



Environmental Justice Program Update

Department of Pesticide Regulation

The Department of Pesticide Regulation (DPR) works with government agencies, communities, advocacy groups, regulated industries, and other parties to ensure environmental justice. DPR works to incorporate EJ into programs, goals, and activities, including:

- Ensuring DPR's programs, policies, and activities focus on those communities most impacted by pesticides. Ensuring that outreach materials are made available to the public;
- Ensuring that DPR provides outreach to environmental justice communities by providing them with accessible and meaningful opportunities to learn about DPR's programs and to provide input; and
- Maintaining transparency and effectiveness in public participation through the use of advisory committees, workshops, and other forums.

DPR has taken steps to ensure meaningful public participation, to strengthen field enforcement, and make its decision-making more transparent and understandable. Significant strides have also been taken to reduce health and environmental risk and conduct outreach to workers and others that may be impacted by pesticide use. Below is a summary of the environmental justice challenges and accomplishments DPR faced from 2013-2015.

Challenges

- Outreach to rural communities is often accomplished face-to-face, at the local level. Scheduling staff resources appropriately and providing event support is a challenge, but has helped us to reach out to California's rural communities.
- DPR recognizes the need for more user-friendly graphic formats and language accessible brochures. DPR is in the process of converting many of its outreach materials to mobile-friendly formats.
- The need for safety information in Hmong language for farmers and farmworkers continues to increase and staff is working to build on its English-Hmong directory of "commonly used terms."

Accomplishments

Schools

- **School Pesticide Workshops:** Beginning in May 2015, DPR held statewide workshops to seek public input on agricultural pesticides used around schools. Many schools have been built on prime agricultural land next to farm operations. Increasingly, teachers, parents and the general public want to know what chemicals are being applied around them. Input was solicited regarding "improving communication through notification to schools of intended applications of certain pesticides," and "reducing the risk of exposure by requiring additional restrictions on certain pesticides." Workshops were held in Sacramento, Salinas, Ventura, Oxnard, Lamont and Coachella. DPR will use the input from the workshops to develop regulations that will help mitigate the challenges created by schools being placed close to working farms.
- **Healthy Schools Act Amendments:** Reducing pesticides in schools has been part of DPR's mission for the past 10 years. To expand on current training opportunities, DPR created the Integrated Pest Management for Schools video series, which can be watched on the DPR



YouTube channel in English and Spanish. Recent amendments to the Healthy Schools Act prompted DPR to expand outreach and training efforts to promote the use of integrated pest management at California public schools and child care centers. DPR created an easy-to-use template that schools and child care centers can use to develop an integrated pest management (IPM) plan. A pesticide use reporting form was reformatted so that when completed by schools and child care centers, they will meet the recordkeeping and reporting requirements of the Healthy Schools Act. In 2016, DPR launched new online training, which are free for pest management professionals, school and child care center staff, and anyone else who may use a pesticide at schools and child care centers.

Fumigants

- **Enhanced Pesticide Protection for Chloropicrin:** In January 2015, DPR announced new rules for the use of the pesticide chloropicrin, providing enhanced protections for people who work and live near fields treated with the fumigant. The fumigant is used in many counties including Ventura, Monterey, Santa Barbara, Santa Cruz, San Joaquin, and Fresno. Overall, the new restrictions are more protective than those at the federal level which went into effect in 2012. DPR devised these restrictions after extensive public outreach and comment in 2013. The new measures include larger buffer zones, minimum buffer zones, limiting acreage, notification and notice of intent requirements. DPR will require that growers provide the local county agricultural commissioner details of the upcoming fumigation at least 48 hours before the scheduled application.

Pesticide Safety

- **Mixteco, Zapoteco language outreach videos:** Working with U.S. EPA Region 9, DPR translated 5 Spanish outreach videos into indigenous languages. The videos are being distributed in DVD format and are available for download on the DPR YouTube channel. The videos are also being used in training workshops with DPR and U.S. EPA Region 9.
- **Toll-Free Pest Line:** Outreach wallet cards were distributed to farmworkers with information for contacting the County Agricultural Commissioner, 1-877-378-5463 (1-87-PestLine) and Poison Control, 1-800-222-1222. These toll-free lines are in wide distribution and included on fact sheets, community guides, and DPR's website. Between May 2013 and May 2015, 10,000 Spanish cards and approximately 3,000 English cards were requested and mailed out from DPR Headquarters. During this time, an



Fieldworker Instructor Training Workshops

In 2014, DPR contracted with the University of California Statewide Integrated Pest Management program to conduct pesticide safety training for trainers of fieldworkers. Recently, the UC IPM program re-established the Pesticide Safety Education Program. The contract focuses on two proposed program areas designed to further enhance this mission: continuing education programs and worker health and safety modules for fieldworker trainers. The goals of the proposed programs are to promote a reduction in off-site movement of pesticides, reduce the risk of pesticide exposure to workers (pesticide handlers and fieldworkers), and promote improved compliance with pesticide laws and regulations. 56 trainers attended workshops in 2015. In 2016, two additional workshops will be held in Monterey County.

additional 8,000 Spanish cards were handed out by staff at outreach events statewide.

- **Spanish Radio Ads:** In 2013, DPR produced and broadcast Spanish radio ads to publicize the PestLine and Poison Control hotline. DPR contracted with Spanish language radio stations providing the best area coverage in the counties of Monterey, San Luis Obispo, Santa Barbara, Santa Cruz, Siskiyou and Ventura. In all, 15 stations broadcast the Spanish PSA's for a total of 3,300 broadcasts. In August and September 2014, DPR contracted with 12 stations in Imperial, Riverside, San Diego, Los Angeles, Orange and San Bernardino Counties to air a total of 1,380 PSA broadcasts. The PSA's played during morning and evening peak hours, and some stations included news media interviews with DPR outreach staff.
- **Worker Health and Safety Outreach:** Each year, DPR staff takes part in community meetings, health conferences, and other events to educate and promote pesticide safety for workers and their families. Staff also promotes pesticide safety in guest appearances on Spanish-language media outlets in the Central Valley, Central Coast, Bay Area, Sacramento Valley, and Imperial Valley. In 2013 -2015, staff participated in over 200 outreach events focused on workers and families.

Grants

- **Alliance Grants:** DPR awarded approximately \$1.08 million for six Alliance Grant projects from 2012-2014. Some of the projects gathered data and conducted research to better serve EJ communities, and they helped build a good knowledge base for sound integrated pest management decision making in underserved communities. DPR continues to work with the following grants projects: *Field Edge Plantings for Pesticide Reduction and Enhanced Biodiversity on Farmlands, Facilitation of the Anaerobic Soil Disinfestation Pre-Plant Soil Treatment, Developing an IPM Program to Reduce the Exposure to Pesticides for Young Children in Family Child Care Homes in California, and IPM Focus on Multi-Unit Housing.*
- **Research Grants to Reduce Risks Associated with Pesticide Exposure:** The 2012-13 California State budget authorized DPR's new Pest Management Research Grants Program. This program provided \$1 million in 2012-2013 and 2013-2014, and \$500,000 annually in subsequent years, for research grants that help develop practices that reduce the use of high-risk pesticides and the risk of unanticipated effects on public health and the environment. Priority research topics include field agricultural fumigants and organophosphate insecticides. Grant proposals must contribute to an integrated pest management system, reducing risks associated with the use of pesticides. The Legislature augmented the Research Grants Program budget with \$600,000 annually for three years beginning in 2014-2015, and they directed that the funds be spent on developing alternatives to agricultural field fumigants. The 2014-2015 grant projects included:
 - "Optimizing Solarization-Based Technologies as Sustainable Alternatives to Soil Fumigation" UC Regents Division of Agriculture and Natural Resources (\$299,992).



Spanish Television Ads

In fall 2013, DPR contracted with Spanish TV network Vme (public television) to broadcast 5 Spanish-language pesticide safety videos. The videos aired in approximately 16 counties in northern California, and publicized the toll-free PestLine and Poison Control hotline. In 2015, the ads were broadcast on Valley Public Television, the Spanish-language Fresno Vme affiliate.

- “Development of a Mobile Steam Applicator to Replace Fumigants for Strawberry” UC Davis (\$294,612).
- “Improving Efficacy of Biologically Mediated Soilborne Disease Management in Strawberry by the Use of Reduced Rate Fumigations” The California Strawberry Commission (\$298,472).
- “Determining the Impacts of Plant-Parasitic Nematodes and Soil Fumigation on Pistachio Growth” UC Cooperative Extension, Merced (\$74,384).
- “Managing Nematode Parasitism and Prunus Replant Disease with Spot Fumigation and Rootstocks” UC Cooperative Extension, Merced (\$108,433).

Compliance and Enforcement

- **Pesticide Residue Monitoring:** In 2013, DPR discovered cactus pads, or “nopales,” imported from Mexico, that were tainted with an organophosphate-based pesticide. This had the potential to sicken people. DPR also worked diligently to remove the entire product from store shelves and distribution centers. In addition, DPR asked the U.S. Food and Drug Administration to inspect produce at the borders and points of entry to stop shipments into California. In May 2014, DPR and CalEPA Assistant Secretary for Border Affairs met with Max Cervantes of Secretaria de Agricultura, Ganaderia, Desarrollo Rural, Pesca Y Alimentacion and other health department officials from Mexico to discuss food safety issues related to pesticide residues. In October 2014, DPR made a presentation on the Pesticide Residue Monitoring Program to approximately 160 Mexican fruit and vegetable growers at workshops in Mexicali and Ensenada, Mexico.
- **Spray Safe:** In 2013-2015, DPR participated with several Spray Safe events for farmworkers, applicators, pest control advisors, growers CAC staff and others. Spray Safe is a forum that brings together stakeholders, with the goal of increasing communication and safety regarding pesticides. DPR Enforcement staff attended events in Modesto, Yuba City, Bakersfield, Stockton, Ventura, and Santa Barbara.
- **Breaking Barriers:** Since 2009, DPR’s Enforcement and Worker Health and Safety branches, in conjunction with U.S. EPA Region 9, have provided one-day “Breaking Barriers” training sessions in various locations throughout California to assist non-Spanish speaking inspectors who work with Spanish speaking field workers and applicators. The course is targeted towards County Agricultural Commissioner inspectors currently conducting fieldworker safety inspections and agricultural pesticide monitoring inspections (such as pesticide use, field fumigation, and commodity fumigation).

Environmental Monitoring

- **Air Monitoring:** DPR established an air monitoring network in February 2011 in Kern, Monterey and San Joaquin counties to expand its knowledge of the potential health risks of long-term exposure to pesticides. The network is the first of its kind in the nation. The latest results of 32 pesticide and five breakdown products monitored in 2014 show that 23 were detected in at least one sample, but only one had results that require further consideration. The data from the Kern site showed that for the four years of monitoring, the cancer-causing pesticide 1,3-dichloropropene was detected at a level that, if continued for 70 years, would exceed DPR’s regulatory target for cancer risk. DPR is conducting more detailed evaluations of 1,3-dichloropropene, and has also taken further actions to reduce its exposures.



Goals

Preventing Exposure

- **Chlorpyrifos:** In 2015, DPR designated chlorpyrifos, when used in the production of an agricultural commodity, a California restricted material. Chlorpyrifos belongs to a class of chemicals known as organophosphates that can adversely affect the nervous system and has been linked to long-term neurological effects. By designating this chemical as a California restricted material, it can only be used under a permit issued by the County Agricultural Commissioner who can impose additional restrictions as may be necessary to protect public health or the environment. Providing this effective mechanism to further regulate the use of this chemical will provide a benefit to public health, worker safety, and the environment by reducing the potential for unintended exposures.
- **Reducing Pesticides Around Schools:** Beginning in May 2015, DPR held statewide workshops to seek public input on agricultural pesticides used around schools. DPR will use the input from the workshops to develop regulations that will help mitigate the challenges created by schools being placed close to working farms.

Nonfumigants

- **Volatile Organic Compounds Regulations in the San Joaquin Valley:** Following the earlier adoption of regulations restricting the use of fumigant pesticides, these regulations will restrict the use of certain nonfumigants in the San Joaquin Valley ozone nonattainment area. The regulations will reduce volatile organic compound (VOC) emissions from pesticides to meet the state's obligation under the state implementation plan to achieve and maintain federal ambient air quality standards for ozone. The San Joaquin Valley has been identified by various reports as an area of environmental justice concern. Based on regulations adopted in 2013, DPR implemented additional restrictions to reduce emissions from nonfumigant pesticides. These restrictions prohibit certain uses of high-VOC products containing abamectin, chlorpyrifos, gibberellins, or oxyfluorfen when used in the San Joaquin Valley ozone nonattainment area. The prohibitions on the high-VOC pesticides were in effect May 1, 2015 through October 31, 2015, and will continue May through October 2016.

Research

- **Alternatives to Fumigants:** DPR will award additional grants to support research into alternatives to fumigants, and will continue its support for the Strawberry Research Partnership with the California Strawberry Commission.

Outreach

- **Worker Health and Farmworker and Promotora Outreach Events:** DPR will provide outreach materials and staff booths at Promotora and farm worker health and safety events in farmworker communities around the state.
- **Consumer and Bilingual Outreach:** DPR will be developing outreach materials for restaurant workers with safety information on using antimicrobial cleaning solutions. DPR continues to publish bilingual brochures, video, and website information to reach underserved constituents.