[CHAPTER 7]

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) delegates pesticide enforcement regulatory authority to the states. U.S. EPA sets minimum pesticide standards for 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 that conduct safety inspections and investigations.

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

The Department is essentially a law-enforcing body, the agricultural police force of the State.

— 1921 department bulletin

Role of Federal, State and Local Agencies in Pesticide Use Enforcement

The 1972 amendments to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) gave U.S. EPA authority 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.) Under these agreements under FIFRA, 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 assure 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.

The department believes that cooperation and education are among the most desirable and eventually the most potent means of law enforcement, and accordingly tries to improve every opportunity to outline and to explain the requirements of law to all concerned.

— 1941 department annual report

- Inspections, compliance monitoring and compliance assistance that focus on protecting pesticide applicators and workers in various settings.
- Investigating priority incidents and illnesses. *(See Chapter 10 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, Product Compliance, and Pest Management and Licensing—and DPR's Structural Pest Control Board (SPCB) 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, Fresno and West Sacramento.

The Product Compliance Branch checks pesticide products for compliance with labeling and sales requirements, follows up on product sales complaints and conducts inspections of pesticide producers.

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

DPR's Structural Pest Control Board (SPCB) licenses and regulates structural pest control companies and applicators. *(See Chapter 8 for more information.)*

Local vector control agencies are overseen by the state Department of Public Health (DPH). DPR and DPH have an interagency agreement on vector control practices, which addresses pesticide availability, applicator certification, and pesticide use and episode reporting. CACs have varying degrees of involvement, depending on the county.

In California, there are jurisdictional roles at the international border with Mexico. Pesticide use in the border area affects people in both countries. DPR takes part in several federal and state border projects. One is 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 is the U.S./Mexico Pesticide Information Exchange Project, funded by U.S. EPA to address cooperatively common pesticide issues along the entire border.

Restricted Materials and Permitting

Pesticide uses can be restricted by U.S. EPA and 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 1295[1]) 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." Further, the statutes directed, the 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.

[1] Appendix A lists this 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.

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. *(See Chapter 1 for more information on DPR's certified regulatory status.)* Before farmers or pest control businesses can buy or use a restricted material (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 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 mitigate potential adverse effects.

For many California-restricted materials, DPR develops suggested permit conditions for CACs, based on the department's scientific evaluations of potential health and environmental impacts. DPR's suggested 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 of restricted-materials permitting with environmental impact reports, CACs must have flexibility to restrict pesticide use permits to local conditions at the time of the application. Therefore, the commissioners may follow the DPR's suggested permit conditions or structure their own restrictions.

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.

Legislative investigations had indicated the need for more stringent control over the use of injurious pest control materials which might drift and thereby present a serious hazard to persons, animals, and crops.

— 1950 department annual report

The State is a large one and to attempt to distribute a corps of inspectors throughout the State large enough to detect fraudulent practices and punish the offenders by legal means only would be a hopeless task and an unnecessary burden upon the taxpayers.

— 1921 department annual report

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. CAC staff reviews NOIs and can disallow the proposed application if conditions warrant or apply extra controls if needed. CAC staff makes pre-application inspections on at least five 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 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. Food and Agricultural Code (FAC) 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 adequate county programs; evaluates the effectiveness of the local programs; and assures 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 biologists in all 58 counties enforce state pesticide laws and regulations in agricultural, structural, and nonagricultural use settings. They 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. (These businesses and individuals must get statewide licenses from DPR and register in each county where they work.)
- Investigating pesticide incidents and illnesses.
- Taking enforcement action, including levying fines and penalties if violations are found.
- Providing training to pesticide users (handlers) and field workers.

(See separate article in this chapter for more information on the county agricultural commissioners.)

CACs and DPR provide compliance assistance to the regulated community through outreach and training, including presentations to 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.

The 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 (many living near agricultural fields) require a more complex partnership between state and local pesticide regulatory authorities than anywhere in the nation. Other states have 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 assure 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 conducts inspections to prevent misapplication or drift, and possible contamination of workers, the public and the environment. CAC biologists also 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 Game 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 10.)* 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.

Law enforcement which is the result of intelligence and integrity is permanent.

— 1938 department annual report

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 15,000 to 18,000 pesticide inspections yearly, leading 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.
- 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.

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 registrations 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.) Commissioners may fine any agricultural or structural pest control licensee up to $5,000 for each violation of certain laws or regulations. CACs may also suspend the right of a structural pest control licensee to perform work in their county for up to three days.

Growers found to have knowingly treated a commodity or crop with a pesticide that had been stolen or illegally obtained are subject to a fine of $10,000 plus one-half the value of the crop to which the illegally obtained pesticide was applied. In addition, DPR licensees found to have knowingly sold, applied or provided stolen pesticides must have their license suspended for at least 18 months.

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 DPR or 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 nonsubstantive 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.

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 1992, DPR and CACs began working on a uniform approach to enforcement response. In 1994, they finalized guidelines that acknowledged the necessity of a consistent enforcement response policy while maintaining the ability to recognize local conditions in decision making. Under the guidelines, violations of the state's pesticide regulations were categorized as minor, moderate or serious violations. Minor violations primarily involve paperwork oversights that do not have a significant effect on health, safety or the environment. The stiffest penalties were for violations classified as serious, creating a hazard or causing a health or the environmental impact.

Using the enforcement guidelines as a starting point, in 2005 DPR and CACs jointly developed an enforcement response policy. More formal than the previous guidelines, it included a system to classify the type of violation and procedures to consistently determine the appropriate enforcement action. It also 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 regulation, giving it the force of law. CACs throughout California follow the same requirements. The enforcement response regulations 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 at least the middle classification. When circumstances are more egregious or when health property or the environment are harmed, the violations are placed in the highest classification

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 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.

Consistent enforcement of good laws and regulations is in many ways an aid to legitimate business.

— 1938 department annual report

The aim is to make the entire enforcement program thoroughly understood by all whom it affects and, so far as possible to enlist their cooperation, for the foundation of good law enforcement is understanding.

— 1938 department annual report

Among other findings, the compliance assessment report showed that growers had significantly more compliance problems than professional agricultural pest control businesses. However, there were shortcomings in how professional handlers complied with requirements for use of personal protective equipment (for example, respirators and protective clothing). There were also problems in professional handler use of closed pesticide mixing and handling systems designed to protect workers against exposure to highly hazardous liquid pesticides.

DPR used compliance assessment data to evaluate the effectiveness of laws, regulations and label requirements, and to develop measures to improve enforcement. This included 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.

DPR had for many years communicated policies and procedures to CACs in formal guidance letters. However, with hundreds of such letters issued, it was difficult to search for specific topics and to know when a policy letter had been superseded by a newer one. In 2007, DPR began consolidating these standards into eight manuals that became 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 2003, DPR and the counties revised work planning and performance review, adding objective performance measures to help CAC staff better target local problems or patterns of continuing violations related to public health, occupational safety and environmental quality.

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, emerging issues, and measurable solutions based on available resources. DPR uses jointly developed performance standards to evaluate the effectiveness of the county's enforcement program.

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. Besides oversight inspections and independent inspections performed by CAC staff, DPR field staff also independently inspects hundreds of worksites to assess compliance with worker protection requirements.

To help focus CAC work plans, Enforcement Branch staff conducts regular effectiveness evaluations of all CAC offices and staff. DPR uses inspection reports to document compliance rates and annual reports sent by CACs to document workload and hours, and enforcement actions. DPR staff evaluates major elements of the

county's program, describes successful program aspects and follows 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. CAC pesticide regulatory workload data are also used to allot DPR funding of local pesticide programs. *(See Chapter 15 for more information on state and local funding.)*

To evaluate county performance and help prioritize enforcement goals for each county, in 2008 DPR created an enforcement statistical profile. These annual county profiles consolidate data from several DPR databases, tracking enforcement programs in 58 counties. Each year, CACs collectively issue about 39,000 restricted materials permits including 11,000 site inspections, conduct another 20,000 agricultural and nonagricultural site inspections, and do more than 6,600 compliance actions, investigations 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.

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.

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 that use or supervise the use of restricted pesticides on property they do not own or lease.

Many California farmers rely on trained operators to apply pesticides for them. This employment trend has increased as modern agriculture has found need for expensive application equipment, such as aircraft, to provide effective and economical pest control.

— 1958 department annual report

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 business that practice vector control or structural pest control. The state Department of Public Health oversees local vector control. The SPCB issues licenses to structural pest control field representatives and operatives who make inspections, present bids, and contract for work for their companies. (*See Chapter 8 for more information on the SPCB.)*

Types of licenses and certificates

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

- *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 materials 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 garden maintenance businesses that occasionally engage in pest control. (If the primary purpose of the business is pest control, a 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) licen*se — 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 SPCB.
- *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 2010, DPR licensed about 28,000 agricultural pesticide applicators, businesses and PCAs, and pesticide dealers and brokers, including about 7,800 QALs and 10,700 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

LICENSING & CERTIFICATION PROGRAM

DPR's Licensing and Certification Program is responsible for examining and licensing qualified applicators, aircraft pilots, pest control dealer designated agents and agricultural pest control advisers; and for certifying pesticide applicators who use or supervise the use of restricted pesticides. It also licenses businesses that sell or apply pesticides or use pest control methods or devices for hire (pest control business, maintenance gardener pest control business, pest control dealer and pesticide broker).

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 that 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 pest control applicators who are pilots (also known as aerial applicators or crop dusters). Both apprentice and journey-level pilots must pass the licensing examination and maintain a medical certification to verify their ability to fly.

PCA 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 certificate. 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. The exam must be in written form but a CAC has the discretion to give an oral exam "in those situations where, in the opinion of the commissioner, a written examination would not accurately measure the understanding of the applicant."

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

Product Compliance Program

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 … ."

Furthermore, many of the modern pesticides are dangerous to handle and farmers prefer to hire trained and properly equipped operators to apply the chemicals for them.

— 1958 department annual report

Uniform and firm handling of regulations has outlawed the bad practices of the few, has protected the many from unscrupulous competitions, and provided a bulwark of consumer confidence throughout the economic poisons business.

— Economic Poisons: California Law and Its Administration (1944)

Over the decades that followed, modern manufacturing techniques lessened and then almost eliminated product adulteration and contamination. As a result, in the 1990s, the Department of Pesticide Regulation (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. The mission of the Product Compliance Branch (PCB) is:

- Protection of the environment and public health by enforcing registration requirements that assure pesticide products are evaluated for efficacy and safety, and labeled with the appropriate instructions and precautions.
- Assuring fiscal support of pesticide regulatory programs by enforcing the payment of the fee assessed on pesticide sales into California.

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), PCB field staff performs 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 market 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. Among the goals of these inspections is 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. PCB staff also checks 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 inspects products offered for sale, reviewing labels to ensure they are registered. They also check that product labels are the same as those approved by DPR, for example, to assure that there are no changes to product names, claims or uses, or to precautionary statements that mitigate environmental and health hazards. Violations are prosecuted 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.

PCB staff audits 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 interest owed and are subject to civil penalties. They cannot continue selling their product unless they get it registered in California. *(See Chapter 15 for more information on the mill assessment.)* Violations are prosecuted by DPR's Office of Legal Affairs.

In the mid-2000s, PCB 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.