

Drift Management: Policy & Enforcement

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Drift

- What is it?
- Legal Responsibilities
- Planning & Prevention
- Technical Resources



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What is Drift?

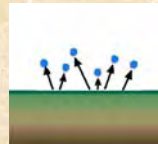


- Pesticide that moves through the air and is not deposited on the target area at the time of application.
- Substantial drift – the quantity of pesticide deposited outside the target area is greater than that which would have resulted had the applicator used **DUE CARE**.

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Off Site Movement

- Movement of pesticide and associated degradation compounds from the target area after the application.



- Translocation
- Volatilization
- Dust
- Soil particles with residue

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Legal Responsibilities

- FAC § 12972 – Prevent substantial drift to non-target areas.
- CCR § 6614 – Evaluate application prior to and while applying. **Stop application** if there is a reasonable possibility of contaminating:
 - » Persons
 - » Crops
 - » Animals
 - » Property

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Legal Responsibilities

- CCR § 6600 – Each person performing pest control:
 1. Use only pest control equipment which is in good repair and safe to operate.
 2. Perform all pest control in a careful and effective manner.
 3. Use only methods and equipment suitable to insure proper application of pesticides.
 4. Perform all pest control under climatic conditions suitable to insure proper application of pesticides.
 5. Exercise reasonable precautions to avoid contamination of the environment.

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Legal Responsibilities

- CCR § 6460 - Drift control (liquid dicamba, propanil, 2,4-D).
- CCR § 6462 – Propanil (rice vs. prunes).
- CCR § 6464 – Phenoxy et. al.
- CCR § 6466 – Paraquat.
- CCR § 6470 – Cotton harvest aids (defoliants).

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Legal Responsibilities

- Label statements FAC § 12973
 - Directional and precautionary statements
- Permit conditions
 - Buffer zones
 - Rate and acreage limits
 - Specific methods



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Aerial Application Permit Condition Monterey County

- No fixed wing within 1,000 ft urban residential areas
- No helicopter within 120 ft urban residential areas
 - Between 120 & 600 ft
 - Fly parallel to residences*
 - Ground person at site in two way communication

* Unless precluded by pilot safety concerns

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Legal Responsibilities

- FAC § 12997.5 Violators responsible for immediate payment of uncompensated medical costs for:
 - Non-occupational individual
 - Acute illness/injury
 - Violation identified



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Enforcement of Pesticide Laws & Regs

- Inconsistent enforcement from county to county
- High profile cases of exposure
- Attention of law makers – SB455 didn't pass, but had strong message from governor.

Together DPR and CACs developed the
Enforcement Response Policy **ERP**

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Enforcement Response Policy ERP

- Statewide consensus – need more or higher level penalties for flagrant or repeat violators
- Improve statewide consistency and enforcement integrity
- Provide guidance on how to
 1. Classify the type of violation and
 2. Consistently determine the appropriate action and use progressive enforcement response.

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Enforcement Response

- Two compliance actions (violations) within two years will result in a enforcement action.
- Fine on first offense for all “possible” health or environmental effects.
- Or the County Agricultural Commissioner must document a justification for not fining.
- The Department of Pesticide Regulation is auditing the County Agricultural Commissioners for compliance with the new policy.
- Policy being put in regulations – January 2007?

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Enforcement Responses

- Hazard or Effect Violations (HEV) – **Actual Hazard**
- Class A (serious) fines
 - Prompt response necessary to protect health, safety, environment
 - Violations of a lawful order of the CAC
 - Repeat violations of Class B violations
 - Fine Range CCR § 6130
 - **\$700-\$5000**

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Enforcement Responses

- Hazard or Effect Violations (HEV) – **Possible Effect**
- Class B (moderate) Fines
 - Prompt response necessary to protect health, safety, environment
 - Repeat Violations of Class C violations
 - Fine Range CCR § 6130
 - **\$250-\$1000**

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Enforcement Responses

- Unclassified Violations (UV) – **Still Significant**
- Class C (minor) Fines
 - Less of a need for a prompt response
 - Does not pose a threat to health, property or environment
 - Violations not included in Class A or Class B
 - Fine Range CCR § 6130
 - **\$50-\$400**

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Enforcement Responses

- Other penalties will be considered for the most flagrant violators.
 - Criminal Prosecution through the District Attorney’s Office.
 - Referral to the state agency for licensing or other statewide action.
 - Denial, suspension or revocation of permits or registration.

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Ag Civil Penalties (Fines) Monterey County

- Before Enforcement Response (Jan 2002-Aug 2005)
 - 23 NOPAs - \$30,400 in fines.
- After ERP (Aug. 2005 to Aug. 2006)
 - 34 NOPAs - \$33,400 in fines.
 - 2 cases were referred to the District Attorney’s Office.
 - One case settled for ≈ \$ 180,000.

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Administrative Hearing Process

- Testimony and evidence is presented in front of an impartial hearing officer appointed by the County Ag. Commissioner.
- The objective of the hearing is to give the violating person/business the opportunity to present testimony and evidence to refute the violations presented in the Notice of Proposed Action.

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Administrative Hearing Process

Accused have the right to Due Process of the Law

- May be represented by counsel;
- Is entitled to review the evidence;
- Is entitled to cross-examine witnesses on relevant matters;
- Is entitled to produce evidence in his/her behalf;
- Is entitled to an appeal;
- Any penalties or fines taken against the respondent must be based upon sufficient competent evidence contained in the record.



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Administrative Hearing Process

Notice of Proposed Decision

- Submitted by the Hearing Officer.
- CAC reviews and adopts the Proposed Decision.
- Respondent violator has the right to appeal decision.



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Prevention Through Planning

- Product
- Formulation
- Method
- Equipment
- Timing
- Buffer zones



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Prevention Through Planning

- Droplet size - # 1 Factor Influencing Drift

Droplet Diameter (microns)	Type of Droplet	Time required to fall 10 feet	Lateral distance traveled in a 3MPH wind
5	Fog	66 minutes	3 miles
20	Very Fine Spray	4.2 minutes	1,100 feet
100	Fine Spray	10 seconds	44 feet
240	Medium Spray	6 seconds	28 feet
400	Coarse Spray	2 seconds	8.5 feet
1000	Fine Rain	1 second	4.7 feet

One Micron = 1/25,000 inch

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Prevention Through Planning

- Odor masks
- Marking Dyes
- Drift control additives



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Prevention Through Planning



- Sensitive sites
 - Schools, hospitals
 - Residences
 - Industrial sites
 - Crops, roads
- Work Schedules
 - Your crews
 - Neighbors crews
- Bystanders

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Prevention Through Planning

- Evaluate, access & scrutinize
 - Before application
 - During application
- Use of flaggers & spotters
- Training the applicators



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Prevention Through Planning

- Meteorological factors
 - Wind
 - Temperature
 - Relative Humidity
 - Inversion layers



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Prevention Through Planning

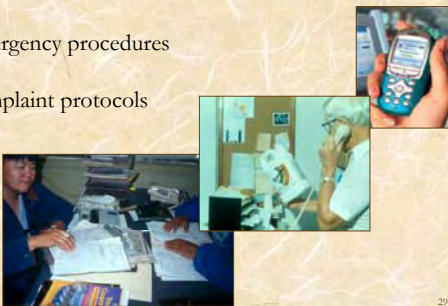
- Communication
 - Applicators
 - Fieldworkers
 - Employees
 - Neighbors
 - Community



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Prevention Through Planning

- Emergency procedures
- Complaint protocols



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Technical Resources

- CAC, PCAs, PCBs, dealers, colleagues
- www.agdrift.com (see publications)
- www.cdpr.ca.gov/docs/drftinit/drftdocs.htm
- www.ianrpubs.unl.edu/epublic/pages/index.jsp

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