

Ensuring Safe Pesticide Use

The goal of California’s pesticide regulatory program is to protect people and the environment from harm that could be caused by unsafe pesticide use.

Pesticide use is controlled by federal, state and local government agencies. The U.S. Environmental Protection Agency (U.S. EPA) sets minimum pesticide use standards and delegates pesticide enforcement regulatory authority to the states. California’s pesticide laws and regulations are typically more rigorous and carried out by regulatory programs wider in scope than any other state. Examples include:

- Scientific evaluation of products before they can be sold or used.
- Examination and licensing of individuals and businesses that recommend, perform or supervise pest control.
- Surveillance of products sold in the marketplace to ensure they are registered and meet state health, environmental and safety standards.
- Site-specific permitting for the use of certain hazardous pesticides.
- Full reporting of agricultural pesticide use.
- Sampling and residue testing of fresh produce.
- Strict laws, regulations and programs to protect workers and the environment, including field inspections and monitoring of air, soil and water.
- Grants and outreach promoting greater use of pest management strategies that lower risks associated with pesticides and reduce pesticide use where possible.
- Local enforcement agents in all 58 counties who conduct safety inspections and investigations.

Several of these programs are discussed elsewhere in this guide. This chapter focuses on use enforcement, licensing and product compliance.

ROLES OF FEDERAL, STATE AND LOCAL AGENCIES IN PESTICIDE USE ENFORCEMENT

In 1947, Congress responded to the increasing use of pesticides by enacting the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

This law governed the registration, sale, possession and use of pesticides. It required that pesticides distributed in interstate commerce be registered with the U.S. Department of Agriculture (USDA). Like earlier laws, FIFRA was more concerned with pesticide product quality and efficacy than with safety. However, the statute declared pesticides “misbranded” if they were harmful to people, animals or vegetation (except weeds) when properly used.

In 1972, amendments to FIFRA enabled U.S. EPA to delegate pesticide enforcement authority to states through cooperative agreements with state pesticide regulatory programs. (A cooperative agreement is a contract between the U.S. government and a state or local government agency when the federal government is to be substantially involved in the activities covered by the cooperative agreement.)



DPR promotes reduced-risk pest management strategies like those taught at this 2016 Integrated Pest Management workshop at a school in Redding.

Roles of U.S. EPA and the States in Regulating Pesticides

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) specifically authorizes state regulation of the sale and use of federally registered pesticides as long as state regulations are at least as restrictive as federal standards. Under FIFRA, for example, states may prohibit the distribution and sale of a federally registered pesticide or restrict pesticide use locally to protect ground water, wildlife or human health. FIFRA prohibits states from imposing state requirements on pesticide labeling or packaging.

Generally, the U.S. Environmental Protection Agency (U.S. EPA) has authority to enforce FIFRA requirements. However, FIFRA acknowledges that states have a pivotal role in regulating pesticides in their own jurisdictions, provided that their programs are at least as strict as those required under federal law. FIFRA Section 24(a) reads, “A State may regulate the sale or use of any Federally-registered pesticide or device in the state, but only if and to the extent the regulation does not permit any sale or use prohibited by this Act.”

States have primary enforcement responsibility for pesticide use/misuse violations under Sections 26 and 27 of FIFRA. FIFRA Section 26 gives states that U.S. EPA has determined have adequate enforcement procedures, laws and regulations, primary authority for enforcing FIFRA provisions related to pesticide use, including inspection authority. U.S. EPA is authorized by FIFRA Section 27 to rescind a state’s primary enforcement responsibility if a state is not adequately carrying out its duties.

FIFRA Section 11 authorizes U.S. EPA to form cooperative agreements with states, giving them the responsibility for training, inspecting and certifying applicators of restricted-use pesticides. States also may initially review and give preliminary approval to applications for emergency exemptions from registration and special local needs registrations, (although under some conditions FIFRA allows U.S. EPA later to deny state-approved applications).

The role of the states in regulating the use of pesticides is a result of lobbying by the states, which have argued successfully that control at the state level is more knowledgeable, precise and reliable. The federal role, by design, is not intended to substitute for the authority of any state to pursue a regulatory approach best suited to local conditions. A U.S. Senate staff analysis in 1996 observed:

In general, Federal authority has not increased at the expense of State authority. Even when it has, existing statutes have allowed States to set more stringent standards than Federal standards, if so desired and needed. We should permit States to set separate safety standards. States can set these standards more quickly than the U.S. EPA in response to an emergency. They can also set a standard that provides more comprehensive protection than a federal standard. Some states, for example, have formulated standards that are more stringent than federal standards and are better designed to protect individual groups of citizens.

Preemption: Federal, State and Local Jurisdiction

Preemption refers to laws at one level of government taking precedence over laws of a lower level. As such, no entity at the lower level can pass a law that allows action that would violate the higher-level law.

Federal laws take precedence over state and local law, and state law can take precedence over local law. Once Congress has passed legislation, any state or local law that conflicts with federal law is invalid. Even if there is not a direct conflict, if the federal law expressly provides that it controls the entire field regulated, or if that intent can be implied from the comprehensive nature of the regulation, federal law has control over any state or local law regulating the same field. In the field of pesticides, federal law (the Federal Insecticide, Fungicide, and Rodenticide Act, FIFRA) clearly states that only the federal government has authority over pesticide labeling. In other words, no state or local government can dictate what is on a pesticide product label. However, a state can refuse to allow registration of a product and therefore the possession, sale and use of any pesticide not meeting its own health or safety standards. States can also adopt regulations more protective of health and the environment than on a product label.

The California Constitution also allows the state to preempt local jurisdictions. The Constitution states that city councils or boards of supervisors may pass laws (called ordinances at the local level) provided they do not conflict with state law. However, California law (Chapter 1386, Statutes of 1984, FAC Section 11501.1) states that no local government “may prohibit or in any way attempt to regulate any matter relating to the registration, sale, transportation, or use of pesticides, and any of these [local] ordinances, laws, or regulations are void and of no force or effect.”

The 1984 legislation was in response to a State Supreme Court ruling that same year in *The People v. County of Mendocino*. In that case, the State Attorney General had sued the county, arguing that state law preempted a 1979 initiative approved by Mendocino County voters to ban the aerial application of phenoxy herbicides in the county. The herbicides were used by a forest products company to inhibit hardwood growth in favor of conifer growth. The initiative followed a 1977 incident in which an aerial herbicide application drifted nearly three miles onto school buses.

A lower court ruled in favor of the state, finding that California law preempted county regulation of pesticide use. However, in 1984 the State Supreme Court disagreed, ruling that “the Legislature has not preempted local regulation of

pesticide use.” The court ruled that Mendocino’s “initiative ordinance neither duplicates nor contradicts any statute,” and that voters in any California county could ban the use of pesticides in that county, even if state and federal law allowed such use.

The court stated, “The legislative history (of FIFRA) does not demonstrate a clear Congressional intention to preempt traditional local police powers to regulate the use of pesticides or to preempt state power to distribute its regulatory authority between itself and its political subdivisions.”

In response, the Legislature passed a bill stating it is “the intent of the Legislature to overturn” the Supreme Court ruling, and that “matters relating to (pesticides) are of a statewide interest and concern and are to be administered on a statewide basis by the state unless specific exceptions are made in state legislation for local administration.”

In an unpublished 1986 opinion, the Court of Appeal for the Third Appellate District found FAC Section 11501.1 constitutional and in so doing invalidated a Trinity County local pesticide ordinance.

Local governing bodies may pass ordinances that regulate or restrict pesticide use in their own operations. For example, a city council may pass an ordinance that restricts or bans pesticide use in municipal buildings and in public parks. Similarly, a school district board can decree that certain pesticides cannot be used in schools.

In 1991, in *Wisconsin Public Intervenor v. Ralph Mortier*, the U.S. Supreme Court ruled that, absent state law to the contrary, federal pesticide law does not preempt local regulations dealing with the use of pesticides. The U.S. Supreme Court ruled that FIFRA “leaves the allocation of regulatory authority to the absolute discretion of the states themselves, including the options of ... leaving local regulation of pesticides in the hands of local authorities under existing state laws.” However, the ability of states to preempt local authority was left in place. Because California law clearly forbids local ordinances, the 1991 U.S. Supreme Court decision had no effect in California.

In 1996, legislation (Chapter 361, AB 124) clarified but did not significantly alter the Department of Pesticide Regulation’s preemption authority. The legislation required the department to notify any local agency that proposes an ordinance governing the sale, use or handling of pesticides whenever the department determines state law preempts the ordinance. The bill also required the department to file court action, if necessary, to invalidate the ordinance and prohibit its enforcement.



The Federal Insecticide, Fungicide and Rodenticide Act of 1947 sought to standardize the testing and registration of pesticide products.

Under these agreements, states are authorized to enforce pesticide laws and to develop licensing, certification and training programs for applicators of restricted-use pesticides. U.S. EPA pays certain costs, with states providing a percentage of matching funds.

The 1975 U.S. EPA-California agreement was the nation's first and served as a model for federal agreements with other states.

Each year, the Department of Pesticide Regulation (DPR) identifies state priorities and reviews U.S. EPA's cooperative agreement program to ensure department activities reflect U.S. EPA's national priorities. DPR and U.S. EPA then develop a work plan to carry out their respective pesticide regulatory roles. The state work plan includes:

- Ensuring pesticides sold are legally registered by U.S. EPA and by DPR for use in California.
- Certifying commercial and private pesticide applicators.
- Performing inspections, compliance monitoring and compliance assistance that focus on protecting pesticide applicators and workers in various settings.
- Investigating all priority incidents and illnesses. (*See Chapter 8 for more information on U.S. EPA's priority criteria.*)
- Inspecting pesticide-producing establishments.
- Enforcing the requirements of pesticide product labeling and ensuring safe use.

With a cooperative agreement in place, DPR has primary responsibility for pesticide use enforcement in California. The agreement extends to county agricultural commissioners (CACs) for local enforcement.

Three DPR branches—Enforcement, Worker Health and Safety, and Pest Management and Licensing—work closely with CACs to enforce state pesticide laws and regulations in the field.

The Enforcement Branch provides statewide training of CAC staff, guidance on enforceable standards for pesticide use, technical support, incident investigation support, and oversight and evaluation of CAC enforcement. In addition to staff in Sacramento, the Enforcement Branch has regional offices in Anaheim, Clovis and West Sacramento. The branch's Product Compliance Inspections Unit inspects pesticide products in retail and wholesale outlets, and markets, for compliance with labeling and sales requirements. Inspectors also follow up on product sales complaints and conduct inspections of pesticide manufacturers.

The Worker Health and Safety Branch is responsible for worker and public safety during and after pesticide use.

The Pest Management and Licensing Branch manages licensing and certification of pest control advisors, applicators, aircraft pilots, businesses, and pesticide dealers and brokers.

In California, there are jurisdictional roles at the international border with Mexico. Pesticide use in the border area affects people in both countries. DPR has taken part in several federal and state border projects. One was the Pesticide Emergency Response Plan, a U.S. EPA-funded project that identifies individuals and agencies responsible for emergency response and investigation of pesticide incidents along the border. Another was the U.S./Mexico Pesticide Information Exchange Project, funded by U.S. EPA to cooperatively address common pesticide issues along the entire border.

RESTRICTED MATERIALS AND PERMITTING

Pesticides can be categorized as restricted either by the U.S. EPA or by DPR.

California’s system for placing certain pesticides into restricted-use categories was the outcome of incidents in the late 1940s, when newly introduced herbicides caused drift damage to nontarget crops. This prompted the 1949 passage of laws (Chapters 1294 and 1295¹) requiring the Department of Agriculture (the agency then responsible for pesticide regulation) to adopt regulations governing the use of “injurious materials. . . . Such rules and regulations shall prescribe the time when and the conditions under which such materials may be used.” The statutes also directed that pesticides “shall be used only under a permit of the commissioner. . . . Such permit shall be conditioned upon compliance with the rules and regulations of the director and upon such other conditions as the commissioner may deem necessary to avoid injury.” In response, the department in 1950 adopted regulations setting up the state’s restricted material permit system requiring users of these pesticides to have specified training and a permit from the CAC.

Federally, the 1972 amendments to FIFRA recognized that some chemicals, while too dangerous for general use, could be used safely with training. The legislation gave U.S. EPA the flexibility to regulate pesticides beyond the choice of either registration or cancellation. U.S. EPA places pesticides into either general or restricted categories, with the latter group available only to certified applicators.

The use of both federal restricted-use pesticides (RUPs) and California restricted materials is subject to limits. Federal restrictions on RUPs, requiring use only by certified applicators, are carried out through instructions on pesticide product labels. In California, controls on state-listed restricted materials are carried out through permits issued by CACs and are in addition to any controls on product labels.

The criteria DPR uses to designate a pesticide as a restricted material include hazards to public health, farmworkers, domestic animals, honeybees, the environment, wildlife, or crops other than those being treated. DPR designates a pesticide active ingredient as a restricted material through regulation. This action may be prompted by a review of data sent by registrants, information gained from field studies and incident investigations, or other information.

DPR designed the restricted material permit program to allow further restrictions to protect people and the environment in light of local conditions. It is part of DPR’s regulatory program that supports certification as a functional equivalent to an environmental impact report under the California Environmental Quality Act (*for more on functional equivalency, see Appendix C*).

Before farmers or pest control businesses can buy or use a restricted pesticide (whether federally restricted or California restricted only), they must be certified by DPR. That is, they must have had specified training and been tested in handling and using pesticides. In addition, buying or using a California-restricted pesticide (but not a federal restricted use pesticide, or RUP) requires a restricted materials permit from the CAC.

The CAC must decide if a substantial adverse health or environmental impact will result from the proposed use of a restricted material. CAC staff may conduct pre-application site monitoring if they decide that an on-site evaluation is needed to fully assess risk. If the CAC decides that a substantial risk is likely, the commissioner may deny the permit or may issue it under the condition that applicators follow site-specific use practices (beyond the label and applicable regulations) to



A tractor used to apply metam sodium, a restricted pesticide, photographed during a 2016 demonstration.

¹ *Appendix A lists these and other statutes noted in this chapter and shows the related code section it amended or added. Statutes and related code sections deleted or superseded by later legislation have been omitted.*



California's agricultural commissioners work with DPR in enforcing the state's pesticide laws. Here, commissioners pause for a photo with DPR Director Brian Leahy (front row, second from left) and DPR Agricultural Commissioner Liaison Joe Marade (front row, fourth from left) at the California Agricultural Commissioners and Sealers Association's annual meeting in 2016.

mitigate potential adverse effects.

For many California-restricted materials, DPR develops recommended permit conditions for CACs, based on the department's scientific evaluations of potential health and environmental impacts. DPR's recommended permit conditions reflect the minimum measures necessary to protect people and the environment. The commissioners use DPR's information and their own evaluations of, and experience with, local conditions to develop controls specific to each application site. To preserve the functional equivalency under CEQA of restricted-materials permitting with environmental impact reports, CACs must have flexibility to restrict pesticide use permits based on local conditions at the time of the application. Therefore, the commissioners may follow the DPR's recommended permit conditions or structure their own conditions that are equally as protective or more stringent.

CACs can issue multiyear restricted materials permits to perennial agricultural plantings (such as fruit trees or grapevines), nonproduction agricultural sites and nonagricultural sites. However, the permit holder must immediately notify the CAC of any changes in the information on the permit, for example, a newly built school, home or labor camp nearby.

Because the permits are the functional equivalent of environmental impact reports, they must be site- and time-specific. The site can be clearly described when the permit is issued. However, since permits are issued for 12 or 24 months and applications cannot be scheduled months in advance, time specificity is achieved by the grower filing a notice of intent (NOI) to apply the pesticide. The NOI must be sent to the commissioner at least 24 hours before the scheduled application to provide CAC staff with an opportunity to evaluate the site before or during the application.

The NOI must describe the site to be treated and the pesticides to be applied. It must also contain information on any changes in the environmental setting (for example, construction of homes or schools, changes in types of crops to be planted) since the permit was issued. CACs review NOIs and can disallow the proposed application if conditions warrant or apply extra controls if needed. CACs make pre-application inspections on at least 5 percent of the use sites identified by permits or NOIs to ensure accuracy of information on the permit and to confirm the application can be made safely.

STATE-COUNTY PESTICIDE ENFORCEMENT PARTNERSHIP

California law designates DPR as the agency responsible for delivering an effective statewide pesticide regulatory program. The Legislature has also delegated local pesticide use enforcement to CACs.

The Food and Agricultural Code (Section 2281) outlines these respective responsibilities:

... the commissioner shall be responsible for local administration of the enforcement program. [DPR] shall be responsible for overall statewide enforcement and shall issue instructions and make recommendations to the commissioner. Such instructions and recommendations shall govern the procedure to be followed by the commissioner in the discharge of his duties. [DPR] shall furnish assistance in planning and otherwise developing an adequate county enforcement program, including uniformity, coordination, training, special services, special equipment, and forms, statewide publicity, statewide planning, and emergency assistance. [DPR] shall develop, jointly with the commissioners, county priorities for such enforcement programs and activities.

DPR uses its statewide authority to oversee, evaluate and improve local pesticide use enforcement programs. DPR assists CACs in planning and developing

County Agricultural Commissioners

California law designates the Department of Pesticide Regulation (DPR) as the agency responsible for delivering an effective statewide pesticide regulatory program. The Legislature also delegated local administration of pesticide use enforcement to county agricultural commissioners (CACs), governed by state laws and regulations and DPR's guidance. DPR uses its statewide authority to assist CACs in planning and developing county programs.

County boards of supervisors appoint agricultural commissioners in all the state's 58 counties to direct offices staffed by county employees. All CACs must be licensed by the state. A handful of small counties share commissioners, so there are fewer than 58 CACs in the state. CACs get pesticide enforcement funding from DPR and their own county government. Other CAC funding comes from grants, fees, fines and the California Department of Food and Agriculture (CDFA). CACs enforce state laws and regulations that cover environmental protection, pest prevention, worker and consumer protection, and other special services.

The size and diversity of California agriculture and the state's large population (with many people living near agricultural fields) require a more complex partnership between state and local pesticide regulatory authorities than anywhere in the nation. Many other states have only a relative handful of inspectors, employed by the state's lead pesticide agency to conduct pesticide enforcement. California stands apart with its agricultural commissioners and their combined staffs of approximately 280 inspector-biologists who serve as the field enforcement agents for federal and state pesticide laws and regulations.

CACs inspect the operations and records of growers, nonagricultural applicators (for example, industrial, institutional), agricultural and structural pest control businesses, pest control dealers, agricultural pest control advisers, farm labor contractors and government agencies to ensure compliance with worker protection standards and other pesticide safety requirements. They certify private applicators, issue restricted material permits and operator identification numbers, train field workers, and conduct outreach to the public. Certain pesticide applications, such as aerial applications and soil fumigations with restricted materials, require CACs to provide extra regulatory oversight to reduce potential hazards. In addition, they oversee pesticide use reporting, promote best management practices and monitor applications in the field.

CACs regulate pesticide use to ensure applicators comply with label directions and pesticide laws and regulations. CAC staff conduct inspections to prevent misapplication or drift, and possible contamination of workers, the public and the environment. CAC biologists enforce regulations to protect ground and surface water from pesticide contamination, and protect endangered species and other wildlife. To do this, they may work with other regulatory agencies, such as California Department of Fish and Wildlife and regional water boards and the State Water Resources Control Board.

Among a CAC's most important responsibilities is investigating illnesses and injuries. All reported pesticide-related illnesses and injuries are investigated by the commissioner in the county in which the illness occurred. CAC biologists interview injured parties, other witnesses, and employers if the illness occurred at work. As part of the investigation, a CAC biologist may take a residue sample for laboratory analysis. (*For more information on illness and incident investigation, see Chapter 8.*) If the CAC determines a violation occurred and the law was broken, the commissioner takes a compliance or enforcement action.

In addition to pesticide laws, commissioners also enforce laws administered by CDFA, including those related to pest detection, exclusion and eradication, and quality standards for fruits and vegetables.

Although in most counties they are called agricultural commissioners, CACs have duties that range far beyond the farm gate. For example, CAC biologists check maintenance gardeners to ensure they are licensed to apply pesticides, and that their pesticides are labeled for professional landscaping and applied safely. They also inspect residential structural fumigations for termites and structural pesticide applications by professional applicators.

Since many pesticides are used in nonagricultural settings—sanitizers in municipal water treatment plants, disinfecting chemicals in food service facilities and hospitals—pesticide laws may overlap other areas where workplace safety is involved. Therefore, CACs may also work with the state departments of Industrial Relations and Public Health. They may work with the county's environmental health department on pesticide spills, and with county animal control on complaints about potential misuse of rodenticides. Commissioners also consult with state and federal forestry officials about pesticide use and invasive weeds.



Cactus pads, called nopales, seized from a Southern California produce distributor in 2014 after illegal pesticide residues were discovered.

adequate county programs; evaluates the effectiveness of the local programs; and ensures corrective actions are taken in areas needing improvement. DPR develops enforcement program standards for conducting inspections, issuing restricted materials permits, investigating pesticide-related incidents, interpreting pesticide rules, and implementing the administrative civil penalty system. DPR also conducts technical training courses for CAC inspectors and investigative staff who enforce these laws and regulations.

CACs and their combined staffs of about 280 full-time pesticide enforcement biologists/inspectors enforce state pesticide laws and regulations in agricultural, structural, and nonagricultural use settings in all 58 counties. Their duties include:

- Inspecting the operations and records of growers, pest control businesses, pesticide dealers, and agricultural pest control advisers.
- Managing the restricted materials permit program.
- Registering licensed pest control businesses, pest control aircraft pilots, structural use businesses and agricultural pest control advisers.
- Investigating pesticide incidents and illnesses.
- Taking enforcement action, including levying civil penalties if violations are found.
- Providing training to pesticide users (handlers) and field workers.

(See Page 13 for more information on county agricultural commissioners.)

CACs and DPR provide compliance assistance to the regulated community through outreach and training, including presentations to growers, applicators, government agencies, and trade and industry groups. Compliance assistance and outreach are designed to provide information on regulatory requirements and controls on use, safe handling procedures, and transport and disposal of pesticides.

PESTICIDE ENFORCEMENT AND COMPLIANCE OPTIONS

DPR and CACs have broad authority to enter public and private property for enforcement activities such as audits, inspections, investigations and taking samples for laboratory testing. The law also allows DPR and CACs to discipline violators through various sanctions and to protect the public by prohibiting or stopping hazardous activities.

CAC biologists conduct approximately 15,000 pesticide inspections annually. These inspections lead to most enforcement actions. A smaller portion of enforcement actions are based on investigations of pesticide-related illnesses and incidents, and investigations of other complaints. Enforcement tools available to DPR or CACs include:

- Administrative civil penalties (fines).
- Refusal, revocation or suspension of county registrations or licenses and certificates by CACs.
- Civil and criminal court actions filed by local prosecutors or by DPR through the State Attorney General.
- Cease-and-desist orders, compliance interviews, warning letters and violation notices.
- Orders to seize or hold fresh produce, issued by DPR.
- Crop abatement orders and crop seizures, issued by DPR.
- Orders to prohibit harvest of commodities, issued by DPR or a CAC.

Administrative actions

CACs may take actions to levy fines for violations of pesticide use laws and regulations, for example, illegal applications or drift. CACs can levy a separate penalty for each person injured by illegal pesticide use.

Commissioners may fine up to \$5,000 for each violation of pesticide use laws or regulations.

DPR's administrative authority applies to the illegal sale of unregistered or mislabeled pesticides, and for packing, shipping or selling produce containing illegal pesticide residues. DPR-imposed civil penalties can be as high as \$5,000 for each violation.

DPR can refuse, revoke or suspend the business license of a pest control operator or maintenance gardener to perform pest control, and a pesticide dealer's business license to sell pesticides. Pest control advisers, licensees, certificate holders and others are also subject to these administrative actions.

CACs have the authority to refuse, revoke or suspend the county registration of pest control business operators and maintenance gardeners and that of agricultural pest control advisers. (These registrations are required to do business in a county.) CACs may also suspend the right of a structural pest control licensee to perform work in their county for up to three days for each violation.

Persons found to have violated pesticide laws resulting in injury are also required to repay certain unreimbursed medical expenses of people who seek immediate medical attention from a pesticide incident involving production of an agricultural commodity.

If CACs believe civil penalties are not warranted, in certain instances they have an option of gaining compliance through violation notices, compliance interviews and warning letters. These are generally used to document first-time less serious violations. In addition, they can issue cease-and-desist orders to stop hazardous activities involving the illegal use of pesticides.

Criminal and civil actions

Criminal and civil actions can be taken against licensees, certificate holders, permittees and other pesticide users. These actions can also be taken against pest control advisers, sellers and manufacturers of pesticides. Criminal actions can be filed by a county district attorney, typically at the request of a CAC, or by the State Attorney General at DPR's request. Criminal penalties range from a minimum of \$500 and not more than six months imprisonment to \$50,000 and imprisonment of one year for offenses involving intentional or negligent violations that created a hazard to human health or the environment. Civil complaints can be filed only by the Attorney General. Penalties range from \$1,000 to \$25,000 for each violation. Criminal and civil proceedings are considered instead of agricultural or structural administrative civil penalties for repetitive or intentional violations, or violations that have created a hazard to human health or the environment.

Crop quarantine, crop abatement and crop seizure

DPR may quarantine and hold any lot of produce that contains pesticide residues over the federal allowable levels. In some cases, the owner of the produce has the option of reconditioning the produce to remove the illegal residues. If the illegal residues cannot be removed, the produce cannot be sold. In addition, DPR is authorized to seize lots of produce based on a suspicion they contain illegal pesticide residues. The produce is then laboratory-tested and should illegal residues be present, the seizure is maintained. Should a residue of an unregistered pesticide be found on a crop in the field, DPR can prohibit harvest and, in some cases, order the crop destroyed.



Quarantined ginger disposed of in 2013.



It is of paramount interest to California's agricultural economy that the healthfulness of its products is beyond question.

— 1946 California Department of Agriculture report

IMPROVING ENFORCEMENT

Consistent enforcement response

Consistent statewide enforcement of California's environmental laws is paramount for the protection of people, property and the environment. However, local program administration naturally can result in variable enforcement decisions and responses. In 1994, DPR and CACs finalized guidelines that acknowledged the necessity of a consistent enforcement response policy while maintaining the ability to recognize local conditions in decision making.

Using the enforcement guidelines as a starting point, in 2005 DPR and CACs jointly developed an enforcement response policy which encouraged CACs to use progressive enforcement, taking into account the severity and frequency of violations in deciding penalties.

In 2006, DPR put key elements of the policy into regulations which strengthened the CACs' ability to impose penalties and appropriately increase fines for serious or repeat violations. The regulations also encourage CACs to give district attorneys the opportunity to file civil or criminal prosecutions in serious cases. In 2011, DPR amended the regulations to improve effectiveness and clarity, allowing the counties to better focus enforcement on the most serious cases. The definitions of the violation categories were made clearer, placing all violations of laws and regulations designed to protect people and the environment into a classification requiring a fine in the middle range. When circumstances are more egregious or when health, property or the environment are harmed, the violations are placed in a category requiring a fine in the top range.

Compliance assessment

In 2001, the department completed a five-year project to assess compliance of the agricultural industry with rules governing pesticide handler and field-worker safety. The intent was to measure the effectiveness of the statewide enforcement program and identify needed improvements. Enforcement Branch staff made hundreds of field inspections, observing a wide range of pesticide activities in more than 20 counties reflecting the diversity of California's agriculture and geography. Enforcement Branch staff observed specific aspects of pesticide use in field situations and documented compliance of growers, applicators and other pesticide users.

DPR uses compliance assessment data to evaluate the effectiveness of laws, regulations and label requirements, and to develop measures to improve enforcement. This includes follow-up training of CAC staff to better focus pesticide use and field-worker safety inspections on areas of noncompliance. DPR also conducts outreach to inform industry groups, labor and public training organizations, and licensees about compliance problems.

DPR and CACs use compliance assessment information to identify program strengths and weaknesses, plan focused inspections, design outreach programs, make programmatic and policy changes, and adjust annual work plans. DPR also uses the data to identify statewide trends, target enforcement activities and evaluate county enforcement priorities. In 2003, compliance assessment and training evaluation of CACs were combined into the County Oversight Inspection Program.

In 2007, DPR began consolidating these enforcement standards into a compendium of manuals intended to be the single source of enforcement guidance, available online and updated regularly. They address the pesticide regulatory program, investigative and inspection procedures, laws and regulations, restricted materials and permitting, conducting hearings, and interpreting laws and regulations.

County work plans and evaluations

In 1994, DPR and the commissioners began a program to target local enforcement

on activities that directly protect worker and public health and the environment. Under this program, DPR and each CAC develop a work plan each year to focus enforcement on activities with a history of problems or potential for problems.

In 2004, DPR and CACs developed program guidance identifying three core program priorities: restricted material permitting, compliance monitoring through inspections and investigations, and enforcement response to violations. DPR’s guidance represents a simplified approach in targeting core enforcement program priorities and evaluating the effectiveness of county programs. In turn, county work plans identify state, regional and local compliance problems, and emerging issues.

DPR’s three regional offices help CACs develop work plans that detail each county’s priorities, with clearly stated goals and performance measures balancing U.S. EPA’s national priorities and DPR’s statewide goals with local conditions unique to each county.

DPR and county staff also do joint inspections to help ensure that compliance and enforcement activities are conducted efficiently and effectively throughout the state.

To help focus on CAC work plans, Enforcement Branch staff conduct regular effectiveness evaluations of all CAC offices and staff. These evaluations are required once every three years, or sooner if requested by the CAC or Regional Office. DPR uses inspection reports to document compliance rates and annual reports sent by CACs to document workload and hours, and enforcement actions. DPR staff evaluate major elements of the county’s program, describe successful program aspects and follow up with CACs on needed improvements. The evaluations consider the number, type and quality of inspections; restricted material permit accuracy; quality, thoroughness and timeliness of investigations; appropriateness of enforcement actions and adherence to enforcement guidelines; business registration and license records; and financial reports.

Enforcement databases

In 1997, the department received funding to create a statewide database of compliance and enforcement actions. The goal was to track the compliance history of agricultural pesticide applicators, dealers and advisers, particularly those who work in more than one county. In 1998, DPR expanded the database’s scope beyond the first four license categories to track enforcement and compliance actions in all nine licensing and certification programs.

The project evolved into two Enforcement Branch databases—one to track inspections and the second enforcement actions. The inspection-tracking database collects information on the thousands of inspections conducted yearly by the counties in both agricultural and nonagricultural (including structural) pesticide use settings, and compliance rates with laws and regulations. Information in this database includes the number and type of inspections, the sections of laws and regulations that were the subject of the inspections, and the compliance rates for each item.

The enforcement action tracking system collects information on enforcement actions taken by the counties and includes the sections of laws and regulations violated and the fine amounts assessed. Information in this database includes the person or firm cited, date of violation, code section violated, type of enforcement action taken, pesticide involved, date of action, date case closed, and proposed and final fines. This database is useful in finding repeat violators in a county and in pointing out regional patterns for specific individuals or businesses. Evaluation of data may be used to adjust or change performance goals for both DPR and the counties.

In 2015, DPR and CACs began working on a consolidated inspection and enforcement action database (CalPEATs Project) that will streamline reporting of this information.

To evaluate county performance and help prioritize enforcement goals for each county, in 2008 DPR created an enforcement statistical profile. These annual county



DPR maintains regional offices in West Sacramento, Clovis and Anaheim.



In the early years, a farmer applied pest control materials himself, but now, in order to secure adequate control of pests, he often finds that it is necessary to hire a specialist to apply these materials, particularly when special techniques or equipment are needed.

— California Department of Agriculture special report to the Legislature on pesticide enforcement (1953)

profiles consolidate data from several DPR databases, tracking enforcement programs in 58 counties.

CACs collectively issue about 30,000 restricted materials permits per year. CAC staff also conduct about 7,000 pre-application site inspections, 20,000 agricultural and nonagricultural site inspections, 1,700 investigations, and 4,800 compliance and enforcement actions.

The data is used by DPR and CACs to better target inspections, identify emerging problems and staff training needs, assess effectiveness, plan focused inspections, and pinpoint areas for industry outreach and compliance improvement.

CAC pesticide regulatory workload data are also used to allot DPR funding of local pesticide programs. (See Chapter 13 for more information on state and local funding.)

LICENSING AND CERTIFICATION PROGRAM

Among DPR's legislative mandates is to "ensure that people selling, possessing, storing, handling, applying and recommending the use of pesticides are knowledgeable in their safe use." Licensing of pesticide professionals is designed to ensure they have the knowledge and ability to use pesticides safely and effectively. Many individuals and businesses that sell, consult on or professionally apply pesticides are required to get a license or certificate from DPR's Licensing and Certification Program. In most cases, this licensing process includes a closed-book examination that includes questions on pesticide laws and regulations as well as questions on specific information that is applicable to each license or certificate.

The need for a pesticide license or certificate is determined by the types of pesticides applied and the circumstances under which the pesticides are applied. DPR issues licenses or certificates to:

- People and businesses that apply pesticides.
- Pesticide dealers and brokers.
- People who advise on agricultural pesticide applications.
- Pesticide applicators who use or supervise the use of restricted pesticides on property they do not own or lease.

Pest control advisers, businesses, aircraft pilots and certain structural pest control licensees and businesses must register with the CAC in each county in which they work. The law provides the CAC may revoke for cause any registration to work in that county.

DPR's Licensing and Certification Program does not license individuals or businesses that practice vector control or structural pest control. The state Department of Public Health oversees local vector control. The Structural Pest Control Board (See Chapter 1) issues licenses to structural pest control field representatives and operatives who make inspections, present bids, and contract for work for their companies.

Types of licenses and certificates

DPR's Licensing and Certification Program issues four types of business licenses:

- **Pest control business.** For businesses that engage in pest control for hire.
- **Pest control dealer.** For pesticide retailers who sell agricultural-use or dual-use products to users; those who sell any method or device for the control of agricultural pests, such as biological control agents, lures or insect-trapping devices; those who solicit sales of pesticides by making agricultural-use recommendations through field representatives or other agents; and those who sell restricted pesticides to users.
- **Pesticide broker license.** Required by any person who first sells or distributes

pesticides in California (except persons already licensed as pest control dealers, or registrants selling their own products). This license does not allow the sale of agricultural use or restricted pesticides to end-users.

- **Maintenance gardener pest control business.** For maintenance gardening businesses that occasionally engage in pest control. (If the primary purpose of the business is pest control, a maintenance gardener pest control business license is required.)

The Licensing and Certification Program also issues five types of licenses and certificates to individuals:

- **Agricultural pest control adviser (PCA) license.** Required to offer a recommendation on any agricultural use of pesticides, to sell services as an authority on any agricultural pesticide use, or to solicit services or sales for any agricultural pesticide use.
- **Pest control aircraft pilot certificate.** Required to operate an aircraft for pest control.
- **Pest control dealer designated agent license.** Required to supervise the operations of a licensed pest control dealer. Each licensed pest control dealer must have designated agents at the principal office and each branch location.
- **Qualified applicator certificate (QAC).** Required for government employees and some other categories of workers who apply or supervise the application of restricted pesticides for any purpose or on any property other than that provided by the definition of private applicator (see below); or by maintenance gardeners and some other employees who perform pest control incidental to their job or business (that is, whose primary work is not pest control). QACs cannot supervise the operations of a pest control business (except for maintenance gardener businesses). They are also not allowed to do structural pest control. That requires a license from the Structural Pest Control Board.
- **Qualified applicator license (QAL).** Required to apply or supervise the application of restricted pesticides for any purpose or on any property other than that provided by the definition of private applicator (see below); or by anyone who supervises pesticide applications made by a licensed pest control business.

In 2015, DPR licensed about 31,000 agricultural pesticide applicators, businesses and PCAs, and pesticide dealers and brokers, including about 10,100 QALs and 10,600 QACs.

Although the qualified applicator license and certificate are similar, there are differences in responsibilities. The QAL is the more rigorous of the two. All commercial pest control businesses, except maintenance gardener businesses, must have at least one QAL on staff at each business location to supervise pesticide handlers for the business.

A QAC is usually enough for individuals who work for government agencies or for businesses other than pest control businesses, such as golf courses and schools. For these individuals, as well as for the maintenance gardener businesses, pest control is not the primary reason for their businesses; thus the more rigorous QAL examination is not necessary.

Both QAL and QAC applicants are required to take a laws-and-regulations exam and an exam in one or more of 17 categories of pest control for which the operator wishes to become qualified.

DPR also licenses pest control aircraft pilots. These are pilots (also known as aerial applicators or crop dusters) who apply pesticides by aircraft. Both apprentice and journey-level pilots must pass the licensing examination and maintain an appropriate Federal Aviation Administration (FAA) pilot's license, which includes a medical certification to verify their ability to fly.



Aerial pesticide application near Knight's Landing in 2016.



DPR's product compliance inspectors ensure pesticidal products sold in California comply to state and federal registration laws.

Pest control advisor applicants must have a bachelor's degree in pest management or in an agricultural, biological or natural science that includes specific course material. People with advanced science or pest management degrees do not need specific course material to apply to be a PCA. In addition, individuals without a college degree may apply if they have enough work experience and have taken specific college courses.

Business and individual licenses and certificates are issued for two years. Individual licenses and certificates cannot be renewed unless the holder has completed certain minimum Continuing Education (CE) hours related to pesticides or pest management within each license or certificate period. All courses must be approved by DPR. CE courses are typically offered by applicator associations or third-party vendors. CACs also present some courses.

Private applicator certificates

Private applicator certificates are required for people who use or supervise the use of restricted pesticides on property owned or leased by the applicator or the applicator's employer. Until 1996, applicators could receive their certification from a CAC by applying for and being granted a restricted materials permit. SB 800 (Chapter 705, Statutes of 1995) created a separate system and set minimum standards for certifying private applicators. Under the bill, CACs conduct examinations before issuing a private applicator certificate.

The new law required DPR to develop the exam to test the applicant's knowledge of pesticide use, including label directions and restrictions on use; pest control equipment; pest problems and identification; worker protection; and environmentally sensitive areas.

Private applicator certificates are issued for three years. CACs can revoke a certificate based on failure to comply with laws governing the safe use of pesticides.

PRODUCT COMPLIANCE

Product enforcement began with a pesticide product quality program in 1911, when truth-in-labeling laws were in their infancy and adulteration and misrepresentation of products were common. A 1935 department description of the program was to prove appropriate for many years to come:

The work includes the inspection, sampling, and analyzing of all substances under (department) supervision. Many thousands of inspections take place on dealers' shelves, in warehouses, and frequently in the hands of actual purchasers or users in order to determine whether all materials are registered and properly labeled. Official sampling of registered materials is carried on throughout the state. These samples are analyzed and, if the results do not conform to the guarantee, the registrant is dealt with according to the provisions of the California statutes. ...

Over the decades that followed, modern manufacturing techniques lessened and then almost eliminated product adulteration and contamination. As a result, in the 1990s, DPR reduced its product testing while maintaining a focus on compliance with registration and labeling requirements.

In 2004, DPR consolidated product compliance activities by merging its Audits Branch with compliance staff from other branches to create the Product Compliance Branch. In February 2017, the Inspections Unit was moved to the Enforcement Branch. Mill Collection and Disbursement, as well as the Product Compliance Auditors, were moved into the ASD under the Fiscal, Audits and Business Services Branch.

Inspection and compliance activities

To ensure that pesticide products used in California are registered by DPR and the

U.S. Environmental Protection Agency (U.S. EPA), Product Compliance Inspections Unit staff perform inspection and compliance activities under both the state program and as part of DPR's cooperative enforcement agreement with U.S. EPA. Inspections include those conducted at pesticide-producing establishments, and retail and wholesale sites.

DPR conducts establishment inspections under federal authority at facilities where pesticide products are manufactured, prepared, processed, packaged, repackaged, labeled or relabeled. DPR may also conduct these establishment inspections at locations where registrants keep their records.

Most inspections are marketplace surveillance to ensure compliance with product registration, formulation, packaging and labeling requirements. Sampling sites include government agencies; retail and wholesale nurseries, hardware, home-and-garden centers; landscape material suppliers; agricultural chemical dealers; feed, farm and pet stores; and beauty and barber suppliers. Inspectors also check medical, dental and veterinary suppliers; industrial and institutional suppliers; restaurant and hospital suppliers; grocery and drugstores; pool and spa centers; marine supply dealers; and any other place that sells pesticides.

To ensure that products in the channels of trade are in compliance with state and federal pesticide laws, field staff inspect products offered for sale by reviewing labels to ensure they are registered. Staff also check that product labels are the same as those approved by DPR, for example, to ensure that there are no changes to product names, claims or uses, or changes to precautionary statements that mitigate environmental and health hazards. Violations are enforced by DPR's Office of Legal Affairs.

Pesticide product samples collected during establishment or marketplace inspections may be submitted to the California Department of Food and Agriculture's Center for Analytical Chemistry for analysis. The lab compares the percent of active ingredient in the container with the formulation declared on the label and checks for possible product contamination. Many products contain more than one active ingredient and each individual component is reviewed. When analysis reveals that a pesticide product is deficient in ingredient or otherwise varies from the ingredient statement shown on its label, DPR may bring an enforcement action for adulteration or misbranding of the product.

Product compliance auditors audit pesticide sellers throughout the country who ship or sell their products into California. Audits are designed to determine if the pesticides are registered, to verify sales and to document that mill assessments have been paid. If mill assessments were unpaid, sellers must pay any money and a late fee, and are subject to civil penalties. They cannot continue selling their product unless they get it registered in California. (*See Chapter 13 for more information on the mill assessment.*) Violations are prosecuted by DPR's Office of Legal Affairs.

In the mid-2000s, product compliance auditors found significant gaps in reporting of certain types of pesticide transactions, including Internet sales of industrial, institutional and consumer-use pesticides, sales by intermediate brokers, and sales through the distribution centers of nationwide retailers. Auditors discovered that shortcomings in state law led to underreporting of pesticide sales and underpayment of fees.

As a result, DPR sponsored legislation in 2005. The goal was to promote a safe, fair and equitable marketplace by ensuring only California-registered products are sold in the state and that fees levied on pesticides are paid on all sales. The legislation (Chapter 612, Statutes of 2005, AB 1011) expanded broker licensing to encompass all those (other than registrants) who first sell or distribute any pesticides into or within California, whether agricultural or nonagricultural products. Previously, the law required that only sellers of agricultural pesticides be licensed with DPR.



Lab equipment at the CDFA
Center for Analytical Chemistry
in Sacramento.