



California Pesticide Laws and Regulations

Riley Reynolds, PCA

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Regulatory Process

■ Laws -

- Federal - FIFRA - primary federal pesticide law
- State Legislature - studies the problems and passes state laws based upon...
 - the Food and Agricultural Code is the primary source for State laws that cover pesticide use
- Governor - signs state laws into effect
- Director of DPR - adopts regulations to implement these laws



Regulatory Process

- Regulations – are written to implement laws
 - Primary Pesticide Regulatory Agencies
 - EPA - Environmental Protection Agency
 - Federal
 - DPR - Department of Pesticide Regulation
 - State of California
 - County Ag Commissioners
 - County



Enforcement

- "Enforcement action" is an action with the potential to impose a monetary penalty or loss of a right or privilege initiated by a Notice of Proposed Action. Enforcement actions include administrative civil penalty; or disciplinary action (refuse, suspend, or revoke) against a county registration, certificate, or permit.
 - Class A or Serious Violation Enforcement Response.
 - Class B or Moderate Violation Enforcement Response.
 - Class C or Minor Violation Enforcement Response.



Enforcement and Civil Penalties

- 6130. Civil Penalty Actions by Commissioners.
- For purposes of this article, violations shall be designated as "Class A," "Class B," and "Class C."
 - (A) Class A: Violations which created an actual health or environmental hazard, violations of a lawful order of the commissioner issued pursuant to sections 11737, 11737.5, 11896, or 11897 of the Food and Agricultural Code, or violations that are repeat Class B violations. The fine range for Class A violations is \$700-\$5,000.



Enforcement and Civil Penalties

- 6130. Civil Penalty Actions by Commissioners.
- For purposes of this article, violations shall be designated as "Class A," "Class B," and "Class C."
 - (B) Class B: Violations which posed a reasonable possibility of creating a health or environmental effect or violations that are repeat Class C violations. The fine range for Class B violations is \$250-\$1,000.
 - (C) Class C: Violations that are not defined in either Class A or Class B. The fine range for Class C violations is \$50-\$400.



Regulatory Program

- Purpose is for the submittal of the State pesticide regulatory program to the Secretary of Resources.
 - Agriculture is a major economic factor in CA
 - The proper, safe, and efficient use of pesticides is essential to protect health and production of agricultural commodities
 - Proper timing of pesticide applications is good management
 - Environmental review is necessary
 - Individual permits to apply pesticides are issued on short notice
 - Environmental impact reports are costly



Regulatory Program

■ Regulations

- Director can adopt, amend or repeal a regulation
- Reports of proposed regulation amendments, adoptions, or repeals are available upon written request
- Final decisions will be posted with the Secretary of the Resources Agency for public inspection for 30 days



Regulatory Program

- Inspection Authority

- DPR staff or Ag Commissioners can enter or inspect or sample at a reasonable time the following:

- Fields, areas, structures, or greenhouses where pesticides are handled, stored or applied
 - Growing crops, harvested commodities
 - Equipment (PPE or machinery), change areas
 - Records: work hours, training, recommendations, pesticide use, sales and delivery



Pesticide Registration General Provisions

- Intended to be used - implied that it should be used as a pesticide
- Liquid chemical Sterilants - critical medical device put into the body?
- Evaluation time Frames for pesticide registration scientific data - 120 days for new active ingredient or major new use of existing, 60 days for other
- Brands - may be registered under more than one brand name
- Transfer of Registration - can be done, need a new application and fee
- Change of name - need current registration, new application, affidavit
- Registration Date - registration effective on the date of issue
- Registration certification - all information must be accurate and complete
- Review and evaluation - acute health effects, chronic health effects, environmental damage, toxicity to aquatic biota or wildlife, medical management, feasible alternatives, efficacy
- Application Fees will apply (see further in the presentation) In addition to application fee, Interim Registration fee is \$5000.00



Pesticide Registration Requirements

- Application – All application fees, plus six copies of product labeling, and all data
- Application form must be filled out completely
- Document requests - to the director all data required by EPA
- General toxicity data - acute oral and dermal LD₅₀, acute LC₅₀, primary eye and skin irritant data, 2-year feeding study in 2 animal species, teratogenicity study for 2 generations, 3 mutagenicity studies for gene mutations, chromosomal aberrations and DNA damage
- Supplemental Data may be required to complete the application process.



Pesticide Registration Exemptions

- **Deodorizers or cleansing agents** are not considered pesticides
- FIFRA Section 18, which is when the director determines a specific public health quarantine, emergency or crisis exists that requires the use of an unregistered pesticide and there is no feasible alternative. The data requirements are waived, but utilization of the best pest control methods and technology are a must. Including: monitoring, thresholds, application methods to protect human health and environment, and mitigation efforts to protect non-target organisms, etc.
- FIFRA Section 24C, Special local need registration, used for certain crop emergencies can be issued to individual registrants or grower organizations.
- Adverse effects disclosure will be discussed on the next slide.



Adverse Effects Disclosure

- § 6210. Adverse Effect Disclosure.
 - If, during the registration process or at any time after the registration of a pesticide, the registrant has factual or scientific evidence of any adverse effect or risk of the pesticide to human health or the environment (including ambient air quality), the registrant shall immediately submit such evidence to the director. All such information including, but not limited to that required under Section 6(a)(2) of the Federal Insecticide, Fungicide and Rodenticide Act, shall be submitted to the director.
 - For the purposes of this section, "environment" means the total human surroundings, physical and biological, natural and artificial, including air, water, soil, plants, wildlife, and other ecological factors affecting the growth, development, and safety of people and other living organisms.



Pesticide Registration Renewal

- Annual renewal fee for each pesticide product is \$750; Late payment penalty fee of 20% for each product this includes additional brand name, or a pesticide product where this a change of ownership
- Signed statement saying they have complied with the provisions of section 6210 (Adverse Effects Disclosure)
- Renewals will be issued within 60 days
- The director will certify the renewal
- Label ammendments are subject to review, but don't need separate registration



Pesticide Registration Labeling

- Each container that contains a pesticide should have on it the proper labeling. Each label must contain:
 - Name, Brand, or Trademark – for correct identification
 - Placement of Label – which is visible to any user
 - Acceptance of Labeling – by the the DPR and EPA
 - Name and Address of Manufacturer – for contact purposes
 - Legibility of Label with all information and directions
 - Registration Number – to ensure it is a registered product
 - Warning or Cautionary Statements
 - DANGER, WARNING, or CAUTION
 - Scope of Labeling Requirements




Pesticide Registration Research Authorization

- Research permission is obtained by the director of the DPR
- Specific conditions apply to the commodity, PPE, REI, and medical monitoring and field posting
- Human exposure research follows protocol
- Director may terminate research for various reasons
- All research will comply with laws
- Application for research authorization, and experiments
- Notification and reports of research
- Exemptions include the operator of property and colleges and universities engaged in pesticide research




Restricted Materials Identification

- Pesticides registered under FIFRA section 3, labeled as “Restricted Use Pesticide”
- Any pesticide used under “Emergency Exemption” FIFRA section 18
- Dusts labeled for outdoor use in containers of more than 25 lbs.
- Pesticides which have potential to pollute groundwater, when labeled for agriculture, outdoor institutional, or outdoor industrial
- Certain other chemical formulations (43) see next slide for a full list of these.



■ Acrolein, when labeled for use as an aquatic herbicide - Aldicarb (Temik) - Aluminum phosphide (Phostoxin) - 4-Amino pyridine (Avitrol) - Azinphos-methyl (Guthion) - Calcium cyanide - Carbaryl (Sevin), except: (1) when formulated as a bait; or (2) when labeled only for one or more of the following uses: use directly on livestock or poultry, home use, structural pest control, industrial use, institutional use, or use by public agency vector control districts pursuant to section 2426 of the Health and Safety Code. - Carbofuran (Furadan) - Chloropicrin - 3-Chloro-p-toluidine hydrochloride (Starlicide) - Dazomet (Basamid), when labeled for the production of agricultural plant commodities. - Dicamba (Banvel), except: (1) liquid formulations packaged in containers of 1 quart or less regardless of percentage of dicamba; (2) liquid formulations that contain 15% or less dicamba packaged in containers of 1 gallon or less; (3) liquid formulations of a product that is labeled to be used without further dilution; (4) dry formulations, packaged in containers of 1 pound or less, of a product that is labeled to be further diluted for use; and (5) dry formulations, packaged in containers of 50 pounds or less, of a product that contains 10% or less dicamba and is labeled to be used without further dilution. - 2,4-dichlorophenoxyacetic acid (2,4-D), except: (1) liquid formulations, packaged in containers of 1 quart or less, regardless of percentage of 2,4-D; (2) liquid formulations that contain 15% or less 2,4-D packaged in containers of 1 gallon or less; (3) liquid formulations of a product that is labeled to be used without further dilution; (4) dry formulations, packaged in containers of 1 pound or less, regardless of percentage of 2,4-D; (5) dry formulations, packaged in containers of 50 pounds or less, of a product that contains 10% or less 2,4-D and is labeled to be used without further dilution; and (6) products labeled only for use as a plant growth regulator. - 2,4-dichlorophenoxybutyric acid (2,4-DB), except: (1) liquid formulations, packaged in containers of 1 quart or less, regardless of percentage of 2,4-DB; (2) liquid formulations that contain 15% or less 2,4-DB packaged in containers of one gallon or less; (3) liquid formulations of a product that is labeled to be used without further dilution; (4) dry formulations, packaged in containers of 1 pound or less, regardless of percentage of 2,4-DB; and (5) dry formulations, packaged in containers of 50 pounds or less, of a product that contains 10% or less 2,4-DB and is labeled to be used without further dilution. - 2,4-dichlorophenoxypropionic acid (2,4-DP), except: (1) liquid formulations, packaged in containers of 1 quart or less, regardless of percentage of 2,4-DP; (2) liquid formulations that contain 15% or less 2,4-DP packaged in containers of 1 gallon or less; (3) liquid formulations of a product that is labeled to be used without further dilution; (4) dry formulations, packaged in containers of 1 pound or less, regardless of percentage of 2,4-DP; (5) dry formulations, packaged in containers of 50 pounds or less, of a product that contains 10% or less 2,4-DP and is labeled to be used without further dilution.

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- 1,3-Dichloropropene (Telone II) - Disulfoton (Di-Syston), except when labeled only for one or more of the following uses: home use, structural pest control, industrial use, institutional use, and use by public agency vector control districts pursuant to section 2426 of the Health and Safety Code. - Endosulfan (Thiodan), except when labeled only for one or more of the following uses: home use, structural pest control, industrial use, institutional use, and use by public agency vector control districts pursuant to section 2426 of the Health and Safety Code. - Ethoprop (Mocap), when labeled for turf use. - Fenamiphos (Nemacur) - Lindane, except when labeled only for one or more of the following uses: home use, structural pest control, industrial use, institutional use, and use by public agency vector control districts pursuant to section 2426 of the Health and Safety Code. - Magnesium Phosphide - Metam sodium labeled for the production of agricultural plant commodities - Methamidophos (Monitor) - Methidathion (Supracide) - Methomyl (Lannate), except fly baits containing not more than 1% methomyl - Methyl bromide - 2-methyl-4-chlorophenoxyacetic acid (MCPA), except: (1) liquid formulations packaged in containers of 1 quart or less regardless of percentage of MCPA; (2) liquid formulations that contain 15% or less MCPA packaged in containers of 1 gallon or less; (3) liquid formulations of a product that is to be used without further dilution; (4) dry formulations, packaged in containers of 1 pound or less, regardless of percentage of MCPA; and (5) dry formulations, packaged in containers of 50 pounds or less, of a product that contains less than 10% MCPA and is labeled to be used without further dilution. - Methyl isothiocyanate (MITC) labeled for the production of agricultural plant commodities - Mevinphos (Phosdrin) - Molinate (Ordram) - Oxydemeton-methyl (Metasystox-R) - Paraquat (Gramoxone) - Parathion-methyl - Phorate (Thimet) - Phosphine Gas - Potassium N-methyldithiocarbamate (metam-potassium), when labeled for the production of agricultural plant commodities. Propanil (3,4-dichloropropionanilide) - Sodium cyanide - Sodium fluoroacetate (compound 1080) - Sodium tetrathiocarbonate (Enzone) - Strychnine, except rodenticides when labeled only for one or more of the following uses: home use, structural pest control, industrial use, institutional use, and use by public agency vector control districts pursuant to section 2426 of the Health and Safety Code. - Sulfotepp - Sulfuryl Fluoride - Thiobencarb (Bolero) - Tribufos (DEF, Folex) - Tributyltin, organotin, or a tri-organotin compound formulated as an antifouling paint, coating or compound and labeled for the control of fouling organisms in an aquatic environment. - Zinc phosphide, except when labeled only for one or more of the following uses: home use, structural pest control, industrial use, institutional use, and use by public agency vector control districts pursuant to section 2426 of the Health and Safety Code.



Restricted Materials Exemptions

- Spray adjuvants
- Petroleum oils
- Sulfur
- Lime
- Lime-Sulfur
- Sodium Polysulfide
- Certain Copper compounds
 - (1) Bordeaux mixture - (2) Copper acetate - (3) Copper carbonate - (4) Copper hydroxide - (5) Copper-lime mixtures - (6) Copper linoleate - (7) Copper oleate - (8) Copper oxychloride - (9) Copper sulfate (basic, monohydrate, and pentahydrate) - (10) Copper oxide - (11) Copper calcium oxychloride
- *Bacillus Thuringiensis* Berliner



Restricted Materials Possession and Use Limitations

- Certified applicator shall be aware of conditions, and shall ensure proper application
- Certified applicators include persons possessing a valid:
 - qualified applicator certificate (QAC)
 - qualified applicator license (QAL)
 - private applicator certificate (PAC)
 - pest control aircraft pilot certificate- journeyman, not apprentice pilot.
- A pest control adviser (PCA) is not a certified applicator.
- Nor is a pest control business license and pest control dealer license is not an applicator certification
- Only under restricted materials permit issued by the Ag commissioner or director
- Person named on the permit can possess restricted material listed in permit after expiration of permit, but must ensure proper pesticide storage.



Restricted Materials Permits

- § 6416. Groundwater Protection Restrictions.
- A permit is required for the possession or use of a pesticide containing a chemical listed in section 6800(a) when the pesticide is:
 - (1) applied in an agricultural, outdoor institutional, or outdoor industrial use within a runoff ground water protection area or in a leaching ground water protection area, or
 - (2) restricted for purposes other than ground water protection.
- A permit is not required for the possession or use of a pesticide containing a chemical listed in section 6800(a) when the pesticide is used in a pest eradication program approved by the Department, unless the pesticide is also restricted for purposes other than groundwater protection.
- Notwithstanding the provisions of this article and article 4, the chemicals listed in section 6800(a) may be applied for research or experimental purposes pursuant to a valid research authorization. The applicant must provide the location of the research or experimental site with the research authorization request. The exemptions found in section 6268 do not apply when a person wishes to use these chemicals for research or experimental purposes.



Restricted Materials Permit System

■ Permit Requirements

- Shall be issued in the name of the operator of the property. The permit shall be signed by the property operator, or when allowed by county agricultural commissioner, the permittee authorized representative or licensed pest control adviser
- Permit for non-ag use may be issued in the name of the operator of the property or a pest control business. It shall be signed by the property operator or when allowed by the commissioner, the operator's authorized representative.
- The permittee shall be responsible for compliance with all permit conditions and regulations



Restricted Materials

Permit Duration

- Each permit for ag use shall be site and time specific
- Any permit may be issued for one year
- Permits for perennial ag plantings, non-production ag sites, or non-ag sites may be issued for up to 3 years



Restricted Materials Alternatives

- Each Licensed PCA and Grower
 - Shall consider and adopt if feasible, any reasonable, effective and practical mitigation measure to lessen adverse impact on the environment.
 - Shall have available a copy of the written recommendation covering each agricultural use that requires a permit.



Restricted Materials

Ag-permit Applications

- Applications shall include the following:
 - Permittee name and business address and signature. When permitted by commissioner, can be signed by authorized agent or licensed pest control adviser
 - agents signature
 - Location of property to be treated
 - Identification of all areas which can be adversely impacted
 - Identification of commodity, crop, or site to be treated with anticipated pest problems (pest and crop specific)
 - Restricted Materials to be used
 - Approximate date of intended application
 - Expected method of application
 - Name of business or applicator, address and license number



Restricted Materials Non-Ag permit Applications

- Shall include the following:
 - Name and address of operator of property
 - Signature of either permittee or representative
 - Restricted materials to be used
 - Pest to be controlled
 - Application method
 - Criteria for determining the need for application
 - Name, address and license or certificate number of the certified applicator supervising the application



Restricted Materials Permit & NOI

- Permit Evaluation
 - Environmental impact, Local conditions, Limitations on use of pesticides, Requirements for notice prior to use, Evaluate available pest management guides.
- Notice of intent
 - All information received 24 hours prior to application by the operator.
- Permit monitoring
 - Statistal monitoring which requires more frequent monitoring of individuals who have a record of non-compliance to regulations.
- Permit review
 - Registration does not mean a “right” to use the pesticide.
 - Directors review is limited to the permit involved.



Notice of Intent (NOI)

- When a notice of intent is required by the commissioner, it shall provide the following information concerning the proposed application. If the information required by this paragraph has been provided on the permit it may be referenced on the notice of intent.
 - (1) Permit number;
 - (2) Name and address of permittee and applicator;
 - (3) Location of areas to be treated and name of farm operator;
 - (4) Crop or commodity, or if there is no crop or commodity the site to be treated;
 - (5) Approximate acres or other units;
 - (6) Method of application;
 - (7) Pesticide(s);
 - (8) Dilution, volume per acre or other units, and dosage;
 - (9) Pest(s) to be controlled;
 - (10) Date intended application is to commence; and
 - (11) Location and identity of areas specified in Section 6428 which have changed since the permit was issued and which may be adversely impacted. A map or aerial photograph may be used for designating such locations.

- The commissioner shall be notified at least 24 hours prior to commencing the use of a pesticide requiring a permit. The notice of intent to apply a pesticide may be submitted to the commissioner by the operator of the property to be treated, by such operator's authorized representative, or by the licensed pest control operator who is to apply the pesticide. The commissioner may allow less than 24 hours notice if he determines that because of the nature of the commodity or pest problem effective pest control cannot be attained or when 24 hours are not necessary to adequately evaluate the intended application.



Generalized Effects

- § 6444. Generalized Effects.

If at any time pesticide residues, symptoms, or health hazards appear generally throughout any area, the director or commissioner may cause a field inspection to be made. If it appears that substantial loss, damage or injury is likely to result from continued application of a specific pesticide within such area, the director or commissioner may cause all permits for applications of that pesticide within such area canceled and specify that no additional permits shall be issued therein.



Fumigation and Workers

- § 6445. Fumigation-Handling Activities.
 - For purposes of sections 6447-6447.3, and 6784(b), fumigation-handling activities are limited to employees involved in assisting with covering the tarpaulin at the end of the rows (shoveling); assisting in the overall operation, ensuring proper tarpaulin placement and condition, and changing cylinders (copiloting); operating tractor equipment (driving); supervising the fumigation operation; operating chemigation equipment and assisting in chemigation application and leak repair (chemigating); tarpaulin cutting; tarpaulin or chemigation equipment removal prior to the expiration of the restricted entry interval; and other handling activities specified by the label.



Field Fumigation

- § 6445.5. Field Fumigation Licensing Requirements.
 - Effective January 1, 2009, when a field fumigation application is made by a licensed pest control business, the business must have a person holding a qualified applicator license or certificate with the field fumigation pest control subcategory supervising the work.



Field Fumigation Requirements

- § 6447. Methyl Bromide-Field Fumigation - General Requirements.
 - The provisions of this section and sections 6447.1, 6447.2, 6447.3, and 6784(b) pertain to field soil fumigation using methyl bromide. For purposes of these sections, field soil fumigation does not apply to golf courses, replant of individual vine or tree-sites (tree holes) less than one contiguous acre, raised-tarpaulin nursery fumigations of less than one acre, potting soil, and greenhouses and other similar structures.
 - In addition to the requirements of section 6428, the operator of the property to be treated shall submit a proposed work site plan to the commissioner for evaluation at least seven days prior to submitting a notice of intent. The proposed work site plan shall include, but is not limited to, method of application to be used, acreage and identification of each application block to be treated, application rate to be used, description of the notification procedure to property operators pursuant to section 6447.1(b), description of any activities within the buffer zone(s) as specified in section 6447.2(e) and (f), description of any workday/work hour limitations and respiratory protection as specified in sections 6784(b)(2)(C) and (b)(3), and if applicable, description of the tarpaulin repair response plan, and tarpaulin removal. The commissioner shall retain the proposed worksite plan for one year after the expiration of the permit.
 - The commissioner, pursuant to section 6432, shall evaluate local conditions and the proposed work site plan.
 - The commissioner shall include at least the following when conditioning a permit: the buffer zone requirements, work-hour restrictions, notification requirements, any other restrictions to address local conditions, and if applicable, description of the tarpaulin repair response plan and tarpaulin removal. The commissioner shall complete the evaluation and complete conditioning the permit prior to the submission of the notice of intent.



Field Fumigation Requirements...

- § 6447. Methyl Bromide-Field Fumigation - General Requirements continued...
 - An application block shall not exceed 40 acres unless approved by the Director.
 - Except for experimental research purposes pursuant to a valid research authorization issued according to section 6260 or a reduced volatile organic compound emission fumigation method approved pursuant to section 6452, tarpaulins shall have a permeability factor of no less than 5 and no more than 8 milliliters methyl bromide per hour, per square meter, per 1,000 parts per million of methyl bromide under the tarpaulin at 30 degrees Celsius, and be approved by the Department. A list of approved tarpaulins is available from the Department.
 - Tarpaulins shall be buried under at least four inches of firmly packed soil at the end of the rows. The tarpaulins shall remain in place for the time specified in section 6447.2.
 - Fumigation equipment shall be operated to eliminate pesticide drip by clearing the fumigant from the injection device before it is lifted or removed from the soil.
 - The Department, in coordination with county agricultural commissioners, shall ensure that ambient air concentrations of methyl bromide do not exceed an average daily non-occupational exposure of nine parts per billion in a calendar month.



Pesticide Use Reporting

- § 6626. Pesticide Use Reports for Production Agriculture.
 - The operator of the property which is producing an agricultural commodity shall report the use of pesticides applied to the crop, commodity, or site to the commissioner of the county in which the pest control was performed. This report shall be hand-delivered or mailed, by the 10th day of the month following the month in which the work was performed. This report is not required if the pesticide use is reported to the commissioner by an agricultural pest control business as specified in subsection (b), however, the operator of the property treated shall retain a copy of the business' report by site for two years.
 - An agricultural pest control business shall report the use of pesticides applied by it for the production of an agricultural commodity to the commissioner of the county in which the pest control was performed, by hand-delivery or by mail, within seven days of completion of the pesticide application. A copy of the report shall be sent by the business to the operator of the property where the pest control was done, within 30 days of completion of the pesticide application.
 - Except as provided in (d), each report of pesticide use pursuant to this section shall be on a Department form or in a format approved by the director. Acceptable Department forms include form 38-017 for an operator of the property to report pursuant to subsection (a), and 39-025 for an agricultural pest control business to report pursuant to subsection (b). The information to be reported shall include the information specified in section 6624 and the name and address of the agricultural pest control business which made the application, if such a business made the application.
 - A copy of the use report required by (a) or (b) for the application of a field soil fumigant in the Sacramento Metro, San Joaquin Valley, South Coast, Southeast Desert, and Ventura ozone nonattainment areas must be submitted to the Department with the field fumigation method as specified in section 6624(f) appended to the report. The report must be delivered to the Department according to the date specified in (a) or (b), whichever is applicable. This subsection shall remain in effect only until December 31, 2008.
 - Effective January 1, 2009, a use report required by (a) or (b) for the application of a field soil fumigants in the Sacramento Metro, San Joaquin Valley, South Coast, Southeast Desert, and Ventura ozone nonattainment areas shall include the information specified in 6624(f) in addition to that required by this section.
 - If the report is mailed, the postmark shall be the date of delivery.
 - If the county in which work was performed has no commissioner, the report shall be made to the director.



Licensing Information

- Refer to California Code of Regulations for some licensing information...
- California Code of Regulations
 - Title 3. Food and Agriculture
 - Division 6. Pesticides and Pest Control Operations
 - Chapter 3. Pest Control Operations
 - Subchapter 1. Licensing
 - Articles 1 through 7
- These licensing types are defined and are given.
- Fees for new and renewed licenses are all found on the applications.



Licensing & Licensing Requirements

■ License duration

- The director shall issue licenses and certificates for 2 years
- If your last name begins with A through L, licenses expire Dec. 31 even years.
- If your last name begins with M through Z, licenses expire Dec. 31 odd years.

■ Applications

- Applications for a license or certificate shall be on a proper form, and accompanied by the required fee. The application fee shall allow 12 months to become licensed or certified. Forms can be found at:
- <http://www.cdpr.ca.gov/docs/license/lcforms.htm>



Licensing & Licensing Requirements

- Examinations
 - All applicants must pass the laws and regulations test
 - A passing score of 70% or higher is required
 - Applicants can take up to 4 exams at each time and place
- Fees – a current list of fees can be found at the following link... <http://www.cdpr.ca.gov/docs/license/fees.pdf>
- Notification of change
 - DPR must be immediately notified when there is a change of name, address, business, or any other change in the application



Licensing & Licensing Requirements

- Continuing Education - CE hours shall be earned during the valid period of the certificate or license, by December 31; OR person cannot renew. Must apply as new applicant.
 - QAC and QAL need 20 hours, 4 of which must be laws and regs every 2
 - QAC and QAL in maintenance gardening need 8 hours 2 in laws and regs
 - PCA need a total of 40 CE hours 4 of which must be laws and regs
- Records of Continuing Education
 - Instructor or sponsoring organization shall maintain records of those who successfully completed the continuing education for 3 years
 - Licensees shall maintain their records for 3 years
 - Records shall include
 - Name
 - License number
 - Title and location of course and the ID code
 - Name of instructor, Sponsoring organization, hours completed



Licensing Types

- QAC - Qualified Applicator Certificate
- QAL - Qualified Applicator License
- PAC - Pesticide Applicator Certificate
- PCB - Pest Control Business License
- PCA - Pest Control Advisor License
- PCD – Pest Control Dealers License
- PCAPC - Pest Control Aircraft Pilot Certificate, Journeyman and Apprentice



Pest Control Categories

- § 6530. Categories and Examinations.
 - Applicants may qualify by examination to work in one or more of the following categories:
 - (a) Residential, Industrial and Institutional Pest Control
 - (b) Landscape Maintenance Pest Control
 - (c) Right of Way Pest Control
 - (d) Agricultural Pest Control (plant)
 - (e) Forest Pest Control
 - (f) Aquatic Pest Control
 - (g) Regulatory Pest Control
 - (h) Seed Treatment
 - (i) Agricultural Pest Control (animal)
 - (j) Demonstration and Research
 - (k) Health Related Pest Control



Fumigation License Requirements

■ § 6536. Field Fumigation Licensing Requirements.

- A person who performs or supervises field fumigation applications pursuant to section 6445.5 must hold a qualified applicator license or certificate in the subcategory of field fumigation pest control.
- Notwithstanding section 6530, examination requirements and fees required pursuant to section 6502 may be waived and a person may be issued a qualified applicator license or certificate in the field fumigation pest control (subcategory O) within 12 months from the effective date of this section, if the applicant meets the following criteria:
 - Possesses a valid qualified applicator license or certificate in Agricultural Pest Control (category D), Regulatory Pest Control (category G), or Demonstration and Research (category J);
 - Has at least 24 months of technical experience conducting field fumigation activities for a pest control business licensed by the Director from January 1, 2006 to December 31, 2008; and
 - Has a statement signed by the pest control business under which the applicant is operating verifying this technical experience.



Field Fumigation Use Requirements

- To read and understand more fully all the fumigation requirements & use requirements go to:
- California Code of Regulations
 - Title 3: Food and Agriculture
 - Division 6: Pesticides and Pest Control Operations
 - Chapter 2: Pesticides
 - Subchapter 4: Restricted Materials
 - Article 4: Field Fumigation Use Requirements
 - § 6445 through 6452, and...
 - Article 5: Use Requirements
 - § 6453 through 6489, it is also important to read...
 - Subchapter 5: Produce Carrying Pesticide Residue
 - § 6490 through 6492



Work Requirements

Pest Control Operation

- General Standards of Care
 - Use only equipment in good repair and safe to operate
 - Perform all pest control in a careful manner
 - Use methods to ensure proper applications
 - Climatic conditions must be suitable for proper application
 - Use precautions to avoid environmental contamination
 - ALWAYS follow the requirements found in product labeling, laws and regulations, and permit conditions, deferring to the most strict requirement if there are conflicting requirements,



Work Requirements

Pest Control Operation

- Availability of labeling - A copy of the label shall be at each use site
- Accurate measurement - Use of calibrated tools shall be used
- Uniform mixture - Shall be maintained in application and service rigs
- Equipment cleaning - All equipment shall be thoroughly cleaned
- Back Flow prevention - any equipment that holds pesticides shall be equipped with a back flow prevention device
- Age - No person under 18 can mix or load if any of the following are needed: Air-supplied respiratory protection, closed system, or full body chemical resistant protective clothing
- Protection of persons, animals, and property
- Consent to apply on any persons property
- Notice of application 24 hours prior to treatment
- Pesticide application completion notice within 24 hours of completion



Work Requirements

Pest Control Operation

- Pesticide Use Records - will be maintained by...
 - Any person who uses a pesticide for an AG use
 - Any person who uses a pesticide listed in section 6400
 - Any person engaged for hire in pest control
 - Any person who uses pesticides in industrial post-harvest commodities
 - Any person who uses a pesticide in any outdoor institutional use
- Pesticide records will include:
 - Date, Name of operator, Location, Commodity, Total acreage, Pesticide name and Registration number



Work Requirements

Protection of Bees

- Pesticides that are highly toxic to Bees are in group 1, moderately toxic are in group 2
- Bee keepers who want notification of applications shall notify the Ag commissioner, and give a 2 hour window in which he can be notified.
Requests expire on December 31 of each year
- Bee keepers must be notified 48 hours in advance of application



Work Requirements

Storage, Transportation, Disposal

- Containers that hold or have held pesticides must be stored so as to not present any hazards to persons, animals, food, feed, crops or property.
- Delivery must be made to a lockable storage area, or where a person can control access to the pesticides.
- Posting of signs must be visible at a distance of 25 feet from every possible direction of approach.
- Signs must include: DANGER, POISON STORAGE AREA, ALL UNAUTHORIZED PERSONS KEEP OUT, KEEP DOORS LOCKED WHEN NOT IN USE.
- All containers must have the registrants label with name and address of responsible party visible.
- NO container that is used for food or drink can be used for pesticides



Work Requirements

Storage, Transportation, Disposal

- No pesticides shall be transported in the same compartment with persons, food, or feed
- All containers will be secured during transportation
- Rinse and drain all containers that have held less than 28 gallons of liquid pesticide.
- Triple rinse all containers with approximately half the container volume of water or until the the solution appears clear.
- Invert the emptied container over a nozzle located in the mix tank which can rinse all inner surfaces of the container.
- A minimum of 15 PSI shall be used for rinsing.



Worker Safety

Scope & Purpose

- Purpose is to protect employees who mix, load, apply, store , transport or otherwise handle pesticides. basically any person exposed to residues after application.
- The Employer
 - Is responsible for knowing about safe use requirements.
 - Shall inform employees in a language they understand about the pesticide. being used, pesticide safety hazards, PPE to use, work procedures .
 - Shall supervise employees to ensure safe work practices.
 - Shall provide a safe work place and require safe work practices.
 - Shall ensure employees handle pesticides according to the laws.
- The Employee
 - SHALL utilize the PPE provided and work in a manner in accordance with the laws.



Worker Safety

Hazard Communication

- Records must be at a central location accessible to all employees. forms include:
 - Pesticide use records
 - Pesticide safety information series leaflets
 - MSDS, Material Safety Data Sheets
 - Application methods, specific information for handlers



Worker Safety Handler Training

- Employers shall ensure annual training which will include:
 - Format and meaning of information
 - Hazards of pesticides including acute and chronic effects
 - Routes by which pesticides can enter the body
 - Signs and symptoms of overexposure
 - Emergency First Aid, and medical care
 - Routine and emergency decontamination procedures
 - Sanitation, and appropriate use of PPE
 - Prevention, recognition, and First Aid of heat-related illnesses
 - Safety requirements and procedures
 - Environmental concerns such as drift, runoff, wildlife
 - Warnings about taking pesticides and pesticide containers home
 - Medical supervision of Organophosphates and Carbamates (30 days)
 - Employee rights and Working alone (category 1) only with radio contact



Worker Safety

Employer Provided Protection

- Change area - will be provided for persons who handle category 1 or 2 pesticides. A pesticide free environment
- Handler decontamination facilities - clean water, soap, towels, coveralls, eye flush, and shower are to be provided
- In-field decontamination kit includes: soap, towels, extra coveralls, clean water for hands, 1 pint of water for emergency eye flushing
- Decontamination site shall be within 100 feet of the mixing/loading site when they are handling pesticides with the signal word “DANGER” or “WARNING” on the label



Worker Safety

Personal Protective Equipment

- Personal Protective Equipment includes:
 - Coveralls that are chemical resistant
 - Gloves made of rubber or neoprene are recommended
 - Eye protection or full face guards
 - Respirators that meet NIOSH standards
 - Boots or shoes that are chemical resistant
 - Hats with a wide brim and that are chemical resistant
 - All equipment must be kept clean and in good working order



Worker Safety

Field Worker

- Most all regulations apply to field workers as they do to handlers.
- No employer shall direct or allow any person, other than the applicator to enter or remain in the field during an application.
- Field workers must be trained at minimum every 5 years regarding each pesticide that may be sprayed at their work area.
- Restricted entry interval or REI is the period of time between application and workers entering the field.



Worker Safety

Fumigation

- General Fumigation Safe-Use Requirements
 - Approved respiratory protective equipment must be available
 - A fumigation safety program shall be developed
 - Fumigation in enclosed spaces - vaults, chambers, greenhouses, vans, boxcars, ships, planes, vehicles, tarpaulin-covered structures at all times in these circumstances 2 trained persons must be present.
 - Employees shall not be allowed in fumigated areas except to determine fumigant concentration.
 - The fumigant shall not be released into an occupied work area.
 - Proper aeration will be done before employees return to the area.



Definition of Terms

- The following terms will help you to understand more completely the states laws and Regulations. Also most of these terms will be used repetitively in our following classes. These definitions came from the California Code of Regulations, Title 3, Division 6, and Section 6000.



Agricultural Commodity

- An unprocessed product of farms, ranches, nurseries and forests (except livestock, poultry and fish).



Application Block

- A field or portion of a field treated in a 24-hour period that typically is identified by visible indicators, maps, or other tangible means.



Applied to the Soil

- soil fumigant
- soil applied
- soil treatment product
- can be used as soil drench
- inject into soil
- incorporate in top (x) inches of soil; pre-plant incorporation
- use on soil for soil-borne diseases
- surface application, band treatment, surface blend
- side dressing both/ one side of row and cultivate into soil
- should be mixed uniformly into top (x) inches of soil
- pre-emergent to the weed
- broadcast to the soil
- apply in seed furrow



Assure or Ensure

- To make sure of something
- To take all reasonable measures so that the behavior, activity, or event in question occurs.



Branch Location

- Any location, other than the principal place of business, operated by a pesticide dealer or agriculture pest control operator to carry out licensed activities in California.



Buffer Zone

- An area that surrounds a pesticide application block in which certain activities are restricted for a specified period of time to protect human health and safety from existing or potential adverse effects associated with a pesticide application.



Carbamates

- Esters on N-methyl carbamic acid which inhibit cholinesterase.



Certified Commercial Applicator

- Any person who holds a valid qualified license or certificate by the director.



Certified Private Applicator

- Any person holding a valid PAC license, issued by the county ag commissioner.



Chemical Resistant

- A material that allows no measurable movement of the pesticide through it during use. Often labels require that PPE is made of this material.



Chemigation

- The application of pesticides through irrigation systems.



Closed System

- A procedure for removing a pesticide from its original container, rinsing the emptied container and transferring the pesticide product, mixtures and dilutions and rinse solutions through connecting hoses that prevent exposure of any person to the pesticide or rinse solution.



Conflict with Labeling

- Any deviation from label instructions concerning storage, handling or use except;
- A decrease in dosage rate per unit treated
- A decrease in the concentration of the mixture applied
- Application at a frequency less than specified
- Mixing with another pesticide or fertilizer unless prohibited
- Use to control a non-target pest, that is not prohibited
- Other examples



Continuous Monitoring

- The measurement of the air concentration of a specific pesticide on an uninterrupted, real time basis by instrumental methods.



Coverall

- A one- or two-piece garment of closely woven fabric or equivalent that covers the entire body, except the head, hands, and feet, and must be provided by the employer as PPE. Coveralls are different from work clothing.



Display

- To make information available to the employee so that he or she may readily see and read the document, during normal business hours, without having to make specific requests of any person.



Early Entry

- Entry into a treated field or other area after the pesticide application is complete, but before the restricted entry interval or other restrictions on entry for that pesticide have expired.



Employee

- Any person who, for any kind of compensation, performs work, services, or activities.



Employer

- Any person who exercises primary direction and control over the work, services, and activities of an employee.



Enclosed Cab

- A chemical resistant barrier that completely surrounds the occupant(s) of the cab and meets the those portions of the requirements that pertain to dermal protection.
- Enclosed cab acceptable for respiratory protection incorporates a dust/mist filtering and/or a vapor or gas removing air purification system.



Feasible

- Capable of being accomplished in a successful manner, within a reasonable period of time, taking into account economic, environmental, social, and technological factors.
- Alternatives are other chemical or non-chemical procedures which can reasonably accomplish the same pest control function.



Feasible Mitigation Measure

- A condition attached to the approval of an activity, which, if implemented, would substantially reduce any adverse impact, taking into account economic, environmental, social, and technological factors and timeliness of control.



Field

- Any area (including a greenhouse) upon which one or more agricultural plant commodities (including forest and nursery products) are grown for commercial or research production. Field does not include pastures harvested by animals.



Fumiscope

- A monitoring device that measures the concentration of methyl bromide inside a structure in ounces per 1000 cubic feet.



Ground-Based Application Equipment

- Hand sprayers
- Backpack sprayers
- Air-blast sprayers
- Field soil injection equipment
- Dusters
- Drills
- Granular applicators or Ground rig sprayers



Groundwater Protection Advisory

- A written statement containing advice for the use of a pesticide product containing a chemical listed in section 6800(a) in its respective PMZ



Hand Labor

- Any cultural activity, performed by hand or with hand tools, that cause substantial contact with surfaces that may have pesticide residues.



Handle

- The processes of mixing, loading, transferring, applying (including chemigation), or assisting with the application (including flagging) of pesticides.



Home Use

- To use in a household or its immediate environment.



Industrial Use

- To use for or in a manufacturing, mining, or chemical process; or use in the operation of factories, processing plants, and similar sites.



Institutional Use

- To use within the confines of, or on property necessary for the operation of, buildings such as hospitals, schools, libraries, auditoriums, and office complexes.



Medical Supervision

- Occupational health guidance and necessary associated health evaluations by a licensed physician to practice medicine.
- Especially important when working with Organophosphates, and Carbamates.



Notice of Intent

- Oral or written notification to the commissioner, as specified by the commissioner, prior to the use of a pesticide pursuant to permit.



Operator of Property

- A person who owns the property and/or is legally entitled to possess or use through terms of a lease, rental contract, trust, or other management arrangements.



Organophosphates

- Organophosphorus esters which inhibit cholinesterase.



Personal Protective Equipment

- Apparel and devices worn to minimize human body contact with pesticides or residues that must be provided by the employer and are separate from work clothing.
- PPE



Pest Management Guides

- Manuals prepared by the department or the UC system that include pest management information on specific crops and which have been adopted as a standard by the director.



Pesticide

- Any substance or mixture that is a pesticide
- Any substance intended for pest poisoning



Pesticide Exposure Study

- A data gathering project that includes: Human participants to be directly exposed, and monitored for a specific objective.
- Does not include data collected for the purpose of satisfying health standards, unscheduled monitoring for sources of exposure or to determine workplace exposure.



Pesticide Safety Information Series

- A series of leaflets that summarize health and safety aspects of various pesticides and groups of pesticides.



Restricted Entry Interval

- The period of time after a field is treated with a pesticide during which restrictions on entry are in effect to protect persons from potential exposure to hazardous levels of residues. An REI may be found on the pesticide product label or registration.



Regularly Handle

- The handling of pesticides during any part of the day for more than six calendar days in any 30 consecutive day qualifying period.



Site Specific

- A pesticide permit that identifies the specific area to be treated, the size of that area, and the commodity or site to be treated.



Substantial Drift

- Is when the quantity of pesticide outside the area treated is greater than that which would have resulted had the applicator used due care.



Time Specific

- A pesticide permit that specifies the date intended application is to commence or permit with a notice of intent requirement. The pesticide use may commence within 4 days following such date if delays are caused by uncontrollable conditions such as adverse weather or unavailability of equipment.



Treated Field

- A field that has been treated with a pesticide or had a restricted entry interval in effect within the last 30 days.



Use

- Pre-application activities
 - Arranging for the application
 - mixing or loading
 - preparations
- Application of the pesticide
- Post-application activities
 - Control of treated area
 - clean up, transportation, storage, and disposal
 - Management



THANK YOU!