

## IPM CURRICULUM FOR ROOFERS

### LOW-RISK INTEGRATED PEST MANAGEMENT TRAINING

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#### INSTRUCTION UNITS IN THIS LESSON PLAN:

1. The IPM policy, what it does, what not to do, your role in policy implementation, how to activate pest management help, expectations from Pest Management Technicians.
2. Roofing skills: tight-fitting corners, joints, enclosures, around pipes, wires, waterproofing and water management.
3. Use Borate treated wood: protected from termites, wood-boring insects, carpenter ants, wood rot, mold, fire retardant. Moisture management important to protect structure and prevent pests.
4. Observation and reporting.

#### PERFORMANCE OBJECTIVES:

| Unit # | Objective of Performance   | Importance     | Learning Difficulty |
|--------|--|----------------|---------------------|
| 1      | Know the IPM policy, understand roles in policy implementation and know how to get low-risk pest management help.  | Very Important | Moderate            |
| 2      | Roofing skills are important in excluding pests from structures. Tight-fitting joints, corners, enclosures and around pipes, wires, waterproofing roofs and clearing drainage.   | Very Important | Easy                |
| 3      | Know that Borate-treated wood is protected from wood damaging organisms and is fire retardant. To be applied at dried-in stage by Pest Management Technicians. Good roofing procedures manage moisture to protect the structure and prevent pests. | Important      | Easy                |
| 4      | Be able to observe and report evidence pests.  | Very Important | Moderate            |

KEY:

IMPORTANCE:

Very important, important, not too important

OBJECTIVE OF PERFORMANCE:

Must know, be familiar, have knowledge, understand, perform, demonstrate, etc.

LEARNING DIFFICULTY:

Difficult, Moderate, Easy, Moderate to Very Difficult

## ROOFER LESSON PLAN

PREPARATION DATE: May 9, 2008

PREPARED BY: William E. Currie

UNIT OF INSTRUCTION: Low-risk IPM Policy Implementation

TITLE OF LESSON: Policy, roles and pest management help, woodworking skills, treated wood, observation and reporting.

INSTRUCTIONAL OBJECTIVE: Roofers will know the low-risk IPM policy, their role in implementation, and how to get pest management help. Understand importance of roofing skills in excluding pests. Know the importance of using Borate-treated wood whenever possible. Quality roofing skills protect the building from leaks and moisture damage. Be able to observe (recognize) and report evidence of pests.

TIME ALLOTTED FOR LESSON: 3 hours  
METHOD OF INSTRUCTION: Lecture, guided discussion, demonstration  
INSTRUCTIONAL RESOURCES: Manual, slides, wood examples, pest mounts  
A/V EQUIPMENT: Flip chart, PPT, slide projector, overhead projector, screen

GENERAL PLAN OF PRESENTATION: Introductions. Attendees will understand the IPM policy and their roles in implementation, how to get pest management help, roofing skills, benefits of Borate-treated wood, moisture management, evidence of rodents, termites, carpenter ants, wood borers, wood rot and molds.

INTRODUCTION: Names and roles of instructors, student introductions. Why are we here? Reasons for the low-risk pest management policy. What does it do? IPM definition, prevention philosophy, etc.

EXPLANATION/APPLICATION/PRESENTATION:

1. Roofing skills are important in excluding pests from structures. Roofers provide tight-fitting joints, corners, enclosures and around pipes, wires, waterproof roofs, clear roof drains and manage moisture.
2. Borate-treated wood has many advantages: protected from termites, carpenter ants, wood borers, wood rot and molds, and is fire retardant.
3. Roofers will be able to recognize evidence of rodents, termites, carpenter ants, wood borers, wood rots and molds.

CONCLUSIONS/SUMMARY: Low-risk pest management requires dedication and may be tedious and time-consuming when performed correctly. A thorough understanding of why such procedures are so important frequently imparts a degree of significance to even the most mundane task. Roofers have an important role in moisture management and reporting pest evidence that is observed.

## ROOFER LESSON PLAN UNIT ONE

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation  
 SUBJECT MATTER: Policy, Roles, How to Activate Pest Management Help  
 UNIT OF INSTRUCTION: Unit 1: Lecture, PPT or Overhead Transparencies, 45 minutes

### INSTRUCTIONAL PROCEDURE:

| No. | Instructional Sequence (Tasks)  | Instruction Method (Performance) | Learning Difficulty |
|-----|---|----------------------------------|---------------------|
| 1   | Policy, history, implementation   | Lecture, PPT, overheads          | Easy                |
| 2   | What's different, IPM definition, do's, precautionary principle, approved product list, notification, posting, emergency approval, training | Lecture, PPT, overheads          | Easy                |
| 3   | Don'ts, only licensed Pest Management Technicians apply pesticides, remove harborage (clutter), no BAN, phase out pesticides over time      | Lecture, PPT, overheads          | Moderate            |
| 4   | Roles, sanitation, no food, pest-proof food storage, eliminate clutter, observation and reporting, teach others                             | Lecture, PPT, overheads          | Moderate            |
| 5   | Reportable conditions, pest sighting, pest evidence, droppings, gnawings, webbing, fecal focal points, scattered trash, etc.                | Lecture, PPT, slides, display    | Difficult           |
| 6   | Facilities Manager, point of contact, may examine situation, call to report, information directed to appropriate office                     | Lecture, PPT, overheads          | Easy                |
| 7   | Expectations, Pest Management Technicians respond, emergencies that day, thorough inspection and monitoring                                 | Lecture, PPT, overheads          | Easy                |
| 8   | Low-risk pesticide application, follow-up, repair structural defects, prevent pest access   | Lecture                          | Easy                |
| 9   | Basics of IPM: exclusion, sanitation, habitat modification, inspection, monitoring, low-risk pesticides, records                            | Lecture                          | Moderate            |

INSTRUCTIONAL SEQUENCE: What comes first, chronological order  
 METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion

## ROOFER LESSON PLAN UNIT TWO

COURSE DESCRIPTION: Low-risk Integrated Pest Management Implementation  
 SUBJECT MATTER: Roofing Skills  
 UNIT OF INSTRUCTION: Unit 2: PPT, Slides, Lecture – 45 minutes

### INSTRUCTIONAL PROCEDURE:

| No. | Instructional Sequence (Tasks)  | Instruction Method (Performance) | Learning Difficulty |
|-----|---|----------------------------------|---------------------|
| 1   | Roofing skills are very important to exclude pests from structures and eliminate moisture sources in the structure. | Lecture                          | Easy                |
| 2   | Tight-fitting joints, corners and enclosures, waterproofing.  | Lecture, slides                  | Easy                |
| 3   | Tight-fitting seals around pipes, wires and clearing roof drains.   | Lecture, slides                  | Easy                |

## ROOFER LESSON PLAN UNIT THREE

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation  
 SUBJECT MATTER: Borate Treated Wood  
 UNIT OF INSTRUCTION: Unit 3: PPT, Slides, Lecture – 15 minutes

### INSTRUCTIONAL PROCEDURE:

| No. | Instructional Sequence (Tasks)  | Instruction Method (Performance) | Learning Difficulty |
|-----|---|----------------------------------|---------------------|
| 1   | Wood protection by Borate solutions   | Lecture, slides                  | Easy                |
| 2   | Pretreat wood or treat at dried-in stage by Pest Management Technicians. Needs coordination and timing. | Lecture, slides                  | Easy                |

INSTRUCTIONAL SEQUENCE: What comes first, chronological order  
 METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion

## ROOFER LESSON PLAN UNIT FOUR

COURSE DESCRIPTION: Low-risk Integrated Pest Management Implementation  
SUBJECT MATTER: Observation and Reporting  
UNIT OF INSTRUCTION: Unit 4: PPT, Slides, Lecture, Hands-on – 1 hour 15 minutes

### INSTRUCTIONAL PROCEDURE:

| No. | Instructional Sequence (Tasks)  | Instruction Method (Performance) | Learning Difficulty |
|-----|---------------------------------|----------------------------------|---------------------|
| 1   | Evidence of rodents             | Lecture, slides, hands-on        | Easy                |
| 2   | Evidence of termites            | Lecture, slides, hands-on        | Easy                |
| 3   | Evidence of carpenter ants      | Lecture, slides, hands-on        | Easy                |
| 4   | Evidence of wood-boring insects | Lecture, slides, hands-on        | Easy                |
| 5   | Evidence of wood rot and mold   | Lecture, slides, hands-on        | Difficult           |

INSTRUCTIONAL SEQUENCE: What comes first, chronological order  
METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion