Exam Knowledge Expectations for
Qualified Applicator Certificate & Qualified Applicator License
Category L – Wood Preservation

Use these knowledge expectations (KEs) to help study the suggested material, The Safe and Effective Use of Pesticides, Third Edition. University of California Integrated Pest Management Program (UC IPM), 2016 and Wood Preservation P.J. O’Connor-Marer and M. Grimes, 1992. Knowing the information from all of the KEs should prepare you for taking the exam.

I. Wood Pests
   A. Identification, characteristics, and ecology of wood pests including: termites, fungi, ants, bees, beetles, and marine borers.
   B. Ability to identify type of wood pest based on damage caused.
   C. Knowledge of wood and tree structures relevant to the application of preservative and pesticide chemicals.

II. Pesticide Applications
   A. Knowledge of wood preservation methods including: controlling moisture and temperature, drying, storing lumber, use of structural wood, protection from weather, and physical barriers.
   B. Knowledge of wood preservative characteristics including: toxicity to wood-destroying pests, chemical stability, ability to penetrate wood, potential hazards to non-target species, adverse effects, and corrosiveness.
   C. Knowledge of integrated pest management (IPM) approaches to control wood destroying pests.
   D. Knowledge of treatment and application methods used to preserve wood including: field, brush, dipping, pressure, vacuum, cold soaking, hot and cold bath treatments, and the thermal process.
   E. Knowledge of wood preservative chemical types including: copper naphthenate (CuNap) stains, varnish, paint, and waterborne. (Note: Wood preservative chemicals contained in study materials that are not registered for use in California will not be included in the exam. This includes; creosote and pentachlorophenol).
   F. Methods used to prepare wood for treatment including; peeling, seasoning, drying, shaping, and incising.
   G. Knowledge of wood treatment specific to utility poles including: inspection, re-treatment, and type of wood used.
   H. Knowledge of preservative applications specific to the commercial treatment of wood.
   I. Ability to classify wood preservatives as general use or restricted use pesticides.
   J. Ability to read and understand Safety Data Sheets (SDS) and labeling.
   K. Ability to compute pesticide related calculations and measurements.
III. **Protection of Human Health and Environmental Exposure**

A. Knowledge of the risks associated with burning wood that has been treated with wood preservatives.

B. Knowledge of how to properly dispose of wood preservative pesticides and waste materials used for applications.

C. Understanding of how wood preservatives and pesticides impact the environment including groundwater contamination and non-target species.

D. Knowledge of ways to prevent pesticide related injury, exposure, and illness including: safe and effective use of personal protective equipment (PPE), respiratory equipment, proper use of application equipment, recognition of exposure and poisoning symptoms, first aid, and proper transport and storing methods of chemicals.