Regulating Pesticide Use in San Luis Obispo County

The Department of Agriculture/ Weights and Measures has many duties and responsibilities. One of our most critical roles is acting as the lead agency regulating pesticide use at the local level. It is a key part of our mission and our efforts are designed to protect people, the environment, and the food supply by ensuring the safe and effective use of pesticides within the county.

Pesticide is a broad term, and includes everything from insecticides and herbicides to fungicides, miticides, rodenticides, and even antimicrobial products designed to kill microorganisms such as bacteria and viruses. In our regulatory role, we oversee a wide variety of application types in a diversity of settings. Some of these regulatory activities are obvious, such as our oversight of the pesticides used by local growers and pest control businesses to protect the abundance of crops produced on the Central Coast, but there are other uses that may not be as evident, such as the pesticides that are applied by structural pest control businesses and landscape maintenance gardeners in urban and suburban settings, antimicrobials used by custodial staff, and even home use pesticides. Although our clear focus is on monitoring the use of pesticides in agricultural settings and by pest control companies, we are sometimes called upon to investigate potential pesticide misuse even in a home setting.

We have a team of a dozen inspectors tasked with ensuring that local growers and businesses are in compliance with an extensive list of pertinent federal and state laws and regulations. California has the most robust pesticide regulatory framework in the nation, and we are unique in that each county has agricultural inspectors, well versed in both the local agricultural industry and familiar with local growers and businesses, that conduct regulatory actions. Other states rely upon statewide inspectors who may have to travel hours to reach a particular field and may be completely unfamiliar with a region upon arrival.

Beyond the local knowledge of our inspectors, California's pesticide regulatory system is unique in requiring a permitting system for growers and businesses. Each grower who intends to use pesticides in the production of a commercial crop must obtain a permit or have an Operator Identification Number issued by our department ahead of time. Similarly, pest control businesses working in the county must be licensed by the state and registered with the county prior to conducting work. That process enables us to educate growers, applicators, and pest control business staff on the

Pesticide Use Enforcement Program Mission Statement:

" To protect people, the environment, and the food supply by ensuring the safe use of pesticides in San Luis Obispo County."

applicable pesticide rules prior to making any applications.

Our outreach efforts extend far beyond the permitting process, as we conduct trainings and workshops and provide frequent presentations at grower meetings and other events in a concerted effort to educate local growers and businesses. We strive to provide all of the information that may be needed to maintain compliance with the current pesticide laws and regulations, and our outreach efforts are designed to ensure that every pesticide applicator has the knowledge needed to meet California's stringent regulatory requirements.

Our inspectors have diverse backgrounds in chemistry, biology, entomology, soil science, and agriculture. Although we are not toxicology experts, we work closely with our partners at the state level at the California Department of Pesticide Regulation (CDPR) who have numerous experts in those areas. CDPR has a dedicated staff of toxicologists, chemists, industrial hygienists, and environmental scientists that can help us answer questions and formulate correct approaches to items that may fall outside of our typical area of expertise.

As part of our regulatory role, we cover a wide range of activities: permitting, conducting inspections to ensure that growers are applying the correct pesticides at the correct rates in the correct manner, and ensuring whatever pesticides are used are reported as required. We also help ensure that employees are working safely by checking to see if they have been provided with the required training, provided the necessary personal protective equipment, and are using equipment that is well maintained and safe to operate. We conduct similar inspections for fieldworkers, ensuring that they have received proper training regarding the potential hazards of pesticides and that they have been properly informed regarding the safety of working in a particular field.

Our staff also conduct investigations of pesticide incidents, whether that's a situation where a worker experienced a pesticide illness or exposure, or a neighbor was concerned about the manner in which a pesticide application was taking place, or even just a general concern regarding pesticide use

from a member of the public. During the course of our inspections and investigations, if violations are found, we document each violation and ensure that those issues are corrected. If warranted, enforcement actions, such as fines, are taken to deter such violations from occurring in the future.

Although it is not our role to advise growers specifically on what pesticides should be used, California's overall pesticide regulatory system encourages and emphasizes an Integrated Pest Management (IPM) approach. The goals of IPM are rather simple – to use the best tools and information available to apply the least amount of pesticides in the most judicious manner possible while ensuring pest damage does not exceed acceptable levels – but in practice, IPM can be incredibly complicated because there are so many factors that go into growing crops and the control of certain pests. In our accompanying feature sections, we have highlighted a few local businesses, organizations, and growers who have made great strides in implementing IPM practices into their daily effort to produce the abundance of crops that San Luis Obispo County provides, and to protect local residents and citizens from the harmful effects of certain pests.

We want to thank our Pesticide Use Enforcement staff for all of their dedication and hard work to help keep the citizens of San Luis Obispo County safe. We understand that there is a diversity of opinions about the use of pesticides, and our role is to ensure that when pesticides are used, that they are used properly, legally, and most importantly safely so that we can all continue to thrive and prosper. California has one of the most robust pesticide regulatory frameworks in the world. We are grateful for the efforts of our local growers and pest control business to meet California's high standards, and we are proud of our role in maintaining a healthy environment for all of our county's citizens.

Pesticide Use Permits Issued	Total
Restricted Material Agricultural	483
Restricted Material Non-Agricultural	23
Operator Identification Numbers	425

Notices of Intent	Total
Notices of Intent Received	392

Investigations	Total
Investigations Completed	27

Pesticide Use Inspections	Total
Agricultural Use	218
Pre-application	218
Structural Use	57
Grower Headquarters	33
Fieldworker Safety	21
Pest Control Business Headquarters	6
Commodity Fumigations	1
Total	**554**

Enforcement Responses	Total
Notices of Violation	61
Decision Reports	22
Compliance Interviews	11
Agricultual Civil Penalties	8
Cease and Desist Orders	6
Structural Civil Penalties	2

2022 Integrated Pest Management (IPM) Achievement Awards

Two SLO County organizations - Vineyard Team and the Cal Poly Strawberry Center - received the California Department of Pesticide Regulation's 2022 IPM Achievement Award.

What is IPM?

"... an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment."

-- The University of California Statewide IPM Program

VINEYARD TEAM
Promoting Sustainable Winegrowing

Vineyard Team (VT) was established in 1994 with a mission to "identify and promote the most environmentally safe, viticulturally and economically sustainable farming methods while maintaining or improving the quality and flavor of wine grapes."

SIP CERTIFIED Sustainability in Practice

CDPR's 2022 IPM Achievement Award highlights the organization's success with its Sustainability in Practice (SIP) Certified® program, research and demonstration projects, educational outreach, and annual Sustainable Ag Expo.

VT's commitment to science-based information about sustainable practices in all aspects of the business has driven the SIP Certified Program since 2008. Certified vineyards and wineries adhere to strict standards for conservation and enhancement of biological diversity, pest management, and social equity, to name just a few. They must keep detailed documentation and are inspected annually.

Erin Amaral is Vineyard Manager & Partner with Pacific Coast Farming, VT member, and a former President of the VT Board of Directors. Pacific Coast Farming manages approximately 1,400 acres of wine grapes between Lompoc and Paso Robles, with a majority being SIP Certified. Erin is collaborating with grape growers in Edna Valley and the UC Cooperative Extension to identify vine mealybug hot spots. Once identified, they're able to use a number of IPM techniques to control the pest: targeted insecticide applications, pheromone mating disruption, and targeted release of natural enemies via drone.

Photo: Pacific Coast Farming

"For nearly 30 years, Vineyard Team has brought together researchers and growers to help the industry learn about the latest field-tested sustainable practices. We are proud to work in a community that seeks to learn and improve." -- VT Executive Director, Beth Vukmanic

CAL POLY

CDPR recognized The Cal Poly Strawberry Center (CPSC) with an IPM Achievement Award for its research on alternatives to traditional pesticides, such as increased quality of commercial beneficial predatory mites and improvements to a lygus bug vacuum, and for "training the next generation of IPM ambassadors in the strawberry industry."

CPSC is a collaboration between the California Strawberry Commission and Cal Poly San Luis Obispo. Its mission is to "increase the sustainability of the California strawberry industry through research and education that addresses industry needs", with a focus on plant pathology, entomology, and labor automation.

Gerald Holmes, Ph.D., CPSC Director, works with faculty, staff, and students to achieve the Center's mission and says that it's an honor for the Center to be recognized. The Center worked with approximately 42 graduate and undergraduate students in 2022, whose majors include studies in Agricultural Science, Business, Engineering, Education, Plant Science, and Environmental Horticulture. Students apply what they learn in class to solving problems in the field and laboratory at the Center.

Holmes described how, under the guidance of faculty and staff, BioResource and Agricultural Engineering students worked to improve upon existing technology to create a lygus bug vacuum that sucks up more than twice as many insects.

Holmes also praised the pathology resistance screening project as a necessary and very impactful contribution to growing strawberries more sustainably. The strawberry industry needs varieties with resistance to a multitude of diseases that affect them to reduce pesticide use.

Photo: Jack Wells

CPSC is helping to send bright, experienced, data driven Cal Poly graduates out into all sectors of agriculture with an eye on sustainable pest control.