## OREGON DEPARTMENT OF AGRICULTURE PESTICIDE

## **EXAMINATION OUTLINE**

To successfully complete this examination, the applicant will need to be familiar with the topics identified in this outline. The outline is not intended to be used as the sole study material and may not be all inclusive of topics covered in the exam. See the ODA website <a href="http://oregon.gov/ODA/PEST/">http://oregon.gov/ODA/PEST/</a> or the "Guide to Pesticide-Related Licensing in Oregon" (available on the web or by calling 503-986-4635) for details on recommended study material.

It is advisable to bring a small, hand held calculator to the exam session to assist in performing calculations. This exam has 100 questions. A score of 70% is needed to pass the exam. Government issued photo identification (such as a driver's license) will be required when you check in for testing.

## OREGON DEPARTMENT OF AGRICULTURE PESTICIDE EXAMINATION OUTLINE IIHS GENERAL

- 1) Environment
  - a) Groundwater and surface water contamination
    - i) Pesticide transport in the environment
  - b) Pesticide persistence
    - i) Factors influencing persistence
- 2) Calibration, calculations and equipment
  - i) Equipment and maintenance
    - (1) Bait applicators
    - (2) Backpack sprayers
    - (3) Foam applicators
    - (4) Large volume sprayers
    - (5) Aerosols and fogs
    - (6) Dusters and granular applicators
  - ii) Calibration of equipment
  - iii) Calculations
    - (1) Calculate size of area to be treated
    - (2) Rate of application
    - (3) Mixing percent solutions
- 3) Integrated Pest Management
  - a) Advantages of using an integrated approach
  - b) Chemical vs other control methods
  - c) Scouting and monitoring
- 4) Pest characteristics
  - a) Insects
    - i) Anatomy
    - ii) Insect classification and identification
    - iii) Types of insects (identification, habits, control methods)
      - (1) Cockroaches
      - (2) Ants, wasps, bees, and other hymenopterous pests
      - (3) Stored product pests
      - (4) Fleas
      - (5) Fabric insects
      - (6) Flies and mosquitoes
      - (7) Occasional invaders
  - b) Insect-like pests
    - i) Types
      - (1) Ticks
      - (2) Spiders
      - (3) Centipedes
      - (4) Mites
  - c) Rats and mice

- i) Identification (Norway rat, roof rat, house mouse)
- ii) Behavior
- iii) Control techniques
  - (1) Sanitation
  - (2) Exclusion
  - (3) Trapping
  - (4) Rodenticides (baits, tracking powders, fumigants)
- d) Other pests
- 5) Safety and handling
  - a) Pesticide transportation, storage and disposal
  - b) Protective clothing and equipment
    - i) General clothing requirements
    - ii) Respirator types and uses
    - iii) Decontamination and cleanup
  - c) First aid
    - i) Signs and symptoms
    - ii) First aid and the label
    - iii) What to do in an emergency
- 6) Pesticide characteristics
  - a) Types of pesticides (insecticides, rodenticides, etc)
  - b) Formulation types
  - c) Adjuvants (what are they used for, types)
- 7) Terminology
  - a) See glossary of terms in study manual
- 8) Laws and regulations
  - a) Federal and State laws and regulations
    - i) License types and requirements
    - ii) Certification periods
    - iii) Prohibited acts and civil penalties
  - b) State recordkeeping requirements
    - i) ORS 634
      - (1) Recordkeeping elements
      - (2) Retention time
- 9) Label comprehension
  - a) The label is the law
  - b) Parts of the label including:
    - i) Restricted-use vs general-use
    - ii) Precautionary statements
    - iii) First aid
    - iv) Signal words
    - v) Active and other ingredients
    - vi) Directions for use
    - vii) Storage and disposal
    - viii) Be able to answer word problems and calculations based on a sample label.