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 http://oregon.gov/ODA/PEST/ 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
REGULATORY WEED CONTROL

1) Environment
   a) Drift
      i) Particle drift
      ii) Vapor drift
   b) Groundwater contamination
      i) Pesticide transport in the environment
      ii) Soil types
   c) Wildlife
   d) Pesticide persistence
      i) Factors influencing persistence
      ii) Processes for degradation
2) Calibration, calculations and equipment
   a) Calibration of spray equipment
   b) Know how to calculate the following based on word problems that provide relevant variables.
      i) Application rate
      ii) Sprayer delivery rate
      iii) Area of a field
      iv) How much concentrate to dilute into spray tank
      v) Miscellaneous problems and combinations of the above.
   c) Best ways to change sprayer output, application rates, etc.
   d) Equipment used in right-of-way applications
      i) Boom-type ground sprayers
      ii) Truck mounted sprayers
      iii) Backpack sprayers
3) Integrated Pest Management
   a) Definition of IPM
   b) Advantages of IPM
   c) Types of control methods
   d) Scouting and monitoring
   e) Economic threshold
   f) Economic injury level
4) Pest characteristics
   a) Common right-of-way weeds
      i) Broadleaf, woody and grass
      ii) Annuals, perennials, biennials
      iii) What chemicals are effective on what weeds
   b) Weeds to know
      i) Be able to identify by picture all of the weeds listed on the “Noxious Weed Policy and Classification System”
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 herbicides
b) Formulation types
c) Adjuvants (what are they used for, types)
d) Herbicides to know
    i) Growth regulator herbicides
        (1) 2,4-D
        (2) MCPA
        (3) Dicamba
        (4) Clopyralid
        (5) Picloram
        (6) Fluroxypyr
        (7) Triclopyr
    ii) Lipid inhibitors
    iii) Amino acid synthesis inhibitors
        (1) Chlorsulfuron
        (2) Metsulfuron
        (3) Sulfometuron
        (4) Glufosinate-ammonium
        (5) Glyphosate
        (6) Imazapyr
        (7) Imazapic
    iv) Seedling growth inhibitors
        (1) Dichlobenil
        (2) Oryzalin
        (3) Pendimethalin
        (4) Prodiamine
    v) Photosynthesis inhibitors
        (1) Bromacil
        (2) Diuron
        (3) Tebuthiuron
        (4) Hexazinone
    vi) Cell membrane disruptors
        (1) Diquat
    vii) Pigment inhibitors
        (1) Norflurazon
    viii) Plant growth regulators

(1) Mefluidide
ix) Miscellaneous
(1) Fosamine
x) Premixed products
(1) Crossbow – 2,4-D and triclopyr
(2) Krovar IDF – bromacil and diuron
(3) Landmark – chlorsulfuron and sulfometuron methyl
(4) Sahara – diuron and imazapyr

7) Terminology
a) See glossary of terms in study manual
8) Federal and State laws and regulations
a) ORS 570
b) FIFRA
c) FFDCA
d) ORS 634 & OAR 603
e) WPS
f) OSHA
g) HCS
h) ESA
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