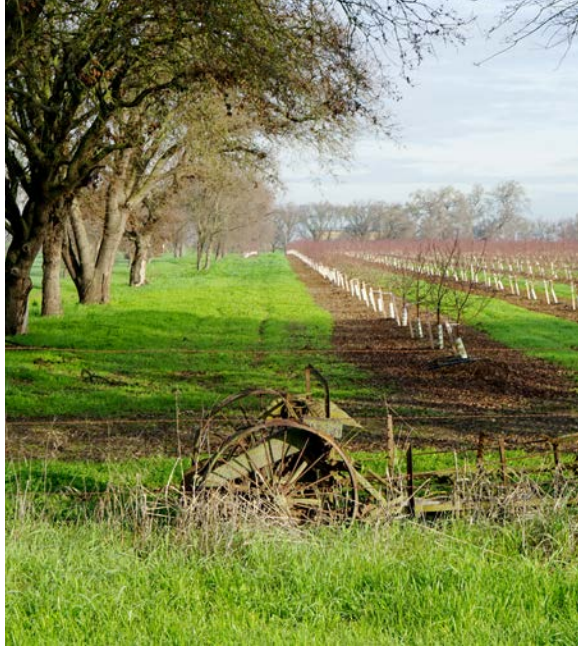


California Department of  
**dpr** Pesticide Regulation

Progress Report  
2017 - 2018





## Progress Report 2017-2018

The Department of Pesticide Regulation (DPR) regulates pesticide sales and use, and fosters reduced-risk pest management. DPR's work includes product evaluation and registration, environmental monitoring, residue testing of fresh produce, and statewide licensing of commercial applicators, dealers and advisers. DPR provides oversight of the local pesticide enforcement programs of all 55 county agricultural commissioners and their combined staffs of approximately 400 biologists.

### Mission Statement

*To protect human health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management.*

### Executive Staff

**Brian Leahy** – Director

**Teresa Marks** – Chief Deputy Director

**Ken Spence** – Director of Policy and Legislation

**Rudy Artau** – Assistant Director, Office of Technology Services

**Jesse Cuevas** – Assistant Director, Pesticide Programs Division

**Charlotte Fadipe** – Assistant Director, Communications

**Polly Frenkel** – Chief Counsel

**Joe Marade** – Agricultural Commissioner Liaison

**Anise Severns** – Assistant Director, Administrative Services Division

**Marylou Verder-Carlos** – Assistant Director, Pesticide Programs Division

**Paul Verke** – Assistant Director, Outreach and Public Engagement

Note: This report contains highlights from 2017 and 2018. For all publications, reports and program activities, please visit our website at: [www.cdpr.ca.gov](http://www.cdpr.ca.gov). For more information or questions, please contact [cdprweb@cdpr.ca.gov](mailto:cdprweb@cdpr.ca.gov). Photographs by DPR staff unless otherwise noted.

July 2018

**On the cover (clockwise from top):** Almond saplings in Galt, surface water sampling, produce monitoring collection inspection in Sacramento.

# LETTER FROM THE DIRECTOR

## The Science of Regulating Pesticides



The Department of Pesticide Regulation (DPR) is a science-based organization. We employ a remarkable team of scientists to monitor air, ground water and surface water for pesticides. Other scientists oversee risk assessments and registrations. Our Enforcement and Worker Health and Safety branches investigate illness and injury, and promote pesticide safety.

Guided by a strategic plan, we embrace technology and science to help us fulfill our mission. Technology—including mobile apps, social media, online forms and database systems—helps us to better serve our partners, constituents and the public. In the coming years, we will be refining our technology to help us fulfill our mission.

In 2017 and 2018, there are many accomplishments of which we are proud.

We have worked to increase safety awareness of the non-agricultural use of pesticides, including antimicrobial cleaners used daily by thousands of workers in restaurants, janitorial services, pools and child care.

Through the newly implemented school regulations, California now has rules on how and when pesticides can be applied within ¼ mile of public schools and licensed child care centers.

In the School and Child Care IPM program, we expanded online training opportunities and digital resources to share with school maintenance workers. Staff conducted workshops and training on using the least-toxic pest management practices at schools and child care centers.

We have made strides in environmental justice, as well, and participated in the CalEPA Environmental Justice Enforcement Initiatives in Oakland, Pomona and Imperial. And, with county agricultural commissioners, we have conducted outreach workshops for advocates in Bakersfield, Santa Maria and Stockton.

We also completed pesticide guidelines for the cannabis industry as we help them transition to a regulated market that protects workers and consumers.

We hope you take a moment to look at our accomplishments in the Progress Report 2017-18, and we look forward to hearing from you.

A handwritten signature in black ink that reads "Brian R. Leahy". The signature is written in a cursive style with a long, sweeping tail on the letter "y".

Brian Leahy, Director



# REDUCING RISK



## REGULATION OF PESTICIDE APPLICATIONS NEAR SCHOOLS AND CHILD CARE CENTERS

In 2017, DPR finalized a regulation that addresses agricultural pesticide applications near school sites.

It created minimum distance standards for certain agricultural pesticide applications near public K-12 schools and licensed day-care centers. It also requires growers to provide annual notifications to school districts of the pesticides they anticipate they will apply.

The goal is to reduce the chances of unintended pesticide exposure to children and increase communication between growers, county agricultural commissioners, and school sites.

The regulation took effect Jan. 1, 2018.

---

## GRANT PROJECTS

Also in 2017, DPR awarded more than \$1.3 million in Integrated Pest Management (IPM) grants to projects furthering DPR's mission of fostering reduced-risk pest management.

- *Alliance Grants:* These projects increase broader adoption of IPM practices through the creation of alliances that include state, local, public, private, educational, and other stakeholders. The Monterey County Agricultural Commissioner's Office was awarded \$94,245 for a project to provide notifications of restricted-use pesticides near schools. Lynn Wunderlich, University of California Agriculture and Natural Resources (ANR), was awarded \$218,896 to support a project to train pesticide applicators to reduce pesticide drift near schools.
- *Research Grants:* About \$1 million went toward research projects looking at fumigant alternatives for carrots (\$185,255), the use of brassica crops and re-cropping for nematode suppression in walnut orchards (\$256,425), the development of fruit fly attractants to reduce pesticide use (\$75,000), and a project looking at site-specific soil pest management, using molecular quantification, remote sensing, and field scouting (\$485,314).

## SCHOOL INTEGRATED PEST MANAGEMENT (IPM) OUTREACH

DPR scientists conducted school-site assessments, onsite training and expanded online training for people who work with pesticides, including antimicrobial cleaners, at schools and licensed child care facilities.

Special site-assessment projects included assisting a school district in Ukiah in controlling a cockroach infestation, working with schools in Riverside and Moreno Valley to tackle red fire ants, addressing a rat mite infestation in Orange County, assisting with rat control at schools in Compton and Newport Beach, and working with a school district in Long Beach that was implementing an herbicide-free weed control program.

DPR demonstrated IPM strategies to school staff, including techniques that emphasize least-toxic pest management practices – like prevention and mechanical control, in addition to judicious pesticide use.

Staff scientists also held in-person school-staff training sessions, including workshops on IPM weed management practices.

# PROTECTING PEOPLE

## CHLORPYRIFOS RESTRICTIONS

DPR scientists completed a draft risk assessment of chlorpyrifos in 2017 and initiated the statutory process for listing and mitigating that chemical as a toxic air contaminant. The draft risk assessment is undergoing a review by the Scientific Review Panel on Toxic Air Contaminants which consists of nine highly qualified scientists engaged in research in their respective fields. The Panel is expected to make a determination on the scientific sufficiency of the assessment and issue its findings by September 2018. The risk assessment will be finalized and could lead to increased restrictions on chlorpyrifos statewide. In late 2017, DPR implemented interim guidelines for chlorpyrifos use which further restricted application methods and increased distances between sites where the chemical is applied and sensitive locations, such as homes and schools.

## WORKER PROTECTIONS

DPR moved forward with additional changes to the state's worker protection regulations. These changes include expanding pesticide handler and fieldworker training, as well as clarifying field posting requirements.





## PESTICIDE INSTRUCTOR SAFETY TRAINING

DPR helped fund and promote numerous training workshops for pesticide safety instructors. Those who complete the Train-the-Trainer workshops, offered through the University of California, become qualified to provide pesticide safety training to fieldworkers and pesticide handlers, as required by California state regulations.

## EDUCATIONAL OUTREACH

DPR is updating its Pesticide Safety Information Series leaflets, and employer Compliance Assistance booklets, in English and Spanish. The PSIS is primarily used as a training aid for employees. California regulations require these documents to be part of pesticide handler and field worker training. The Compliance Assistance booklets are pocket-sized guides explaining training, communication, worksite-facility and other requirements to ensure employee safety.







# CONTINUOUSLY EVALUATE AND RESPOND TO RISKS TO THE ENVIRONMENT

## REEVALUATION OF COPPER-BASED ANTIFOULING PAINT

DPR completed its evaluation of leach rate and paint type information for all copper-based AFP pesticide products subject to the reevaluation and continued to require these data for newly registered products using the International Organization for Standardization (ISO) method 10890:2010 to determine each copper-based AFP's release (leach) rate. Using these data and an established adjustment factor for comparison to actual environmental leach rates, DPR calculated a final daily mean copper leach rate. Effective Jan. 1, 2018, the regulation requires all registrants of new copper-based AFP and coating products to submit copper leach rate data using the ISO method. The regulation establishes a maximum allowable copper leach rate of 9.5  $\mu\text{g}/\text{cm}^2/\text{day}$  for all copper-based AFP and coating product labeled for use on recreational vessels. This reevaluation is concluded.

## PESTICIDE PRODUCTS UNDER REEVALUATION

Effective Jan. 3, 2018, DPR announced its intent to no longer act upon an Application for Pesticide Registration or Application to Amend Pesticide Product if DPR determines the registration or acceptance would potentially "expand use" of an active ingredient or pesticide product currently under reevaluation until the conclusion of the reevaluation (California Notice 2018-01). This applies to new pesticide products, including supplemental distributor registrations (subregistrations) and amendments to currently registered pesticide products, when "expanding use" of the active ingredient relevant to the concern that prompted the reevaluation. When DPR completes the reevaluation, DPR will be able to, in light of the reevaluation determination, consider the application for product registration or amendment.

A man in a white short-sleeved shirt and blue jeans is operating a blue agricultural sprayer machine. The machine has a large white tank on the left and a blue cylindrical tank in the center. The man is standing on a concrete platform, looking down at something in his hands. In the background, there is a large, light-colored building and some trees under a clear blue sky.

## DECISION PERTAINING TO METOLACHLOR/S-METOLACHLOR DEGRADATE IN GROUND WATER

The Pesticide Contamination Prevention Act (PCPA) of 1985 requires DPR to monitor and review the use of pesticides designated as having the potential to contaminate ground water. If DPR detects a pesticide or its degradation product in ground water, the PCPA requires DPR to determine if the detection resulted from legal agricultural use. Once this determination is made, DPR notifies registrants of the opportunity to request a hearing to determine if continued use of the pesticide should be allowed. If no registrant requests a hearing, the agricultural use product registrations are canceled. DPR detected two degradation products—ethanesulfonic acid and oxanilic acid—of the active ingredients metolachlor and S-metolachlor in California's ground water. DPR determined these detections were the result of legal agricultural use of metolachlor/S-metolachlor products and provided notice to the registrants. At the request of the metolachlor and S-metolachlor product registrants, DPR held a public hearing on March 28, 2017 to gather information about the continued agricultural use of metolachlor and S-metolachlor. After reviewing the findings and recommendations of the subcommittee, the Director concurred with their finding that the presence of metolachlor/S-metolachlor degradates in the ground water has not polluted and does not threaten to pollute the ground water of the state. DPR will continue to monitor metolachlor/S-metolachlor products and their degradation products ethanesulfonic acid and oxanilic acid levels in ground water and will take immediate additional action if there is sufficient evidence of approaching the health-protective drinking water level, factoring in an adequate margin of safety.

## REEVALUATION OF DIAZINON PESTICIDES

Since its peak in 1993-1994, agricultural use of diazinon has been declining in California. Agricultural use in 2014 was only 5.4% of peak use in 1994. Likewise, there has been a general downward trend in water quality threshold exceedance frequencies. DPR has determined the current level of aquatic risk is minimal. In June 2017, DPR completed an analysis of diazinon monitoring and use data titled, "A Review of Diazinon Use Contamination in Surface Waters, and Regulatory Actions in California across Water Years 1992-2014," which was published in the journal *Environmental Monitoring and Assessment*. DPR scientists also evaluated surface water monitoring results from 2015 to 2017. There have been no exceedances over the lethal concentration (LC50) values for crustaceans, insects, or fish. DPR has completed its evaluation of California diazinon use and surface water monitoring data and concluded that the use of diazinon in recent years has decreased to a level that poses an insignificant risk to aquatic organisms. DPR has determined no additional mitigation measures are necessary, and therefore, the reevaluation is concluded.

## EXPANDED AIR MONITORING NETWORK

DPR added two air monitoring stations in communities where air monitoring for pesticides will be conducted. The new stations bring the total number of stations to eight when all sites have been initiated. They are located in Chualar (Monterey County), Santa Maria (Santa Barbara County), and Monterey County south of Watsonville. **Another five sites will be monitored by the Air Resources Board in cooperation with DPR: Shafter (Kern County), El Rio/Oxnard (Ventura County), Cuyama (Santa Barbara County), Lindsay (Tulare County), and San Joaquin (Fresno County).** DPR will be monitoring for 31 pesticides and **five pesticide breakdown products at all sites.** Previously only three sites monitored for all 31 pesticides. California is the only state that monitors air as part of its continuous reevaluation of pesticides to ensure the protection of workers, public health, and the environment.





## SURFACE WATER MONITORING: FIPRONIL

DPR in 2016-17 worked with pesticide product registrants to voluntarily implement new state-specific use restriction labels for products containing the pesticide fipronil. Fipronil is commonly used in termite and ant control, and in flea treatments for pets. It is, however, toxic to some aquatic organisms. About half of 500 surface water samples collected from urban runoff and receiving waters around California between 2008 and 2017 contained fipronil at levels considered potentially hazardous for small invertebrates. In April 2017, US EPA approved the California-specific label changes. DPR posted its final decision to accept amended labels for BASF Corporation's product, Termidor SC Termiticide/Insecticide, and Control Solutions, Inc.'s product, Taurus SC, on November 3, 2017. Future fipronil perimeter spray products for professional applicators will have to meet the same restrictions implemented for Termidor and Taurus.

# ADVANCING ENFORCEMENT AND PRODUCT COMPLIANCE

## RECREATIONAL CANNABIS

DPR undertook a number of projects in preparation for the state's transition toward legalized recreational cannabis effective January 2018, including:

- Creating a cannabis information webpage (<http://cdpr.ca.gov/docs/cannabis/index.htm>) where growers, hydroponic shop operators and consumers can access information about laws and regulations affecting cannabis, including criteria for pesticides that are legal (or illegal) to use on cannabis.
- Recommending pesticide residue action levels to the California Bureau of Cannabis Control. DPR established health-based action levels for specific pesticide residues in cannabis to guide the bureau in establishing regulations for testing laboratories.
- Providing guidance and outreach to county agricultural commissioners.



## ACTION TAKEN AGAINST HYDROPONICS SHOPS

In 2017, DPR fined a San Jose hydroponic gardening store \$20,000 for violating state pesticide laws designed to protect public health. The action was for selling illegally repackaged pesticides. Under California law, it is illegal to sell a pesticide unless it is in its original manufacturer's container or packaging approved and registered by DPR.

---

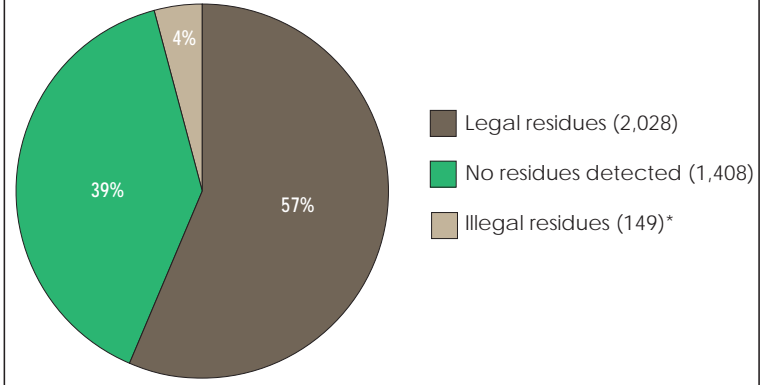
## ENVIRONMENTAL JUSTICE ENFORCEMENT

DPR participated with CalEPA on Environmental Justice Enforcement Initiative actions in Oakland, Pomona and Imperial County. As part of CalEPA's project, DPR staff met with U.S. EPA EJ officials and community organizations and reported on produce sampled for the presence of pesticide residues.



## 2016 PESTICIDE-RESIDUE SAMPLING IN PRODUCE

Percentage of produce samples collected in 2016 with legal, illegal, or no detected pesticide residues.



\* Illegal sample breakdown includes produce that had excess residues over tolerances and produce that had residue present when no tolerance has been set.


## PRODUCE MONITORING

DPR scientists regularly collect produce from stores, markets and distribution centers and then test the produce for pesticide residues. The department issues an annual report for the public based on these findings. Tests on produce collected in 2016 had little or no pesticide residues. DPR, through labs operated by the California Department of Food and Agriculture, tests fresh produce for nearly 400 types of pesticides.

## COMPLAINT TRACKING MOBILE APPLICATION

DPR in 2017 began working on an advanced complaint reporting and tracking system utilizing mobile application technology. Once developed, it will be in English and Spanish, and used by all counties statewide.

# INFORMATION SYSTEMS AND SERVICES



## RISK ASSESSMENT DATA

DPR's IT and Human Health Assessment branches created a new, easier to understand webpage where the public can access product registration, risk assessment, and risk mitigation information by active ingredient. DPR conducts human health risk assessments to evaluate the risk to human health associated with pesticide use. If specific pesticide uses of concern are identified, DPR adopts mitigation measures that reduce the risk of pesticide exposure and thereby the risk of adverse human health effects. The site is located here: [http://www.cdpr.ca.gov/docs/whs/active\\_ingredient/](http://www.cdpr.ca.gov/docs/whs/active_ingredient/)

## PESTICIDE REGISTRATION DATA MANAGEMENT SYSTEM (PRDMS)

In July, 2017, DPR contracted for the development of a new computer system that will help streamline the pesticide registration process. The Pesticide Registration Data Management System (PRDMS) project will offer an online portal for stakeholders to conduct registration, renewal, and other related activities. The project is expected to be ready in two years.

# ENSURING ENVIRONMENTAL JUSTICE



DPR strives to protect all people in California, regardless of race, culture, income or geographical location, from adverse environmental and health effects of pesticides.

## ENVIRONMENTAL JUSTICE (EJ) LIAISON

In 2017, DPR appointed a new EJ Liaison to coordinate DPR's outreach efforts to disadvantaged communities. The position is held by longtime DPR staff scientist Martha Sánchez, who reports to the Chief Deputy Director. California for Pesticides Reform (CPR) welcomed her to meet with EJ communities in Tulare, Monterey and Ventura Counties. In March 2018 she met with staff from Coalition Advocating for Pesticide Safety and allies and was given a tour in Woodville, Poplar, Plainview, and Lindsay to hear the communities concerns.

## WORKSHOPS

In 2017, DPR partnered with the Central California Environmental Justice Network (CCEJN), and the Kern and Santa Barbara County Agricultural Commissioners on these workshops, which were designed to strengthen partnerships with the community by providing attendees a working knowledge of pesticide use enforcement, reporting and worker safety. With the assistance of the San Joaquin County Agricultural Commissioner and Lideres Campesinas, a third workshop was held in June 2018, in Stockton.

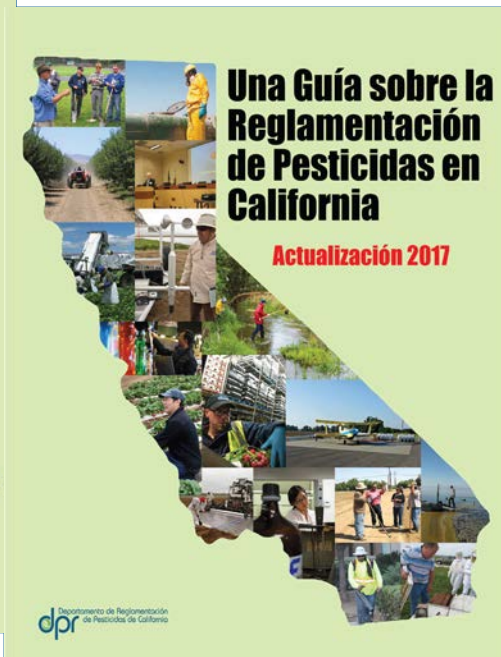
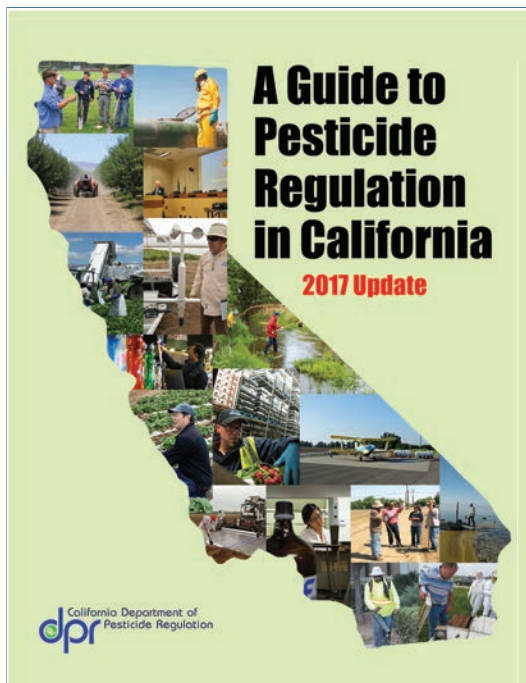
## OUTREACH

DPR staff in 2017-18 participated in more than 130 community events and health fairs. Staff also assisted in providing trainings to promotores, day care providers, farm labor contractors, fieldworker and handlers, where they shared information and DPR publications related to public and worker safety, laws and regulations. They also created and updated several outreach materials for the agricultural industry, as well as materials on home safety issues.



# COMMUNICATIONS AND MEDIA OUTREACH

## GUIDE TO PESTICIDE REGULATION UPDATE



Staff updated DPR's *Guide to Pesticide Regulation in California*. A comprehensive guide—covering everything from the pesticide registration process, and the department's various environmental monitoring, worker health and safety, and human health assessment, to DPR history—was last updated in 2011. A first: DPR also made a Spanish language version of the Guide. It went online in late 2017, and early print editions were made in 2018.

## SOCIAL MEDIA

DPR spearheaded a public awareness campaign related to the sale of illegal and potentially dangerous roach poison at markets in the Bay Area. The products sold were linked to three illnesses, according to Santa Clara County prosecutors, who prosecuted the case. In August 2017, a San Jose man was convicted and sentenced to six months incarceration, and three years of probation.

DPR also used social media with media outreach to inform the public about the department's new school regulations, sanitizer safety, and nopales (edible cactus pad) contamination. Each day, new information is posted for consumers to Facebook, LinkedIn and Twitter. Since the YouTube channel was launched, 90,000 viewers have watched over a quarter million minutes of training videos in English and Spanish.

# SIGNIFICANT STATE LEGISLATION

During 2017, DPR sponsored **AB 1480** (Quirk, Chapter 152, 2017) which protects workers, public health, and the environment by making it unlawful to commit fraud in connection with the pesticide applicator licensing and licensing renewal processes. The measure was signed by Gov. Jerry Brown and has become law.

The following are summaries of the other major bills that affect our program and were also signed into law in 2017.

## **AB 527 (CABALLERO, CHAPTER 404, 2017) PEST CONTROL AIRCRAFT PILOT'S LICENSE CERTIFICATE: UNMANNED AIRCRAFT**

This bill requires pilots operating an unmanned aerial system (UAS) in pest control to possess either a manned or unmanned Pest Control Aircraft Pilot Certificate issued by DPR.

To qualify for an unmanned Pest Control Aircraft Pilot Certificate, the pilot must also be authorized by FAA to operate UAS in pest control. To qualify for a manned Pest Control Aircraft Pilot Certificate, the pilot must have a commercial pilot's license and medical clearance to fly. In either case, the pilot must apply for and pass the required DPR licensing and certification exams.





## **AB 593 (GLORIA, CHAPTER 225) STRUCTURAL FUMIGATION EN- FORCEMENT PROGRAM**

This bill extends the provision that requires any company performing a structural fumigation in Los Angeles County, Orange County, Santa Clara County, or San Diego County to pay the county agricultural commissioner a specified fee for each fumigation conducted at a specific location through January 1, 2023. This fee funds the increased inspection and enforcement activities and must be used for the sole purpose of funding enforcement and training activities directly related to the structural fumigation program.

## **AB 1126 (COMMITTEE ON AGRICULTURE, CHAPTER 112) PESTICIDES: CARBON MONOXIDE**

This bill extends the provision that authorizes the use of carbon monoxide for the control of burrowing rodent pests until January 1, 2023.

---

## **SB 94 (COMMITTEE ON BUDGET AND FISCAL REVIEW, CHAPTER 27) CANNABIS: MEDICINAL AND ADULT USE**

This bill consolidates the Medical Cannabis Regulation and Safety Act (MCRSA) and the Adult Use of Marijuana Act (AUMA) to become the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). It also renames the Bureau of Medical Cannabis Regulation to the Bureau of Cannabis Control and revises license types to expand licensees to nurseries and special cottage cultivation sites. This law requires DPR to develop guidelines for the use of pesticide in the cultivation of cannabis and residue in harvested cannabis.

---

## **SB 258 (LARA, CHAPTER 830) CLEANING PRODUCT RIGHT TO KNOW ACT OF 2017**

This bill requires a manufacturer of a “general cleaning product”, defined to include antimicrobials, to disclose on the product label and on the product’s Internet Web site a list of ingredients contained in the product.

# PESTICIDE REGULATORY PROGRAM FUNDING HIGHLIGHTS

In 2016-17, DPR employed about 366 employees. With a budget of \$94 million, DPR is funded by regulatory fees, with a small amount of federal/special funds, reimbursements from other Departments, and a one-time Legislative augmentation to the General Fund augmentation for a special project. The DPR Fund collects three main sources of revenue:

- Registration fees from over 13,000 companies who register their pesticide products in California.
- Licensing and Certification fees on those individuals who handle or use pesticide products in a commercial setting.
- A quarterly Mill Assessment fee.

DPR's largest revenue source is the Mill Assessment, a fee levied on pesticide sales at the point of first sale into the State. The assessment is currently at the statutory maximum of 21 mills, or 2.1 cents for each dollar of sales (a mill is equal to one-tenth of a cent). An additional three-fourths mill is assessed on agricultural and dual-use products (pesticides labeled for use in both agriculture and nonagricultural settings) to support pesticide consultation activities of the California Department of Food and Agriculture.

Other sources of revenue/funding are:

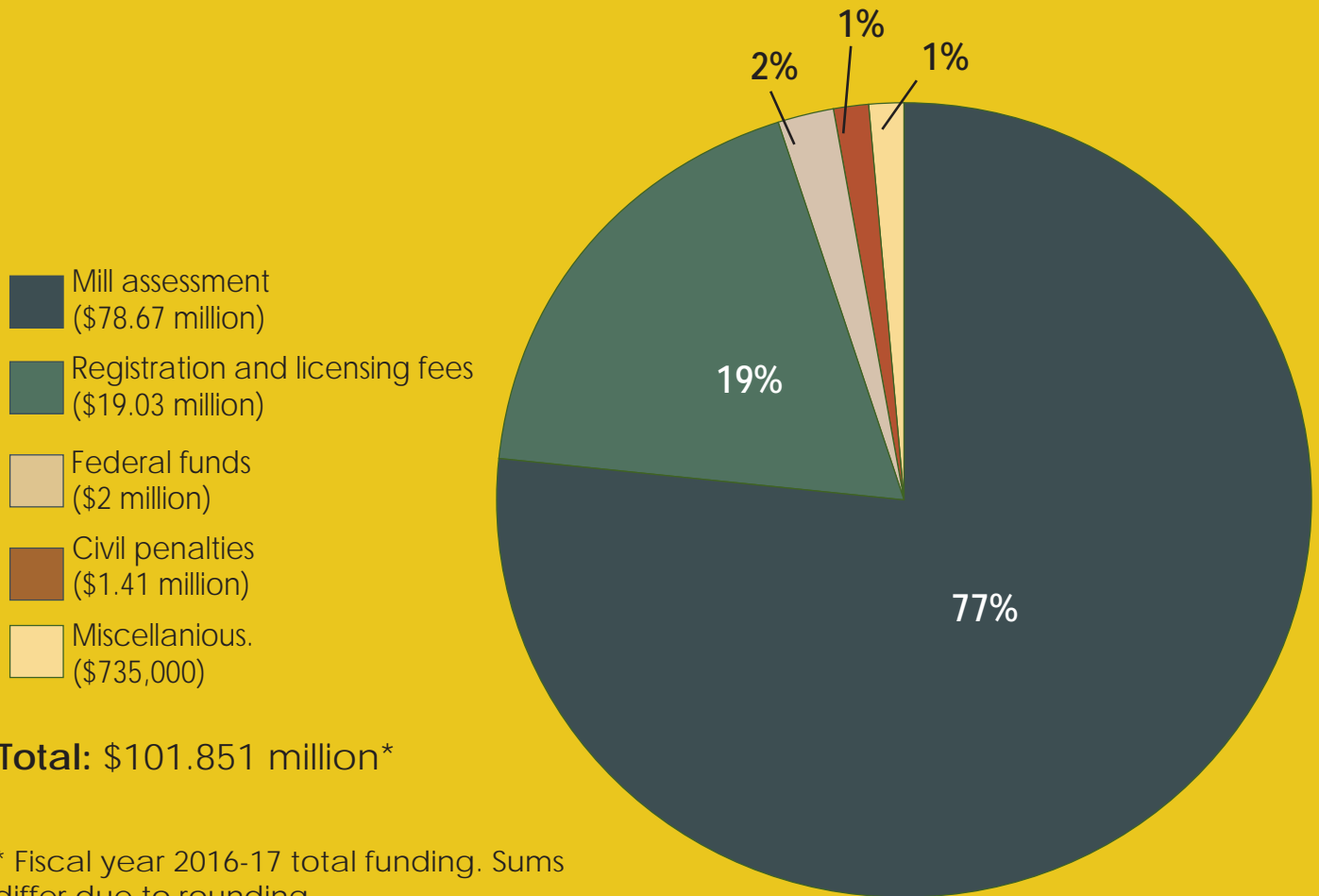
- Civil penalties (for example, the selling of unregistered or misbranded pesticide products).
- Miscellaneous fees, reimbursements from other Departments and a small amount from the Environmental License Plate Fund and General Fund.
- Funds from the U.S. Environmental Protection Agency or the U.S. Department of Agriculture for activities DPR performs with or on behalf of these agencies.

## FUNCTIONAL ACCOUNTING

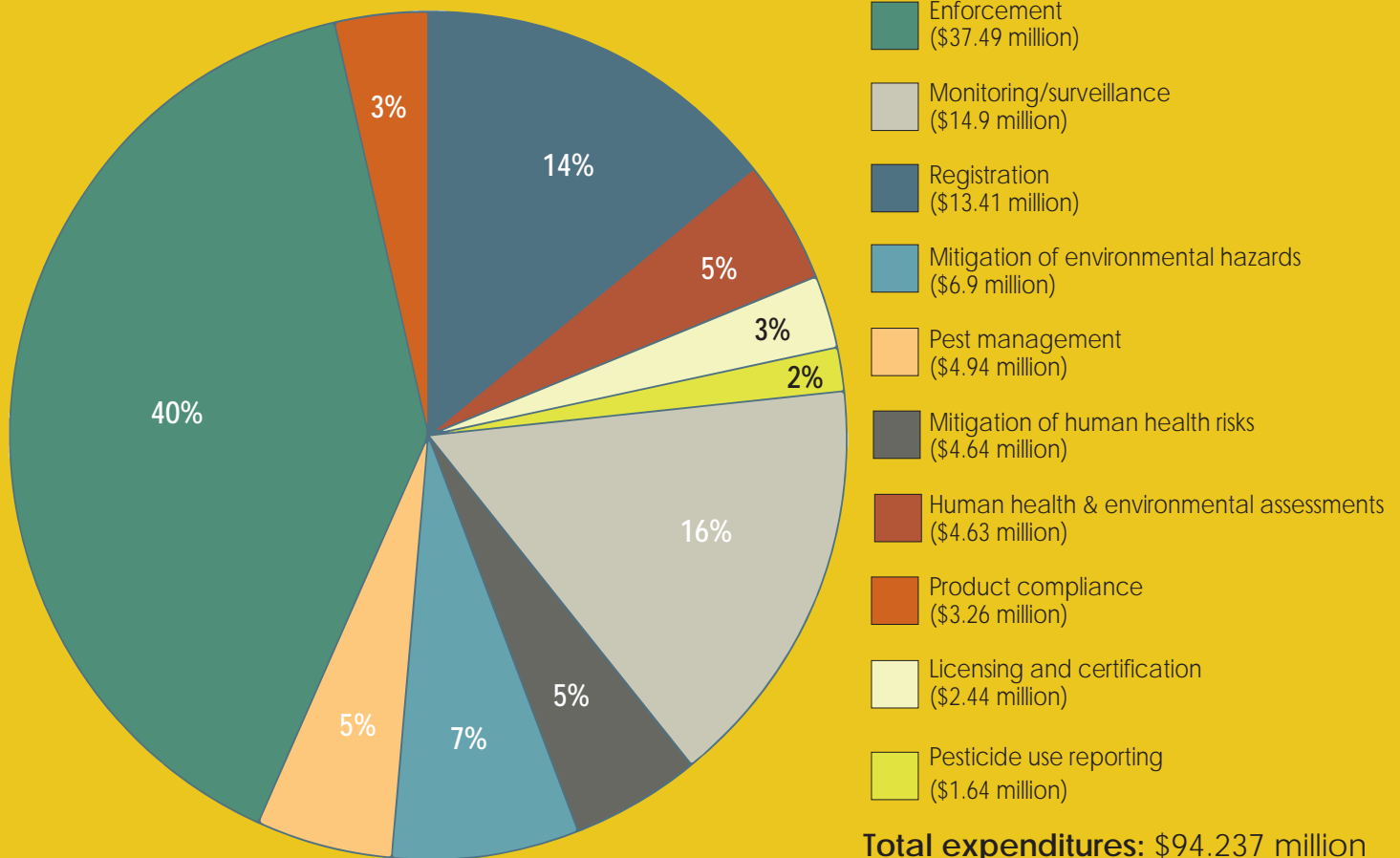
Budgets of government agencies traditionally divide funds by organizational units. But, like other integrated regulatory programs, most of DPR's functions cut across organizational units. Unit-based budgeting makes it difficult to know the costs associated with each function. In 2004, DPR adopted activity-based accounting that focuses on the costs and performance of specific program functions rather than those of each organizational unit. Each program function represents a group of underlying activities, which may be performed by units in one or more branches. The information provided by functional accounting allows DPR to refine its budget and fees to accurately recover costs associated with specific activities.

Functional accounting is linked to DPR's operational plan. The plan describes activities DPR plans to complete during the fiscal year, with performance measures for each function. DPR's operational plans and performance measures are posted on our Web site, as are the functional accounting year-end reports. This allows stakeholders to review specific goals, costs associated with them, and whether goals are being met.

# FUNDING



# EXPENDITURES



**Total expenditures: \$94.237 million**

\* Fiscal year 2016-17 total funding. Sums differ due to rounding.

# MAJOR BUSINESS FUNCTIONS AND KEY ACTIVITIES

## 14% Product Registration

A pesticide must be registered (licensed) with the state before it can be sold or used in California. Pesticide registration includes the scientific, legal, and administrative evaluation process of a pesticide product before its registration. This process includes: tracking submissions, certain technical and scientific evaluation, processing labels, preparing public notices, corresponding with registrants, overseeing data call-ins, maintaining label files and the pesticide data library, and providing information on registered pesticides and label instructions to pesticide enforcement agencies and the public.

## 5% Human Health & Environmental Assessments

Risk assessment includes hazard identification, dose-response assessment, exposure assessment, and preparation of a risk characterization document that assesses potential dietary, workplace, residential, and ambient air exposures. Also included are: activities regarding toxic air contaminants (TACs), coordinating with other agencies and scientific reviewers on risk assessment documents, preparing the environmental fate element of risk assessments, and prioritization of pesticides for risk assessment.

## 3% Licensing and Certification

Through licensing and certification, DPR ensures that people selling, possessing, storing, handling, applying, or recommending the use of pesticides are competent and knowledgeable in their safe use. DPR conducts exams; issues and renews licenses for commercial pest control applicators, aerial applicators, pesticide dealers' designated agents, and pest control advisers; and certifies pesticide applicators that use or supervise the use of restricted pesticides. This function also includes reviewing and accrediting continuing education courses. DPR also licenses pest control businesses, maintenance gardener pest control businesses, pesticide brokers, and pest control dealers.

## 2% Pesticide Use Reporting

In California, all agricultural pesticide use must be reported, as well as commercial applications to structures, landscapes and turf. The main exceptions to full use reporting are home-and-garden applications, and most industrial and institutional uses. Pesticide users submit reports to their local county agricultural commissioner (CAC) who, in turn, submits the data to DPR, which compiles and analyzes the data, and makes it available online.

## 16% Monitoring/Surveillance

State law requires DPR to continuously evaluate pesticides after they are in use to protect the public and the environment. Through monitoring and surveillance, DPR analyzes hazards and develops pollution prevention strategies. Activities include air, ground water, and surface water monitoring;

investigation and evaluation of pesticide illnesses; and testing of fresh produce. Other activities include special monitoring projects and developing pesticide analytical methods. Exposure monitoring includes conducting studies to collect data on potential exposure patterns and to assess regulatory requirements. When products are proposed for formal reevaluation, activities include reviewing evidence that supports initiation of reevaluation.

## **5% Mitigation of Human Health Risks**

DPR uses scientific data to develop measures to reduce human exposure to pesticides that have unacceptable risks. This may include exposures in air, the workplace, and in food and water. Activities include reviewing data to assess worker health impact of pesticide use and developing mitigation strategies. Mitigation measures may include label changes, placing conditions on registration (for example, restricting use to situations with no exposure concerns), and preparing health and safety recommendations for incorporation into regulations, and permit conditions. For products under formal reevaluation, activities include determining health risks and identifying methods to reduce or eliminate these risks.

## **7% Mitigation of Environmental Hazards**

Mitigation of environmental hazards involves using scientific data to develop measures to protect the environment from the potentially adverse effects of pesticides. This includes developing mitigation strategies to protect air, ground water, surface water, endangered species, and desirable (non-target) plants. Mitigation measures may include proposed label changes, placing conditions on registration, regulations, and permit conditions. For products under formal reevaluation, activities include determining environmental risks and identifying methods to reduce or eliminate these risks.

## **5% Pest Management**

These programs assess the impacts and potential problems resulting from pesticide use, focusing on preventive solutions that incorporate integrated pest management (IPM). Activities include facilitating adoption of IPM in schools, awarding grants to encourage development and use of alternatives to pesticides, and the IPM Innovator Awards program. Other activities include technical/scientific resource services, such as evaluating pest management practices that prevent environmental and human health problems and working with industry to implement these practices.

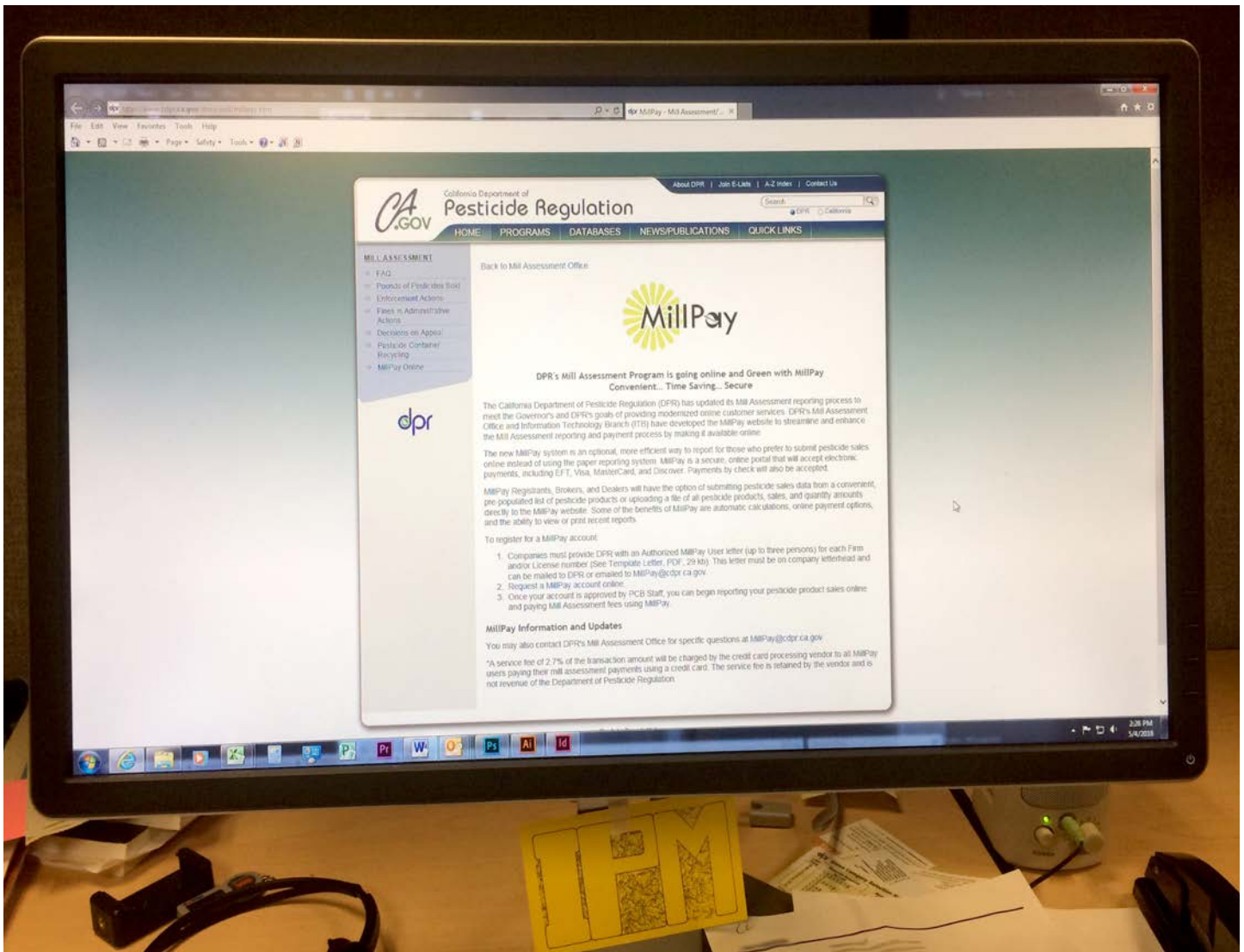
## **40% Enforcement and Compliance**

Local enforcement of pesticide use is largely carried out by CACs and their staffs. DPR headquarters personnel, with field staff in Anaheim, Fresno, and Sacramento, provide the CACs with training, coordination, and technical and legal support. Oversight includes: developing statewide enforcement priorities and guidance, evaluating CAC performance under annual work plans, and researching and analyzing compliance trends. Activities also include pesticide misuse investigations and issuing enforcement actions.



## 3% Product Compliance and Mill Assessment

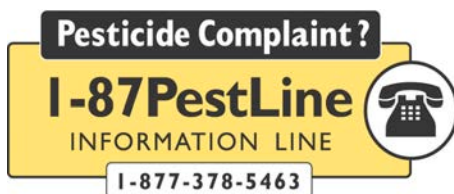
The mill assessment and product compliance program ensures products are registered before sale and use, that they are labeled correctly, and that required fees have been paid. Activities include: inspecting products offered for sale, reviewing labels to ensure they are registered, auditing pesticide sellers to ensure they are paying sufficient assessments on their sales, and initiating enforcement actions against sellers in violation of requirements. Also, overseeing disbursement of the required percentage of mill revenues to CACs, and evaluating trends in the value of the mill.





## THE COUNTY AGRICULTURAL COMMISSIONERS

California's 55 county agricultural commissioners (CACs) play a critical role in enforcing state and federal pesticide laws and regulations. A unique DPR/County partnership, established by the California Legislature, requires CACs to enforce laws and regulations at the county level. CAC staff inspect the work of growers, applicators, farm labor contractors and others who may handle pesticides. They also issue restricted-materials permits, investigate pesticide exposure incidents and complaints, and hold trainings and outreach for growers. More than 400 biologists work under the CACs to carry out their mission. CACs receive pesticide enforcement funding from DPR and their county governments. Other CAC funding comes from grants, fees, fines and the California Department of Food and Agriculture (CDFA). DPR and CDFA meet monthly with commissioners and their staffs.





**STATE OF CALIFORNIA**

**Edmund G. Brown Jr.**  
Governor

**Matthew Rodriquez**  
Secretary  
California Environmental Protection Agency

**Brian Leahy**  
Director  
Department of Pesticide Regulation

1001 I Street, P.O. Box 4015  
Sacramento, CA 95812-4015  
[www.cdpr.ca.gov](http://www.cdpr.ca.gov)

**Accounting Office:** (916) 323-3885

**Budget Office:** (916) 445-1522

**Business Services Office:** (916) 445-4177

**Enforcement Branch:** (916) 324-4100

• Northern Regional Office: (916) 376-8960

• Central Regional Office: (559) 297-3511

• Southern Regional Office: (714) 279-7690

**Environmental Monitoring Branch:** (916) 324-4039

**Executive Office:** (916) 445-4300

**Human Health Assessment Branch:** (916) 445-4233

**Human Resources Branch:** (916) 322-4553

**Information Technology Branch:** (916) 445-2992

**Legal Office:** (916) 324-2666

**Legislation & Policy Office:** (916) 445-3976

**Licensing and Certification Office:** (916) 445-4038

**Media and Communications:** (916) 445-3974

**Pest Management and Licensing Branch:** (916) 445-3914

**Pesticide Registration Branch:** (916) 445-4400

**Regulations Office:** (916) 445-4300

**Worker Health and Safety Branch:** (916) 445-4222

# dpr California Department of Pesticide Regulation

LOCA  
THE WINES OF  
LODI CALIFORNIA

PEIRANO  
ESTATE VINEYARDS

CENTURY OAK  
WINERY

WOODBRIDGE  
WINERY

MACCHIA  
WINERY

DANCING COYOTE  
WINES

LANE TWIN  
WINERY

HERITAGE OAK  
WINERY

LODI VINTNERS  
WINERY

VIAGGIO

OAK FARM  
WINES

ACQUIESCE  
WINERY



Facebook:

[www.facebook.com/CaPesticideRegulation/](http://www.facebook.com/CaPesticideRegulation/)



LinkedIn:

[www.linkedin.com/company/california-department-of-pesticide-regulation](http://www.linkedin.com/company/california-department-of-pesticide-regulation)



Twitter:

[twitter.com/CA\\_Pesticides](https://twitter.com/CA_Pesticides)



YouTube:

[www.youtube.com/user/CaliforniaPesticides](http://www.youtube.com/user/CaliforniaPesticides)