

## Example Topics for DPR Continuing Education:

### Other Hours

*Note: Subjects listed are general topic areas that would be accredited by DPR for “Other” CE hours as long as the information submitted with the CE course approval request included more detail to show the focus is on pesticides or pest management applicable to California and DPR license and certificate holders.*

#### Pest identification, Pest Monitoring and Pest Levels

- Pest identification
- Pest life cycles
- Pest classifications and characteristics
- Pest resistance and/or tolerance to pesticides

#### Ecosystem and Pest Management

- Levels of ecological organization, biochemical cycles in the ecosystem, and other ecosystem factors affecting pest populations and pest management/IPM
- Biodiversity and the physical environment management impact on pest control
- Pest problems and their effect on ecology
- Levels of ecological organization and how they relate to pest management

#### Economic Thresholds, Treatment Guidelines, and Monitoring of Pests

- Pest population thresholds and resulting damage
- Density of pest populations and cost of pest control product applications
- Pest control measures and incremental return/economic injury affecting pest management
- Plant disease forecasting
- Economic loss due to pest damage

#### Cultural Practices

- Feasible mitigation measures in cultural pest control
- Mechanical and physical methods of pest control
- Pest susceptibility or resistance due to plant health, fertilization, biochemical cycles, plant physiology, irrigation, salinity management, use of alternate cropping and crop rotation

#### Biological Control Methods/Biotechnology

- Biological control methods and their role in pest prevention
- Beneficial organisms and their habitats
- Genetically modified crops for pest prevention
- Use of predators and parasites for pest control
- Timelines for release and control (lag times)

# Example Topics for DPR Continuing Education: Other Hours

## Plant and Animal Management Systems

- Eradicating or controlling animal pests
- Pest control programs in cooperation with neighboring landholders, other state agencies and local government
- Invasive species control and quarantines

## Ground Pesticide Application Equipment and Application techniques

- Characteristics and advantages of ground application equipment
- Selection, use, clean up and care of ground application equipment (including compressed air, back-pack, low-pressure, high-pressure hydraulic, and air-blast sprayers)
- Ultra-low volume, injection pump, dust and granular applications
- Equipment calibration
- Managing pests using technology or tools

## Pesticide Formulations and Toxicology

- Minimal exposure pesticides
- Identification of environmentally sensitive areas
- Impacts of pesticides on pollinators
- Impacts of pesticides on people
- Human, wildlife, and environmental exposure/impacts

## Movement of Pesticides

- Pesticide drift protection practices and drift reduction techniques
- Pesticide residue movement due to irrigation run off, erosion tillage, and leaching
- Understanding meteorological conditions (inversions, wind speed, temperature, etc.) and how they impact: proper decision making during applications, drift, and offsite movement of pesticides.

## Integrated Pest Management (IPM) Practices and Techniques

- Purpose and benefits of IPM, understanding pest control techniques and practices
- Using pesticides in an IPM program
- Pest monitoring programs and practices
- Pest control sampling and monitoring methods (includes using pheromones, sticky traps, etc.)
- Managing pests using data from meteorological data, such as degree days and other environmental conditions that play a role in pest development and treatment timing decisions
- Use of GPS & GIS for monitoring pests and applying pesticides

## **Example Topics for DPR Continuing Education:**

### **Other Hours**

- Effect of pest management methods on non-target pests/organisms and the environment
- Effects on pest management or use of pesticides from using fertilizers, composting, managing irrigation, and other production methods
- Comparative effectiveness of IPM versus regularly scheduled chemical applications in pest management systems

### **Other Government Agency's Laws and Regulations Pertaining to Management of a Pest (not CA laws/regulations about pesticides)**

- Vertebrate trapping laws and regulations
- Non-chemical requirements for preventing the movement of invasive species
- Fish and wildlife vertebrate removal/trapping permits
- Maximum residue limits (MRLs) set by other countries

## **Example Topics for DPR Continuing Education: Pesticide Laws and Regulations Hours**

*Note: Subjects listed below are general topics that would be accredited by DPR for “Pesticide Laws and Regulations” CE hours as long as the CE approval request shows that the focus is on California and/or federal pesticide laws and/or regulations applicable to DPR license and certificate holders.*

### **Federal EPA and FIFRA topics**

- Registration, sale, possession, and use of pesticides

### **Pesticide Handler and Fieldworker Safety**

- Worker Protection Standard provisions
- Exposure precautions, emergency treatments, and first aid procedures
- Worker protection training/communications, safety requirements, and decontamination procedures
- Personal protective equipment (PPE): types, proper usage, cleaning, disposal, and storage
- Pesticide storage, transportation, and disposal
- Exemptions from safety requirements
- Pesticide Safety Data Sheets (SDS)

### **Surface and Ground Water Protection from Pesticides**

- Protecting surface and ground water from contamination due to pesticide use
- Using pesticides on the ground water protection list
- Surface or ground water protection restrictions and specific pesticide use requirements
- National Pollutant Discharge Elimination System (NPDES) permit requirements (must be specific to pesticide use)
- Well head protection requirements

### **Pesticide Labeling and label interpretation**

- Label requirements of the pesticide registration process
- Lapses in product registration
- Amendments to a registered label
- Pesticide classification and restrictive statements
- Pesticide use directions, target pests, and crop/plant species
- Acceptable reapplication intervals, restricted-entry statements, and pre-harvest intervals
- Misuse and deviations from label directions

### **Licensing and Certification Requirements for Pesticide Applicators and Advisers**

- Types of licenses/certificates and minimum requirements
- County registration requirements
- Continuing education and record keeping requirements
- License/certificate renewal requirements
- License violations and fraudulent actions

# **Example Topics for DPR Continuing Education:**

## **Pesticide Laws and Regulations Hours**

### **Pesticide Regulation and Registration**

- Pesticide registration process
- Classification of pesticides for general or restricted use
  - restricted materials classification
  - federal and state restrictions
- Restricted Use Permit Requirements
  - permits and written recommendations prior to use
  - compliance with sales and use provisions-federal and state

### **Pesticide Recommendations**

- PCA written recommendation components and requirements, including documentation and retention requirements

### **Pesticide Use Reporting Requirements**

- Pesticide use reports content and submission

### **Pesticide Drift Prevention Regulations**

- Drift definitions, occurrences, impacts, and off-site movement
- Dormant spray regulations
- County specific buffer zones near school sites

### **Pesticide Air Quality Regulations**

- Fumigant use regulations
- Volatile organic compound (VOC) regulations

### **Pesticide Effects on Environmental and Endangered Species and Endangered Species Identification**

- Endangered species range maps
- Endangered species identification
- Consideration of pesticide impacts to endangered species (PRESCRIBE)
- Endangered species injunctions, orders, and protection measures

### **Healthy Schools Act (HSA) Requirements**

- Pesticide use notification, posting, and record keeping requirements
- Pesticides not allowed to be used at schools and child care centers
- Schoolsite pesticide use reporting

### **Local Pesticide Use Rules**

- County-specific requirements
- City-specific requirements

## **Example Topics for DPR Continuing Education:**

### **Aerial Hours**

*Note: Subjects listed are general topic areas that would be accredited by DPR for “Aerial” CE hours as long as the information submitted with the CE course approval request included more detail to show the focus was on aerial information applicable to California and DPR certified pest control pilots.*

#### **Aerial Pesticide Application Equipment and Application Techniques**

- Aerial dispersal system components
- Aerial application guidance systems
- Aerial application technology
- Characteristics, advantages, and disadvantages of aerial application equipment
- Selection, use, clean up, and care of aerial application equipment
- Drift reduction of aerially applied pesticides
- Calibration of liquid and dry aerial application systems
- Inspection and maintenance of dispersal equipment/systems
- Swath marking and flight patterns
- Understanding meteorological conditions (inversions, wind speed, temperature, etc.) and how they impact: proper decision making during applications, drift, and offsite movement of pesticides.

#### **Part 137 Dispensing Pesticides in Congested Area Operation**

#### **Professional Aerial Applicator Support System (PAASS)**