

PART 3. INTEGRATED PEST MANAGEMENT INSPECTION

1. Qualifications: A contractor must

- A. Be certified by QualityPro, GreenShield, or EcoWise.
- B. Be trained to evaluate and treat the interior and exterior of multifamily structures for pest infestations, in accordance with Integrated Pest Management standards.
- C. Have the work performed by an individual who is licensed or certified by the state for residential pest control or be QualityPro certified and who has produced reports of this nature that are well regarded in the marketplace in terms of content, timeliness and responsiveness.

- D. Not be under suspension or debarment by HUD, or involved as a defendant in criminal or civil action with HUD.
- E. Have the capacity to complete the project inspection and prepare the report in a time frame acceptable to the Participating Administrative Entity (PAE).

2. Statement of Work: A contractor shall

- A. Perform an Integrated Pest Management Inspection (IPMI), provide the property manager and each tenant information on glue traps, and prepare an IPMI report for each asset specified by the PAE and report the findings. Exhibit 1 is the form for reporting the glue trap findings and inspection results; Exhibit 2 is the more extensive form of reporting the existing pest control strategies and practices, noting deficiencies, and recording recommendations using IPM principles; and Exhibit 3 is the handout on glue traps to be shared with the property manager and all tenants.
- B. **[NOTE - The following instructions assume the contractor will make two visits to the property: interviewing property management about existing pest control practices and placing the glue traps during the first visit, retrieving the glue traps and conducting the necessary unit and property inspections during the second visit. The PAE has the authority to modify the instructions to require only one visit by the Contractor in those situations where the PAE believes the onsite property management can place the glue traps correctly and provide the glue trap handout to the tenants.]**

Conduct the first onsite visit/inspection to:

- (i) Obtain an understanding of the configuration of buildings.
- (ii) Obtain an understanding of the existing pest control practices.
- (iii) Review the "Using Glue Traps" handout (Exhibit 3) with the property manager and provide it to each tenant or leave it in each unit where glue traps are placed.
- (iv) Place the glue traps (to assess cockroach infestation) within each unit and common areas such as laundry rooms, storage rooms, and interior trash handling areas.
- (v) Advise the property manager that the contractor will retrieve the glue traps and set a date certain for that follow-up visit/inspection.

C. Conduct the second onsite visit/inspection to:

- (i) Collect the glue traps from each unit, observe conditions in the units, and include in the report a unit-by-unit summary of the glue trap findings.

- (ii) Review the findings from the glue traps to help determine which units should be inspected. The contractor then shall conduct site inspections of a minimum of 25% of all units. Unless otherwise guided by the glue trap findings, units shall be randomly sampled while taking into consideration occupied and unoccupied units and the unit size mix, i.e. one bedroom, two-bedrooms, etc. If a significant number of units are found to have infestations not reflected in the glue trap findings, the PAE may require that additional units be inspected at the time the glue traps are collected.
- (iii) Inspect the exterior of building(s) for all areas where the envelope has been penetrated and all points of ingress/egress, looking for any entry points for pests. If identified, the contractor must determine all corrective measures, both immediately and long-term.
- (iv) Inspect the trash disposal, laundry and storage areas for evidence of infestations.

D. Prepare a report according to the outline provided in Exhibit 1 to this Attachment 3, that:

- (i) Identifies any pest infestations as a result of glue trap findings, a visual survey, a review of any pertinent documentation related to past infestations and pest control measures, or interviews with the property owner, management staff, and tenants.
- (ii) Includes color photographs and a detailed narrative describing the property's pest infestation, if any, and provide a corrective course of action for each infestation, and if needed, specific actions for serious infestations within individual units.
- (iii) Includes a Glue Trap Summary, which identifies in detail the quantity and variety of pest trapped, and any obvious general areas/floors/structures with significant infestations (e.g., if a cluster of adjacent apartments appear to have a more severe infestation when compared to the overall building). Identify groups of infested units as High, Moderate, or Low infestation and detail corrective measures for each.
- (iv) Details an immediate course of action, which identifies and estimates the cost of the measures required to address the pest infestations for each identified group (see prior paragraph) and an continuing course of action for using IPM principles at the property.

E. Prepare a report according to the outline provided in Exhibit 2 to this Attachment 3 that:

- (i) Documents the existing pest control strategies, practices, and outcomes.
- (ii) Evaluates the existing pest control strategies and practices.
- (iii) Identifies the deficiencies in the existing pest control strategies and practices.

- (iv) Recommends practices consistent with IPM principles that will achieve better outcomes.
- F. If requested by the PAE, the contractor shall take part in discussions with the owner, tenants, or other interested parties, including neighborhood associations, members of local government, and representatives from the public housing authority, including attendance at a meeting to solicit oral and written comments to be incorporated into the GPCA. The contractor shall assist the PAE in evaluating and responding to tenant and local community comments concerning the physical condition of the project and recommended repairs.
- G. The contractor shall act as an independent third-party on behalf of the PAE to review the completeness and accuracy of any GPCA submitted by the owner.
- H. The contractor shall provide the PAE with weekly status reports (upon request) during the preparation phase to track and monitor the progress.
- I. The GPCA report should also include the following subcomponents:
 - (i) Acknowledgements (who conducted the inspection and prepared the reports, when report was prepared, who received report, and when report was reviewed).
 - (ii) Appendices (color photographs, site plans, maps, etc.).
- J. In addition, the contractor shall:
 - (i) Recommend any additional professional reports needed, for example, to determine the presence or degree of structural defects, or to complete additional investigation into an environmental issue. The PAE will be responsible for obtaining such reports.
 - (ii) If the services of a subcontractor were secured to inspect the property and complete the report, the contractor shall review the inspection for quality, consistency, and agreed upon format and conformance with these requirements.
 - (iii) If requested by the PAE, attend a formal kick-off meeting to clarify the requirements and scope of the work to be performed.

3. Deliverables

- A. A draft report shall be submitted to the PAE for review prior to completion of the final report.
- B. The final report shall be completed in the number of originals and copies requested by the PAE or its designee.

Mark-to-Market Integrated Pest Management Inspection Report

Exhibit 1 to Attachment 3, Green Physical Condition Scope of Work and Contractor Qualifications

(Date)

Project Name: _____

FHA Number: _____

Section 8 Expiration Date: _____

Dear (Property Owner):

At the meeting held on _____ of 20__, we provided the (# of Units) units with Integrated Pest Management (IPM) materials and information to assist in gathering data for the property's IPM review. Below is a report of our glue trap findings, comments, and infestation status (high, moderate, low, none). (Lengthen the table as needed to reflect all units, whether glue traps were returned to IPM inspector or not. Include results from common areas monitored such as laundry, interior trash handling, and storage areas.)

Unit	Visually Inspected	# Traps Collected	Kitchen Trap Count	Bathroom Trap Count	Maintenance Issues	Housekeeping Issues	Other Comments	Status (H, M, L, N)

After analyzing the findings of the glue traps, we conducted a visual inspection of () units (**see attached photos**) and have concluded that the glue trap findings (**do / do not**) reflect the current state of infestation in the units and property.

(IF APPLICABLE) Because of the severity of the infestation found during the visible inspection of the () units, we determined that a more extensive visual inspection of the property was required. We inspected () units, in addition to the () units and have determined the following:

The Green Physical Condition Assessment scope of work, at Part 3.2.D.(ii) requires a “. . . detailed narrative describing the property’s pest infestation, if any, and a corrective course of action for each infestation, and if needed, specific actions for serious infestations within individual units.” (**IPM Inspector – add comments below**)

In addition to the inspection of the units, we inspected the interior and exterior areas of the property for evidence of infestations in the trash disposal areas, laundry facilities, storage areas and any other common area where water and/or food storage is present. Additionally, we inspected all areas where the envelope has been penetrated and all points of ingress/egress for any entry points for pests. Below are our findings for these areas, with a status (high, moderate, low, none) noted, and comments for corrective measures, both immediate and long-term. (Lengthen the table as needed to reflect all areas inspected)

Area	Comments	Status

Based on the above findings, interviews with the property managers, maintenance staff, and tenants, and the review of all documentation made available to us regarding past Pest Control effort we conclude the following course of action is required: (The Green Physical Condition Assessment Scope of Work requires, at Part 3.2.D.(iv), “[the report details]... an immediate course of action, which identifies and estimates the cost of the measures required to address the pest infestations for each identified group (see prior paragraph) and an continuing course of action for using IPM principles at the property”). **(IPM Inspector - add detailed comments below for the units and the common areas including the recommendations from Exhibit 2)**

Sincerely,

(Name of IPM Contractor)

Member of (QualityPro, EcoWise, GreenShield, or other certification program)

OAHP M2M Green Initiative

Effective Integrated Pest Management for Affordable Housing

Exhibit 2 to Attachment 3, Green Physical Condition Assessment Scope of Work and Contractor Qualifications

Essential Elements of Effective IPM (per HUD May 27, 2007 Guidance)	Status at Development (checkmark all that are present)	Comment on Existing Strategies and Deficiencies; Make Recommendations
1. Communicate Policies Communicate ownership/ management's IPM policies and procedures to: <ul style="list-style-type: none"> • All building occupants • Administrative staff • Maintenance personnel • Contractors. 	<input type="checkbox"/> Written pest control policy in place. <input type="checkbox"/> Policy communicated to: <ul style="list-style-type: none"> <input type="checkbox"/> Staff. <input type="checkbox"/> Resident services. <input type="checkbox"/> Maintenance staff. <input type="checkbox"/> Renovation/rehabilitation staff/contractors. <input type="checkbox"/> Pest control services. <input type="checkbox"/> Policy communicated to residents.	
2. Identify Problem Pests Identify pests and environmental conditions that limit the spread of pests.	<input type="checkbox"/> Policy described strategy to address pests: <ul style="list-style-type: none"> <input type="checkbox"/> Rats. <input type="checkbox"/> Mice. <input type="checkbox"/> Cockroaches. <input type="checkbox"/> Bedbugs. <input type="checkbox"/> Other pests: _____ <input type="checkbox"/> Policy described strategy to address environmental conditions: <ul style="list-style-type: none"> <input type="checkbox"/> Water damage and effective cleanup. <input type="checkbox"/> Housekeeping and maintenance within the apartment units. 	

OAHP M2M Green Initiative
Effective Integrated Pest Management for Affordable Housing
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Essential Elements of Effective IPM (per HUD May 27, 2007 Guidance)	Status at Development (checkmark all that are present)	Comment on Existing Strategies and Deficiencies; Make Recommendations
3. Monitor and Track Establish an ongoing monitoring and record keeping system for: <ul style="list-style-type: none"> • Regular sampling and assessment of pests • Surveillance techniques • Remedial actions taken • Assessment of program effectiveness. 	<input type="checkbox"/> Pest control complaints: <ul style="list-style-type: none"> <input type="checkbox"/> Maintained accurate, up-to-date, and accessible tracking reports maintained. <input type="checkbox"/> Recorded in electronic format. <input type="checkbox"/> Analyzed regularly for timeliness, recurrent problems and other trends. <input type="checkbox"/> Action taken based on analysis of complaints. <input type="checkbox"/> Ongoing and regular monitoring of trash handling areas and common areas: <ul style="list-style-type: none"> <input type="checkbox"/> Visual monitoring. <input type="checkbox"/> Glue trap monitoring. <input type="checkbox"/> Ongoing and regular inspection of exterior areas. <input type="checkbox"/> Result of visual monitoring and glue trap monitoring recorded and tracked. <input type="checkbox"/> Annual inspection of each resident for housekeeping and maintenance concerns. <input type="checkbox"/> Annual summary of results of complaint and monitoring analysis.	
4. Set Thresholds for Action Determine, with involvement of residents: <ul style="list-style-type: none"> • Pest population levels – by species – that will be tolerated • Thresholds at which pest populations warrant action. 	<input type="checkbox"/> Zero tolerance set for priority pests: rats, mice, cockroaches, and bedbugs. <input type="checkbox"/> Residents and staff aware of zero tolerance policy. <input type="checkbox"/> Tolerances set for other pests such as ants and spiders.	

Essential Elements of Effective IPM (per HUD May 27, 2007 Guidance)	Status at Development (checkmark all that are present)	Comment on Existing Strategies and Deficiencies; Make Recommendations
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Essential Elements of Effective IPM (per HUD May 27, 2007 Guidance)	Status at Development (checkmark all that are present)	Comment on Existing Strategies and Deficiencies; Make Recommendations
7. Educate Residents and Update Leases <ul style="list-style-type: none"> • Develop an outreach/educational program • Ensure that leases reflect residents' responsibilities for: <ul style="list-style-type: none"> ○ Proper housekeeping ○ Reporting presence of pests, leaks, and mold. 	<ul style="list-style-type: none"> <input type="checkbox"/> Resident leases set specific requirements for: <ul style="list-style-type: none"> a) Housekeeping, sanitation, and trash storage. b) Reporting of pests, leaks, and mold. <input type="checkbox"/> Educational materials on pest control and pesticide use provided to residents. <input type="checkbox"/> New residents expressly told that they are responsible for proper housekeeping and reporting presence of pests, leaks, and mold. <input type="checkbox"/> Units inspected within one month after moving in. <input type="checkbox"/> Residents regularly reminded of responsibilities. <input type="checkbox"/> Resident told to notify resident services before using any pesticides spray or fogger. 	
8. Enforce Lease Enforce lease provisions regarding resident responsibilities such as: <ul style="list-style-type: none"> • Housekeeping • Sanitation • Trash removal and storage. 	<ul style="list-style-type: none"> <input type="checkbox"/> Pest control services and maintenance alerting resident services to housekeeping, sanitation and trash problems on an identified, established schedule. <input type="checkbox"/> Resident services addressing residents with housekeeping problems through education. <input type="checkbox"/> Residents with ongoing or unresolved housekeeping, sanitation or trash problems addressed through enforcement of lease. 	

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Essential Elements of Effective IPM (per HUD May 27, 2007 Guidance)	Status at Development (checkmark all that are present)	Comment on Existing Strategies and Deficiencies; Make Recommendations
9. Use Pesticides Only When Necessary Use pesticides only when necessary, with preference for products that, while producing the desired level of effectiveness, pose the least harm to human health and the environment, and, as appropriate, notifying PHA management before application.	<input type="checkbox"/> Snap traps used for mice. <input type="checkbox"/> Rodenticides only used in tamper-resistant plastic boxes. <input type="checkbox"/> No sprays or foggers used by staff, contractors, or residents without written, advance approval of property manager. <input type="checkbox"/> Boric acid and baits used at unit turnover.	
10. Post Signs Provide and post 'Pesticide Use Notification' signs or other warnings.	<input type="checkbox"/> Program in place to notify residents and staff of pesticide use. <input type="checkbox"/> Signs used to notify residents and staff in advance of pesticide application (if for other than bait stations). <input type="checkbox"/> Residents notified after units treated. <input type="checkbox"/> Residents notified after common areas treated.	
11. Summary	<input type="checkbox"/> How many of the ten Essential Elements of Effective IPM listed in this chart are: - Fully addressed? _____ - Partially addressed? _____ - Missing entirely? _____	

USING GLUE TRAPS

(from the National Center for Healthy Housing)

Cockroaches don't like the light. They prefer the dark. When you see one, the infestation is probably serious. There may be thousands more hidden. Cockroach glue traps left out overnight in the right places are a better way to identify a problem.

Cockroach glue traps are a strip of cardboard with glue on it. The glue traps come in many shapes and styles. The two most basic types come in a triangle or a flattened tube.

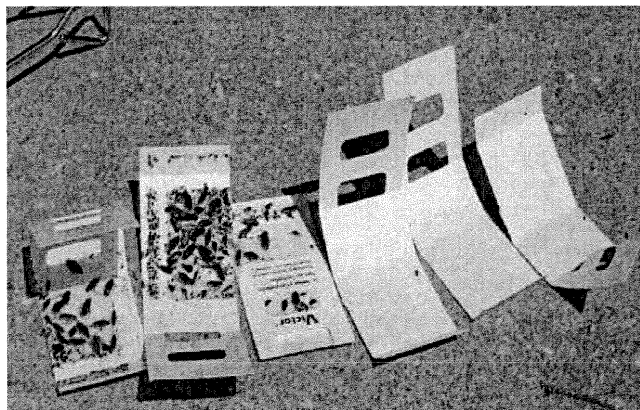


Photo Courtesy of January Jones
Cockroaches on Glue Traps.

They can also be a small, open-face, tray of glue. Avoid these traps since pets and, sometimes, a curious child can get the trap stuck on them. If a mouse gets stuck, it will most likely die after hours of squeaking. People in the area will not be happy. Leave the tray of glue to the professionals.

Please note that glue traps are only useful to monitor for cockroaches. They will not eliminate the cockroaches since only adult cockroaches are likely to be caught.

Setting up the Trap: Each brand is different. Read the instructions. Practice on a few to get it right. Make sure you write the date and location on the trap. Once cockroaches are on the trap, it will be difficult to label. Generally:

- Mark date and location on trap;
- Fold it in the proper shape to get the angles right;
- Open it back up;
- Remove paper that covers glue;
- Fold it into shape using glue to hold it.

You may want to use gloves to avoid getting the glue on your fingers. If you do get glue on you, use a good grease removing detergent such as hand dishwashing soap to get it off. It is not dangerous but it sure is sticky.

Placing the Trap: Cockroaches run along corners. Place the traps in the corner of two walls so the cockroach running along the wall will go through it. Put the trap in places with food, heat and moisture, especially where you see frass (cockroach debris, especially feces). Cockroaches leave it wherever they go.

Kitchen

- On the floor by the refrigerator
- On the floor by the oven
- In the pantry behind the food
- Under sink



Photo courtesy of Changlu Wang, Purdue University
Cockroach Glue Trap along refrigerator

Bathroom

- Behind toilet
- Alongside refrigerator
- In towel closet

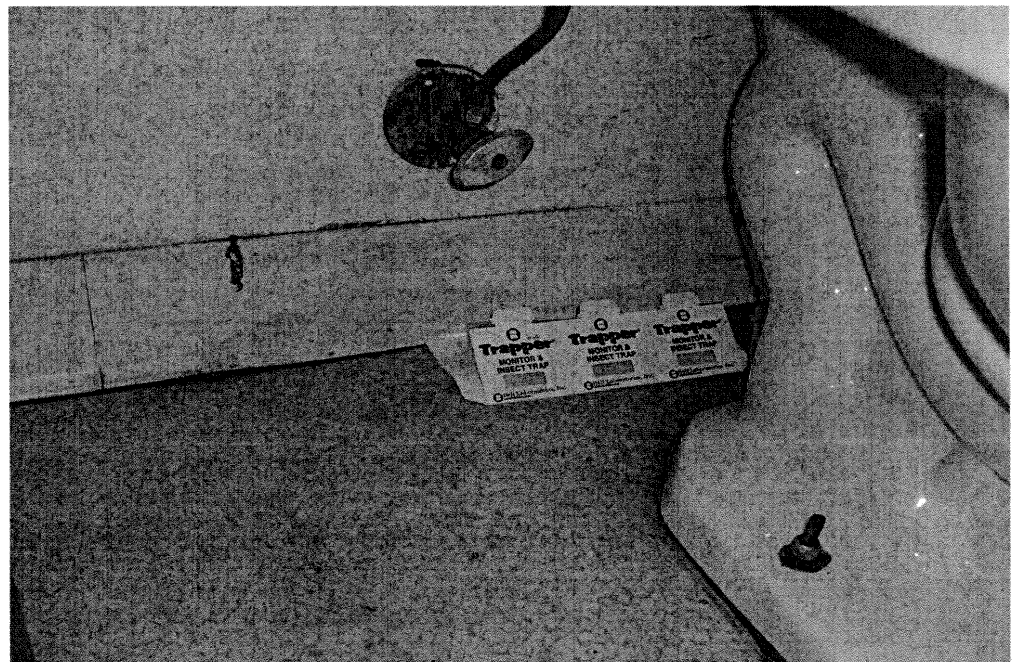


Photo courtesy of Changlu Wang, Purdue University
Cockroach Glue Trap along baseboard in bathroom

Basement

- Under sink
- By washer or dryer



Photo courtesy of Philip Smith, West Virginia Dept. of Agriculture
Cockroach Glue Trap along baseboard in kitchen

Other areas

- Behind bed
- Under couch

FOR THE PEST MANAGEMENT PROFESSIONAL

Checking / Collecting the Trap: Make it part of your routine to check the traps for cockroaches. If you find a cockroach in a trap, remove the trap, replace it with a new one, and put the old one in a zip lock bag. You may want to use tongs to pick it up since the cockroaches may be alive.

Write down as clearly as you can where the trap was located on the bag or on paper that you put in the bag. Seal the bag.

It is important to save the trap and its location information. The pest management professional (PMP) needs it to identify the type of cockroach and more quickly find the location of the infestation.