



**DEPARTMENT OF AGRICULTURE**

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**Merced Agricultural Commissioner**  
**Pesticide Use Enforcement**  
**Multiyear Work Plan**  
**2013 - 2015**

The Merced County Agricultural Commissioner's Office (CAC) is responsible for a comprehensive pesticide regulatory program at the county level, to assure the safe, efficient and legal use and storage of pesticides. The program assures the legal practices and compliance relating to the production of agricultural commodities and safe handling of pesticides by users.

Pesticide regulatory activities include: field monitoring and inspections of pesticide use, pesticide application equipment inspections, investigation of incidents related to pesticide use, pesticide record compliance audits, field worker safety inspections, issuance of pesticide permits for restricted materials, issuance of operator identification numbers (non-restricted pesticides), registration of: maintenance gardeners, pest control businesses, pest control advisors, pilots, farm labor contractors; compilation of pesticide use reports; pesticide storage site inspections; employer safety record inspections for employees and educational presentations.

The goal of these various aspects of the pesticide regulatory program is to assure that those using pesticides understand and are in compliance with the many applicable laws and regulations.

It is the intent of the CAC to implement the following Pesticide Enforcement Work Plan during the 2013 through 2015 calendar years. Specific performance goals and program activities are listed for each of the following functional areas in the work plan:

- I. Pesticide Use Enforcement Programs Resources
- II. Local Conditions
- III. Restricted Materials Permitting
- IV. Compliance Monitoring
- V. Enforcement Response

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**I. Pesticide Use Enforcement Programs Resources**

**Anticipated Staff Allocation for 2013 - 2015**

- 1 – County Agricultural Commissioner
- 1 – Assistant Agricultural Commissioner
- 2 – Deputy Agricultural Commissioners
- 13 – Agricultural Biologists
- 3 – Typist Clerks
- 1 – Office Supervisor

**Pesticide Use Enforcement Program Assets**

Merced County Agricultural Commissioner's Office (MCAC) has two offices. The main office in Merced has ten agricultural biologist and four clerical staff assigned to it. The district office in Los Banos has three agricultural biologists and one half time clerical staff assigned to it.

Each agricultural biologist whose primary assignment is PUE has an assigned vehicle. In addition, PUE staff has been provided with digital cameras and thermo-anemometers. In order to verify buffer zones, one laser rangefinder is available in each office.

Agricultural biologists have computers at their desks providing full access to the restricted materials permit/operator identification number program. Also, each computer has broadband internet access allowing for quick access to pesticide related information.

Agricultural biologist staff has significant experience with the county. The range of experience ranges from 3 to 35 years. Median years of experience = 12.7 years.

All agricultural biologists work in the PUE program to one degree or another. Four agricultural biologists have PUE as their primary assignment. All biologist issue permits, conduct inspections, review notices of intent and use reports, and assist with investigations.

Our department has one designated bilingual agricultural biologist who is fluent in Spanish and one designated bilingual clerical who is fluent in Hmong.

The CalAgPermits program is used to issue Restricted Materials Permits. This program also allows permit holders to issue Notices of Intent (NOI) and Pesticide Use Reports (PUR) online.

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**II. Local Conditions**

**Sensitive Sites**

- Residences and occupied businesses near field fumigations
- Rural schools in the midst of agricultural operations
- Ag/Urban interface (mostly in the Los Banos area but an emerging issue with development associated with the new University of California campus)
- Pesticide applications to crops in proximity to waterways
- Sites with a history of neighbor complaints
- Endangered species habitats
- Sensitive crops (protection of organic production)
- Groundwater protection areas (357 sections in Merced County)

**Cropping Patterns**

Merced County produces over 200 commodities. All areas of the county are heterogeneous in planting patterns. For workload reasons, the county is divided into five pesticide use enforcement districts with the major crops as follows:

- District 1 (Merced – Atwater – Livingston – Delhi – Snelling)
  - Tree crops (almond, peach, pistachio, walnut, apricot); vine crops (grape, berries, kiwi); dairies and dairy support crops (silage corn, sudan grass, grain hay, alfalfa); poultry and egg production; rangeland (irrigated and non-irrigated); vegetable crops (sweet potato, tomato, strawberry, watermelons); nursery crop production.
  - Generally medium to large operations with considerable urban interface occurring around the perimeters of Merced, Atwater, Livingston and Delhi. Infrastructure and development of the area around the new University of California, Merced is also becoming an urban interface concern. Seasonal streams used during the summer to move irrigation water and the Merced River are significant environmental resources and are of special environmental concern. The west part of the district has primarily leaching sections of concern for groundwater protection.
- District 2 (Merced – Le Grand – El Nido – Planada)
  - Tree crops (almond, pistachio, fig, dried plum, walnut, pomegranate); vine crops (grape); dairy and dairy support crops (silage corn, grain hay, alfalfa); vegetable crops (tomato, radicchio, peppers, truck farming); nursery crop production; field crops (cotton, rice, grains); beef cattle; irrigated pasture and rangeland.
  - Generally small to medium size farms with significant urban interface issues due to areas of infrastructure and development near the new University of California, Merced. Seasonal creeks running through farmland are of special environmental concern. Much of this district has groundwater protection concerns (mainly run-off).

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- District 3 (Dos Palos – Los Banos)
  - Field crops (cotton, grain, rice, alfalfa, sugar beets, silage corn, dried beans); vegetable crops (tomato, cantaloupe, honeydew melon, onion); tree crops (almond); beef and sheep operations; irrigated pasture.
  - Mostly medium to very large farming operations. Significant urban interface issues. Expanding urbanization will be an issue for the foreseeable future (Los Banos). Only a small area in the north portion of the district with groundwater concerns from leaching. Environmental concerns are wildlife refuges, duck clubs, and significant endangered species habitat.
  
- District 4 (Los Banos – Santa Nella – Gustine)
  - Tree crops (almond, cherry, walnut, apricot, dried plum); vegetable crops (tomato, cantaloupe, lima bean); field crops (cotton, sugar beets, grains); dairy and dairy support crops (silage corn, grain hay, sudan grass, alfalfa); rangeland; wildlife areas (refuges, duck clubs).
  - Farm size runs from small to large. Significant urban interface issues (Los Banos). Expanding urbanization will be an issue for the foreseeable future. Wildlife refuges, state parks, and endangered species are the primary environmental concerns.
  
- District 5 (Merced – Atwater – Stevinson – Livingston – Hilmar – Delhi)
  - Dairy and dairy support crops (silage corn, grain hay, alfalfa, sudan grass); grapes(wine and raisin); almonds; peaches; blueberries; kiwi; walnuts; vegetable crops (sweet potato, watermelons, tomato, truck farms); poultry and egg production; field crops (grains, dried beans, sugar beets, cotton, ).
  - Mostly small to medium size farm operations. Emerging urban interface issues (Livingston, Atwater). Field fumigation buffer zones are a major concern near expanding rural residential areas. Environmental concerns are centered on the Merced River and wildlife refuges. Shallow surface water tables results in virtually the entire district designated for groundwater protection from leaching.

## **II. Restricted Materials Permitting**

### **Permit and Registration Process**

- Approximately 2,700 restricted material permits and 180 operator identification numbers (OINs) are active in Merced County. Restricted Materials Permits (RMPs) are issued on a multi-year and annual year basis. OIN's are effective on an annual basis only.
  
- Agricultural biologists on rotating office duty issue pesticide permits, operator identification numbers, and licensee registrations. For approximately four months (November through February) we operate on an appointment basis, with up to three agricultural biologists on duty at any one time.

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- Permit applicants are expected to come with updated site and vicinity maps, and anticipated pesticide needs. During the permit review process, site maps are reviewed for completeness; proposed restricted materials are compared to the commodities for any off-label concerns and necessity of use; sites are cross checked with groundwater protection area and endangered species maps for necessary permit conditioning; and, pesticide use reporting compliance for the previous year is checked.

- DPR suggested permit conditions have been incorporated into Merced County Agricultural Commissioner permit conditions along with several Merced County specific permit conditions. Each new permit and permit renewal is provided copies of applicable permit conditions and the permittee signs an acknowledgement that he/she has received copies.

- Private applicator certification is handled at the same time as permit issuance. If the private applicator needs to take the examination, it is administered and scored in advance of permit review and issuance. The private applicator re-certification test has been used since December of 2007. If renewal is by continuing education, the private applicator records are checked to verify completion of minimum requirements.

- Notices of intent (NOI's) to use restricted materials are reviewed in a timely manner. Staff knowledge and experience is invaluable in this step to know where potential problems exist and how to customize conditions for particular applications. Pre-application site inspections are performed when weekend duty staff is unfamiliar with the district or when district inspectors are not sure of surrounding areas. Pre-application site inspections are performed on nearly all field fumigation NOIs. A list of sensitive sites requiring special consideration has been developed and identified on a county map and is available to staff.

- Continuing education is a high priority in Merced County, both for our private applicators and licensees. During 2012, the department provided 18 hours of continuing education designed for private applicators in which 14 hours covered laws and regulations. Continuing education topics usually are directed towards new or upcoming regulations. In addition to C.E. classes, the department provides outreach to several public agencies and events concerning pesticide regulation and safety

- Growers are notified annually of new and expected regulation changes through mail and again at the time of permit issuance. At the time of permit issuance, growers are given a chance to discuss new regulations, or those that are unclear to them on a one on one basis with the biologist. Several informational handouts are available to them at this time.

**Goals to Improve the Permit Issuance Process**

- Accuracy of maps and identification of sensitive sites on the maps is an ongoing concern. As mentioned before, the experience of staff is invaluable when reviewing a notice of intent when

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the map may not be the best. However, we recognize that this knowledge may not always be available to the person doing the NOI review.

- Stress will continue to be placed on the evaluation and necessity of growers requesting the addition of restricted materials to their permits, and accuracy of information recorded on permits.

**Deliverables**

- In 2012, all of the restricted materials permits were reviewed in advance of the permit issuance season to allow permits with inadequate maps to be identified and the folder flagged to alert the permit-issuing biologist of any deficiencies. The permit issuance checklist utilized while reviewing permits will continue to be used to flag and correct any discrepancies or inadequacies in the permits, which will be, or have already been issued. During permit issuance, we will continue to spend more time on reviewing the maps for accuracy.

- We will also continue to pay close attention to pesticide applications to crops in proximity to waterways for compliance with regulations.

- A continuing supply shortage of 1, 3 dichloropropene, has created a need for new methods, and uses of alternative fumigants (mainly in sweet potatoes) previously fumigated with 1, 3 dichloropropene. Because of the newly introduced methods and uses, and the potential of off-site movement, applications of fumigants such as 1, 3 dichloropropene, metam sodium, metam potassium, chloropichrin, and methyl bromide will continue to be thoroughly reviewed, especially near occupied areas

- Merced County Permit Conditions are reviewed and updated prior to each permit season as conditions and requirements change. Significant changes to 2010 permit issuance include the requirement for metam potassium/metam sodium users to complete a DPR approved stewardship certification class, and the notification of amended regulations pertaining to: notice of applications, notification of completion of applications, application specific information, field entry after scheduled or completed applications, and requirements for early entry employees.

- In conjunction with the permit reminder letter, emphasis will be placed on the requirement for accurate and complete maps. Permits will be spot checked for accuracy of their maps and biologist will get immediate written feedback after issuing permits of any maps which are not complete, accurate, or clear. Permits will also be checked at this time for other discrepancies or deficiencies related to the permit issuance process.

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**III. Compliance Monitoring**

**Inspection Goals**

<u>Inspection Type</u>	2013	2014	2015
<b>Pesticide Use Monitoring</b>	<b>200</b>	<b>200</b>	<b>200</b>
<b>Mix/Load Inspections</b>	<b>40</b>	<b>40</b>	<b>40</b>
<b>Field Worker Safety Inspections</b>	<b>60</b>	<b>65</b>	<b>70</b>
<b>Commodity Fumigation Use Monitoring Inspections</b>	<b>20</b>	<b>20</b>	<b>20</b>
<b>Field Fumigation Inspection</b>	<b>40</b>	<b>40</b>	<b>40</b>
<b>Structural Fumigation Inspection</b>	<b>10</b>	<b>15</b>	<b>15</b>
<b>Structural Use Monitoring Inspections</b>	<b>25</b>	<b>25</b>	<b>25</b>
<b>Pest Control Headquarters Inspection</b>	<b>30</b>	<b>30</b>	<b>30</b>
<b>Pest Control Business Headquarters Inspection</b>	<b>30</b>	<b>40</b>	<b>40</b>

-Improve tracking and identification of non-compliances discovered during pesticide use enforcement inspections to comply with the enforcement response regulations in a timely manner.

**Investigation Response and Reporting Improvement**

- Significant emphasis has been placed on improving report writing in recent years. Reports are now much more thorough and professional. However, a few areas have been identified which could improve our investigations:

- Less experienced biologist and biologist not routinely conducting inspections, will continue to be trained and offered opportunities for training by DPR staff when available. An effort to assign investigations to other licensed staff on a limited basis will be made to lighten investigative burdens on PUE staff, and to offer PUE experience to staff whose primary responsibility are not PUE.

- Better illness and complaint tracking has been accomplished with an illness/complaint log. Emphasis will be placed on the higher priority investigations and efforts are made to complete them in a timely manner. A stronger emphasis will continue to be placed on completing investigations within the 120 day time frame described in DPR's Inspection Procedures Manual (Compendium Volume #5). There is also still a need to streamline the process to finalize the minor complaints. A form for minor complaints has been developed and will be utilized in 2013.

- Investigational samples. A locking freezer that is dedicated to storing investigational samples prior to shipment to CDFA's Center for Analytical Chemistry is available to only authorized

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staff. New staff and veteran staff need training in taking various types of samples. To accomplish this, training by the enforcement branch liaison will need to be provided. A new modular building was added in 2009. A space in this building is dedicated to the storage of PUE samples, and other equipment used for PUE activities.

- Improved planning during early stages of investigations. A sample plan form was developed and will be utilized for investigations. Staff will attend investigative, NOPA report writing, advocate and hearing officer trainings as offered by DPR. Advocate training offered by DPR would be beneficial to staff to help identify essential elements of potential violations and to assure that necessary evidence is obtained.

-Improve tracking and identification of non-compliances discovered during investigations to comply with the enforcement response regulations in a timely manner.

#### **IV. Enforcement Response**

- Agricultural biologist staff has received adequate training and has the experience in how to properly address noncompliances through appropriate compliance action. Staff will strive to complete compliance actions within acceptable time frames.

- A compliance history database was started several years ago, and all inspections, compliance actions, and civil penalty actions are being entered into the database. Compliance history reports are immediately available. This has streamlined the process of analyzing the enforcement options.

- We maintain a pesticide episode investigation log for those cases which will not be assigned a WH&S illness investigation number or a priority episode tracking number.

- We will continue to consider other enforcement options including denying restricted materials permits, licensee registrations, referral of cases to DPR, or consultation with the Merced County District Attorney for the most egregious cases.

- Biologist have begun preparing and writing “decision report packages,” which would contain draft decision reports, follow-up inspections, and/or compliance interviews. Decision reports written by biologist are then be reviewed by the Deputy and /or Assistant Commissioner.

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**Goal to Improve Enforcement Response**

Improve the timeliness of evaluating non-compliances to comply with the Enforcement Response Regulations (ERR). Staff is involved in the process of writing decision reports in order to meet the proposed 60 day review requirement.

**Deliverables**

- Continued training of agricultural biologists in the ERR and how to process noncompliances through the regulations to arrive at appropriate recommendations for Administrative Civil Penalty or compliance action. This can be accomplished through joint training provided by experienced staff and our enforcement branch liaison (EBL) on a one-on-one basis throughout the year. Once this training is provided, staff would be guided in the process of making recommendation for actions.
- More timely tracking of noncompliances and processing through the Pesticide Enforcement Response Regulation database has already been initiated. Regular consultation with staff to refine and strengthen this process will be implemented.
- Development of a letter informing inspected persons/businesses with noncompliances, of the Commissioners requirements and procedures under the ERR to evaluate and act on noncompliances when directed by regulation.

**County Priorities and Other Pesticide Regulatory Activities**

- Non-Fumigant VOC Regulation Compliance (San Joaquin Valley). When regulations are final: Work closely with DPR's Central Regional Office, DPR's Environmental Monitoring Branch and SJV Deputies to design and implement a region wide enforcement strategy. Prior to finalization of regulations: CAC staff plan to make an effort to educate the majority of pesticide dealers on an annual basis with on-site training and record inspections prior to the date new Non-Fumigant VOC regulations take effect. This will be accomplished by using several inspectors at each location performing records inspections of the dealer records, pest control business records/headquarter, and pest control advisor records
- Compliance with Soil Fumigant Phase II Labeling (December 1, 2012) Staff has attended all trainings offered by DPR and Federal EPA regarding field fumigant Phase II labeling. CAC staff will continue to review these regulations and attend any additional training associated with these changes to ensure compliance in our county to these new EPA requirements. CAC currently provides outreach at the beginning of each calendar year by meeting with the major pest control businesses that make the majority of these applications. During this outreach, recent USEPA and DPR regulation requirements are discussed and reviewed. In addition, permit condition requirements are reviewed along with their conflicts and resolutions with Federal and state-wide regulations. CAC staff

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will continue to review specific components of USEPA label Phase II requirements including fumigation management plans, emergency response preparedness, and buffer zone requirements. CAC staff will continue to assist applicators and (especially) growers by providing outreach and assistance interpreting the regulatory requirements for the use of these fumigants.

- Chloropicrin mitigation measures, when released by DPR will be evaluated with the strong intent to incorporate them into Merced County's Restricted Material Permitting Program. CAC staff will focus on outreach (as with other fumigants) to growers and applicators. An effort will be made to smoothly incorporate these mitigations measures and to address any conflicts between current regulations and these proposed measures.
- Reporting to DPR, complaints or report of loss related to bee kills associated with an alleged pesticide application(s). As of July 1, 2013, all substantiated or unsubstantiated complaints, reports of loss, or violations, will be reported directly to Department of Pesticide Regulations Central Regional Office.
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- Staff training: CAC staff will make a concerted effort to attend DPR sponsored training events and seminars to ensure staff are properly trained and apprised of current issues and changes. Staff who attend trainings will consult with non-attending CAC staff to relay any relevant information.
- Industry education and outreach: CAC staff endeavors to facilitate compliance by growers and industry by providing education and outreach opportunities regularly. When a request for education or outreach is sent to CAC, staff will make every attempt to fulfill these needs.
- CAC staff will continue to actively participate in the Merced County Hazardous Materials Response Plan and work closely with CalFire, Merced County Environmental Health, and other agencies. CAC staff will continue to attend monthly hazardous material meetings. On occasion, CAC staff will provide agricultural and pesticide use updates and/or assist to personnel obtaining relevant information to facilitate fast and appropriate responses to pesticide related emergencies.