

## Wood Destroying Pest Control 7D Exam Study Guide

This study guide is intended to serve as an outline of the knowledge base covered by the Wood Destroying Pest Control 7D Exam. If you don't understand a statement or term, refer to Truman's Scientific Guide for more information. This exam consists of 50 multiple choice questions and a specimen termiticide label is provided. Topics include:

1. Proper Conduct/Laws/Liability
2. General Termite Knowledge
3. Wood Destroying Insect Types/Characteristics
4. Termite Colony Development
5. Structure/Foundation
6. Pesticide Application/Storage/Disposal
7. Label Comprehension
8. Formulas/Equations

### 1. Proper Conduct/Laws/Liability

- a. An Applicator or Operator license with the Wood Destroying Organisms (7D) category is required to place, monitor, or service termite bait stations; inspect structures for termites; or apply termiticides to a structure.
- b. A complete record of a termiticide or termite bait station application includes a graph with the total treatment area recorded and a legend to explain the notations on the graph, a diagram of the building foundation, and the total gallons of use dilution applied, in addition to other required records.
- c. When an NMDA inspector conducts an on-site inspection of a termiticide application, he/she needs to see the graph of the structure treated, the applicator's current pesticide license, and the label of the product used or to be used, among other things. The inspector may also collect a sample from the tank mix and/or the application site.

### 2. General Termite Knowledge

- a. Termites enter homes via expansion joints, wood to soil contact, utility penetrations, and under exterior facings.
- b. Wood components used by termites are digested by protozoa in the worker termite's gut.
- c. The component of wood consumed by termites is called cellulose.
- d. Termites have gradual metamorphosis.
- e. Termite nymphs can develop into soldiers, workers, primary reproductives, and supplementary reproductives.
- f. Soldier termites serve specifically to protect the colony from its enemies.
- g. Workers are the most numerous in a colony and perform all the work, including feeding the other castes, grooming the queen, excavating the nest, and making the tunnels.
- h. Swarming termites are primary reproductives.
- i. Supplementary reproductives are wingless or have only very short, nonfunctional wings.

### **3. Wood Destroying Insect Types/Characteristics**

- a. Subterranean termites may swarm whenever environmental conditions are conducive (favorable). As a general rule, swarmers emerge on warm, sunny days when humidity is high, often following rain showers.
- b. Damp wood termites are typically the largest and do not keep their galleries and tunnels clean.
- c. Dry wood termites have clean chambers and tunnels that cut across the wood grain.
- d. Subterranean termites differ from all other wood destroying organisms because they damage and feed on spring and soft woods only.
- e. Lyctid beetles prefer to attack woods with higher concentrations of starch such as ash, oak, maple and walnut.
- f. Lyctid beetles leave large amounts of frass due to their inability to digest cellulose.
- g. Powder-post beetles can re-infest seasoned woods.
- h. Most of the damage done by powder-post beetles is done in the larval stage.
- i. Carpenter ants excavate distinctive galleries in wood but do not use wood for food.

### **4. Termite Colony Development**

- a. Workers, soldiers, supplementary reproductives and primary reproductives represent the social castes of a termite colony.
- b. In a colony, worker termites eat and digest wood materials, build tunnels, and feed other termites.
- c. In a colony, soldier termites defend the colony from attack by ants or other termites.
- d. Shelter tubes maintain a moist environment and protect the termites.
- e. Moisture is the most limiting factor for colony development.
- f. Trophallaxis is the exchange of nutrients (transfer of food) between colony members.
- g. Moist shelter tubes found during a termite inspection indicate new workings, even if no live termites or activity are found.

### **5. Structure/Foundation**

- a. A brick veneer is facing made of bricks attached to the exterior of the home.
- b. When treating plenum housing (the area under the subfloor used as a giant heating-cooling duct), the primary concern is the risk of termiticide vapors entering the living space.
- c. Slab penetrations are points where the utilities (plumbing, electrical, etc.) come through the slab, providing a potential entry point for subterranean termites.
- d. Be able to identify the elements of a foundation (footings, joists, sill plates, grades, etc.).
- e. Be able to identify the types of foundations (monolithic, supported, floating, hollow block, etc.).

## **6. Pesticide Application/Storage/Disposal**

- a. Examples of mechanical alteration that help eliminate conditions conducive to termites include the removal of cellulose debris, the elimination of moisture near or in the structure, and the elimination of wood-to-soil contact.
- b. If a well is near a structure the best treatment option, if allowed by the product label, is to remove the soil around the well, treat it, then put the treated soil back around the well.
- c. To clean up termiticide overflow from drill holes, soak it up with absorbent materials and dispose of the saturated materials correctly.
- d. A pretreatment should be completed on the outside of the footer after the final grade is installed.

## **7. Label Comprehension**

- a. Termiticides can never be applied at rates lower than label recommends.
- b. Termidor should be applied by a licensed technician familiar with trenching, rodding and short rodding, subslab injection, low pressure banded surface applications, and foam delivery techniques.
- c. Before applying a pesticide, you should read the label to determine what safety measures must be followed, where you can legally use the pesticide, how to apply the pesticide, and if there are any special use restrictions.

## **8. Formulas/Equations**

- a. There will be 10 questions based on a given label. You will need to be able to interpret and understand label requirements.
- b. There will be 8 questions based on a given label and graph. You will need to be able to refer to a label when given specific information on a graph.
- c. Study a termiticide label to make sure you understand common terms and instructions for using termiticides, including pre-construction; post-construction; treatment of basements, plumbing, plenums, wall voids, etc.; and foaming or other treatment methods.