Pesticide Use Posting and Notification Policy (see Attachment D).

7. MANNER AND TIME TO CONDUCT SERVICE

A. Time Frame of Service Visits:
1. *Routine Services*: The Contractor shall perform routine pest control services that do not adversely affect building occupants' health or productivity during the regular hours of operation in buildings.
2. *After Hours Services*: As mentioned above in 3.E, there may be sites that require servicing to be performed when the building or area is vacated after regular working hours or on weekends. These service days and times will be noted in the Pest Management Plan and there will be no additional charge for this service.
3. *Work Outside of Regularly Scheduled Service*: When it is necessary to perform work outside of the regularly scheduled service time set forth in the Pest Management Plan, the Contractor shall notify the Facilities Manager and the IPM Coordinator at least one (1) day in advance.

B. Call Back Service: The Contractor shall provide all call back services at no additional charge to the [MUNICIPALITY]. The [MUNICIPALITY] will request call back service when previous treatment fails to control the pests specified herein. Service work shall be guaranteed WITH CALL BACKS, AS REQUIRED.

C. Safety and Health: The Contractor shall observe all safety precautions throughout the performance of this contract. All work shall be in strict accordance with all applicable Federal, state, and local safety and health requirements. Where there is a conflict between applicable regulations, the most stringent shall apply.

The Contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work.

D. Restricted Access: Some areas of the [MUNICIPALITY] have limited access due to security, and may require background investigations. Therefore, a schedule for a day and time must be approved by the site coordinator for EACH location receiving service. Once implemented, *no deviation will be accepted without the prior approval of the site coordinator* for the specified location. The Contractor shall adhere to these restrictions and incorporate them into the Pest Management Plan.

E. Uniforms and Protective Clothing: All Contractor personnel working in or around buildings specified in this contract shall wear distinctive uniform clothing. The Contractor shall determine the need for and provide any personal protective items required for the safe performance of work. Protective clothing, equipment, and devices shall, at a minimum, conform to U.S. Occupational Safety and Health Administration (OSHA) standards for the products being used.

F. Vehicles: Vehicles used by the Contractor must be clearly marked with the Contractor's name.

8. SPECIAL REQUESTS AND EMERGENCY SERVICE

On occasion, the [MUNICIPALITY] may request that the Contractor perform corrective, special, or emergency service(s) that are beyond routine service requests. The Contractor shall respond to these exceptional circumstances and complete the emergency work within three (3) hours after receipt of the request. Other special services will be provided within a time frame negotiated by the [MUNICIPALITY] with the Contractor. All special and emergency services shall be recorded on a service ticket to be filed at the site and with the Facilities Manager.

9. GENERAL NON-CHEMICAL CONTROL METHODS

A. Preferred Methods: Monitoring, preventive pest exclusion, habitat modification, and sanitation are the preferred methods of preventing and controlling an infestation and shall be part of the routine pest control service. Throughout the term of this contract, the Contractor shall be responsible for providing recommendations to the Facilities Manager and the IPM Coordinator about any structural, sanitary, or procedural modifications that would reduce pest food, water, harborage, or access. If the [MUNICIPALITY] does not provide the repairs or sanitation that are designated as its responsibility, the Contractor will not be held responsible for the continuation of the pest problems associated with those lack of repairs or sanitation; however, the Contractor will still be responsible for management of those pest problems.

B. Written Recommendations for Repairs or Procedural Modifications: Recommendations that require immediate attention should be conveyed via email to the Facilities Manager and the IPM Coordinator. Other less urgent recommendations should be included in the monthly report to the Facilities Manager and the IPM Coordinator. Recommendations in

the monthly report should be prioritized by their relative impact on pest prevention or control.

C. Building Occupant Cooperation: The Contractor is to actively educate and seek the cooperation of the building management and building occupants to help prevent and reduce pest populations in and around structures. In cases where the Contractor deems such cooperation inadequate to successfully manage pests using IPM principles, the Contractor will notify the Facilities Manager and IPM Coordinator in a timely fashion.

D. Pest Exclusion: The Contractor may make limited applications of approved sealants and other exclusion materials under sinks, around cabinets, pipe chases, windows and doors, exterior areas, etc., in lieu of, or to augment other pest control methods with approval from the Facilities Manager.

E. Written Recommendations for Large-Scale Pest Exclusion: The Contractor must be proactive in identifying and, in some cases, correcting known or suspected problem areas that provide food, water, harborage, and access for pests in and around the building. The Contractor shall make written recommendations with photos illustrating the issues to the Facilities Manager for large-scale repairs or applications of sealants and exclusion materials (e.g., whole room or extensive exterior applications, or estimated completion time of thirty (30) minutes or more).

F. Physical Control Methods: The use of vacuum cleaners, mechanical traps, insect light traps, and glue traps should be fully integrated into the day-to-day operations of the pest control program.

10. USE OF PESTICIDES

The Contractor shall be responsible for application of pesticides according to the label. All pesticides used by the Contractor must be registered with the U.S. Environmental Protection Agency (EPA) and the State of California. Transport, handling, and use of all pesticides shall be in strict accordance with the manufacturer's label instructions and all applicable Federal, state, and local laws and regulations.

The Contractor shall adhere to the following rules for pesticide use:

A. *Approved Products*: The Contractor shall not apply any pesticide product that has not been included in the approved Integrated Pest Management Plan or approved in writing by the IPM Coordinator.

B. *Pesticide Storage*: The Contractor shall not store any pesticide product in a municipal building.

C. *Application by Need*: Pesticide application shall be according to need and not by schedule. As a general rule, application of pesticides in any inside or outside area shall not occur unless visual inspection or monitoring devices indicate the presence of pests in that specific area. Requests for preventive pesticide treatments in areas where monitoring indicates a potential insect or rodent infestation will be evaluated by the IPM Coordinator on a case-by-case basis. Written approval must be granted by the IPM Coordinator prior to any preventive pesticide application.

D. *Minimization of Risk*: When pesticide use is necessary, the Contractor shall employ the least hazardous material, most precise application technique, and minimum quantity of pesticide necessary to achieve control.

E. *Pesticide Posting Policy*: The Contractor shall adhere to the [MUNICIPALITY's] Pesticide Use Posting and Notification Policy (Attachment D).

11. INSECT CONTROL

A. Emphasis on Non-Chemical Methods: The Contractor shall use non-chemical methods of control wherever possible. For example:
   1. Portable vacuums rather than pesticide sprays shall be the standard method for initial cleanouts of cockroach infestations, for removal of ant trails and swarming termites, and for control of spiders in webs.
   2. Sanitation, physical barriers (e.g., screens, air curtains), and trapping devices rather than pesticide sprays shall be the standard method for indoor fly control.

B. Application of Insecticides to Cracks and Crevices and Wall Voids: As a general rule, the Contractor shall apply all insecticides as "crack and crevice" or wall void treatments only, defined in this contract as treatments in which the formulated insecticide is not visible to a bystander during or after the application process.

C. Insecticide Bait Formulations: Bait formulations shall be the standard pesticide technology for cockroach and ant control, with alternate formulations restricted to unique situations where baits are not practical.

D. Application of Insecticides to Exposed Surfaces or as Space Sprays: Application of insecticides to exposed surfaces or as space sprays (i.e., fogging) shall be restricted to very exceptional circumstances where no alternative measures are practical. The Contractor shall obtain approval of the IPM Coordinator prior to any application of insecticide to an exposed surface or any fogging treatment. No surface application or space spray shall be made while staff or visitors are present. The Contractor shall take all necessary precautions to ensure staff and visitor safety, and all necessary steps to ensure the containment of the pesticide to the site of application.

E. Monitoring: Sticky traps shall be used to guide and evaluate indoor insect control efforts wherever necessary.

12. RODENT CONTROL

A. Indoor Trapping: As a general rule, rodent control inside buildings shall be accomplished with trapping devices only. All such devices shall be concealed out of the general view and in protected areas and/or within covers so as not to be affected by routine cleaning and other operations. Trapping devices shall be checked on a schedule approved by the Facilities Manager and the IPM Coordinator. The Contractor shall dispose of trapped rodents within 24 hours. Trapping should not be performed during periods when maintenance of traps will be delayed by holidays, weekends, etc.

B. Outdoor Trapping: Trapping is the preferred method for rodent control outside of municipal buildings. To monitor for rodent activity, tamper-resistant bait stations can be used to house non-toxic feeding blocks along with unset snap traps. When rodent activity is detected, the snap trap can be set. Trapped rodents should be disposed of promptly.

C. Use of Rodenticides: In very exceptional circumstances, if rodenticides are deemed absolutely essential for adequate rodent control inside or outside buildings, the Contractor shall obtain approval of the IPM Coordinator prior to making any rodenticide treatment. All rodenticides, regardless of packaging, shall be placed in locations not accessible to children, pets, wildlife, and domestic animals and in EPA-approved tamper-resistant bait stations. No second-generation anti-coagulant rodenticides may be used.

D. Use of Rodenticide Bait Stations: All bait stations shall be maintained in accordance with EPA regulations, with an emphasis on the safety of non-target organisms. The Contractor shall adhere to the following six points:
   1. All bait stations shall be placed out of the general view, in locations where they will not be disturbed by routine operations.
   2. The lids of all bait stations shall be securely locked or fastened shut.
   3. All bait stations shall be securely attached or anchored to floor, ground, wall, or other immovable surface, so that the box cannot be picked up or moved.
   4. Bait shall always be secured in the feeding chamber of the box and never placed in the runway or entryways of the box.
   5. All bait stations shall be labeled on the outside with the Contractor's business name and address, and dated by the Contractor's technician at the time of installation and each servicing.
   6. All bait stations containing rodenticide shall have a warning sign posted at eye-level on the wall above the station. See the [MUNICIPALITY's) Pesticide Use Posting and Notification Policy (Attachment D).

13. PROGRAM EVALUATION

The IPM Coordinator and the Facilities Manager will continually evaluate the progress of this contract in terms of effectiveness and safety, and will require such changes as are necessary. The Contractor shall take prompt action to correct identified deficiencies.

ATTACHMENT A. Buildings Included in this Contract

Address	Square Footage	Building Name

ATTACHMENT B. Pest Control Equipment List

Brand Name	**To be used for** (e.g., sealing small holes, monitoring for crawling insects, ant baiting)	**Proposed area for use**

Attachment C. Proposed Pest Control Materials List

This is a list of materials that your company proposes to use in the [MUNICIPALITY]. The final list of acceptable materials will be negotiated with the Facilities Manager and the IPM Coordinator.

Brand Name	**Active Ingredient and %**	**EPA Reg #**	**Signal Word**	**To be used for** (e.g., ant bait, cockroach control, etc.)	**Proposed method of use** (e.g., as a bait station, in cracks & crevices, etc.)	**Proposed area/building for use** (e.g., in food service areas, around the outside perimeter of the building, etc.)

Attachment D. [MUNICIPALITY] Pesticide Treatment Posting and Notification Policy

General Provisions

This policy applies only to land owned by the [MUNICIPALITY].

Any Department that uses or authorizes the use of a pesticide shall comply with the following posting and notification procedures:

- Signs shall be posted at least three (3) days before application of the pesticide and remain posted at least four (4) days after application. In specific situations/locations, permanent signs may also be used. See provisions below under "Exemptions" and "Other Uses of Permanent Signs".
- Application information shall be posted on the [MUNICIPALITY's] website pesticide posting page at least three (3) days before the application. If the application is postponed or changed, information on the website must be updated.
- If treatment is in an enclosed area, signs shall be posted at all major public and employee entry points.
- If treatment is in an open area, signs shall be posted at highly visible location(s).
- Posting signs for rat and mouse bait stations shall be posted at eye level on the wall or other structure above the bait station.
- Exceptions to these provisions are listed below under "Exemptions".

Contents of Signs

The signs shall be of a standardized design, easily recognizable by the public and municipal employees and shall contain the following information:

1. Name of pesticide product
2. Active ingredient(s) in the product
3. United States Environmental Protection Agency or California State registration number
4. Target pest
5. Signal word on the product label indicating the toxicity category of the pesticide product
6. Date of posting
7. Date(s) of anticipated use; a window of time for anticipated use is acceptable
8. Date of re-entry for staff and the public to the treated area, if applicable
9. Name and contact number of [Municipality] Department responsible for the application
10. Website address for more information

Exemptions

Departments shall *not* be required to post signs in accordance with the provisions above

1. in rights-of-way or other areas that the general public does not use for recreation or pedestrian purposes. Recreation is defined as any activity where significant physical contact with the treated area is likely to occur.
   Note: Each department that uses pesticides in such locations shall provide a public access telephone number for information about pesticide applications. The public access telephone number shall be posted in a prominent location at the department's main office building. Information provided shall include all items listed under "Contents of Signs", above.
2. in or around [MUNICIPALITY]-owned or -leased buildings, if the pesticide is on a list agreed to by the IPM Advisory Committee.

Note: Each municipal building shall post a permanent sign in a prominent location with a list of pesticides that may be used in or around the structure without individual postings. Pesticides not on this list must be posted in accordance with the provisions above. The permanent signs shall contain the following:

a. Name of the pesticide product
b. Active ingredient(s) in the product
c. Signal word on the product label indicating the toxicity category of the pesticide product
d. Areas inside or outside the building where the pesticide might be used
e. Name and contact number of municipal department responsible for applications

Any pesticide granted an emergency exemption for public health emergencies or other urgent situations by the IPM Coordinator shall not be required to be posted prior to treatment. However, all other requirements for posting, as set forth above, shall be followed.

Use of any pesticide listed by the Organic Materials Research Institute or of any products on the FIFRA 25(b) list or in California Code of Regulations Section 6147 may be posted on the day of application. All other provisions listed above apply.

The IPM Coordinator may, at his or her discretion, grant necessary exemptions to the posting requirements.

Other Uses of Permanent Signs

In addition to the provisions above regarding permanent signs in and around buildings, permanent signs are acceptable in areas away from [MUNICIPALITY]-owned or –leased buildings where pesticide applications are a regular, periodic occurrence. The following provisions apply:

1. The permanent sign must contain, at minimum, the following information
    a. Target pest(s)
    b. Reason for treatment
    c. Name and contact number of [MUNICIPALITY] Department responsible for the application
    d. Website address for more information
2. At least three (3) days before any pesticide application, the application information must be posted on the [MUNICIPALITY's] website pesticide posting page. If the application is postponed or changed, information on the website must be updated.

On the actual day of the pesticide application, a paper sign with the information listed above under "Contents of Signs" must be affixed to the permanent sign and remain for at least four (4) days.

Appendix A3: Model Language for Annual Certification of Contracting Pesticide Applicator

[INSERT MUNICIPALITY]'S POLICY TO REQUIRE AN INTEGRATED PEST MANAGEMENT APPROACH TO PEST CONTROL AT ALL MUNICIPAL-MAINTAINED FACILITIES AND PROPERTY

POLICY STATEMENT

The [**Insert Municipality**] will carry out its pest management operations, at municipal-owned facilities, and on property where the municipal is responsible to provide facility and landscape maintenance, using reduced-risk Integrated Pest Management (IPM) techniques.

The [**Insert Municipality**], recognizing that some pesticides may be potentially hazardous to human health and the environment, shall give preference to reasonably available non-pesticide alternatives, and reduced-risk pesticides, when performing pest control activities.

Departments that apply pesticides will follow an IPM policy whose goal is to ensure the long-term prevention or suppression of pest problems, while reducing or eliminating the need for chemical pest controls (to the maximum extent feasible), with minimum negative impact on human health, non-target organisms, and the environment.

The IPM policy includes pest-specific and standard operating procedures (describing the IPM approach). The municipality prepares a report each year summarizing and evaluating the pest control activities performed by municipal staff and contractors.

No products containing Clopyralid, Diazinon, Chlorpyrifos (Dursban), Chloradane, DDT, Dieldrin or other organophosphates may be used on municipal property. [**Insert Name of Any Pesticides That Require Additional Authorization for Use on Municipal Property**] may be used by municipal staff or a municipal contractor on municipal property or property maintained by the municipal only after all other IPM methods have been tried and with the approval of the designated municipal staff person.

Municipal staff are to report pest control problems to the [**Insert Designated Municipal Staff Title**] or to the [**Other Designated Municipal Staff**]. No unauthorized municipal staff can purchase pesticides for use at work.

Contracting Pesticide Applicators for [**Insert Municipality**] will sign this form to acknowledge that they are aware of the [**Insert Municipality**]'s Integrated Pest Management policy.

_____ _____

Contracting Pesticide Applicator Printed Name Date

_____

Contracting Pesticide Applicator Signature