

CEQA Mitigation Measures for Pest Control Recommendations

Scott A. Johnson
Vegetation Management Specialist
Wilbur-Ellis Company
sjohnson@wilburellis.com

Agenda

- Å Follow-up to last year's PCA rec talk
- Å Drill a bit deeper
- Å Define CEQA
- Å Explain connection to CA pesticide use
- Å Discuss mitigation measures
- Å Example: drift retardants as mitigations
- Å Q&A

What is CEQA?

- Å California Environmental Quality Act
 - ï CEQA is pronounced *see-kwah*
 - ï CEQA is California's primary environmental review and protection law
 - ï Common CEQA documents include:
 - Å Environmental Impact Report = EIR
 - Å Negative Declaration = ñNeg Decò
 - Å Certified Regulatory Program
 - Å Functional Equivalent

Purpose of CEQA

- 1. Inform governmental decision-makers and the public about potentially significant environmental effects of proposed projects
- 2. Identify ways that environmental damage can be avoided or significantly reduced
- 3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures, and
- 4. Disclose to the public the reasons why a governmental agency approved the project if significant environmental effects are involved.

CEQA -- PRC Section 21002

— Å ñApproval of Projects; Feasible Alternative Or Mitigation Measuresò

- i *It is the policy of the state that public agencies should not approve projects as proposed if there **are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects** of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.*ò

CDPR Registration

- Å The California Department of Pesticide Regulation wants to register and regulate the proper use of pesticides that could definitely have adverse impacts on California's environment.
- Å CDPR's registration program is certified as a functional equivalent of a CEQA Programmatic EIR.

CDPR Notice of Decision

- Å As a result of scientific evaluation, it has been determined that **no direct or indirect significant adverse environmental impact is** anticipated from the registration of the above listed products; therefore, no public report on the individual products will be filed.

ALTERNATIVES:

- Å An effective integrated pest management strategy requires the flexibility of a large number of comparable, but not exactly equivalent, pesticides. **A detailed alternatives analysis** involving all anticipated crop and pest uses, under many environmental conditions and cultural practices, is **beyond the scope** of the normal evaluation process when **no significant adverse environmental impact, which cannot be mitigated, is anticipated**. Such analyses are more appropriate where more specific conditions apply, such as at the user level or, in the case of restricted materials, at the level of the county agricultural commissioner. For a specified situation there may be few or no alternatives.
- Å In the present case, in **the absence of an identified significant potential adverse impact**, the benefit arising from pest management flexibility is determined to **justify this registration**.

What Do I Have To Do?

- Å Follow the label
- Å Be able to *“certify that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted”*

CCR 6556 - Recommendations

- Å In addition to the requirement of Section 12003 of the Food and Agricultural Code, each recommendation shall include:
- a. Total acreage or units to be treated;
 - b. Concentration and volume per acre or other units;
 - c. Worker reentry interval, if one has been established; preharvest or preslaughter interval; and label restrictions on use or disposition of the treated commodity, by-products or treated area;
 - d. Criteria used for determining the need for the recommended treatment; and
 - e. Certification that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted.
- Å In addition, the recommendation shall designate the pest by accepted common name.

CCR 6556 - Recommendations

Å In addition to the requirement of Section 12003 of the Food and Agricultural Code, each recommendation shall include:

- a. Total acreage or units to be treated;
- b. Concentration and volume per acre or other units;
- c. Worker reentry interval, if one has been established; preharvest or preslaughter interval; and label restrictions on use or disposition of the treated commodity, by-products or treated area;
- d. Criteria used for determining the need for the recommended treatment; and

e. Certification that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted.

Å In addition, the recommendation shall designate the pest by accepted common name.

Example Mitigations

- Å Reduced pesticide rates
- Å Buffer strips
- Å Spray indicator dyes
- Å Weather condition monitoring
 - ï Such as wind speed and direction
- Å Different application techniques
 - ï Such as ground instead of aerial application to minimize off-target movement

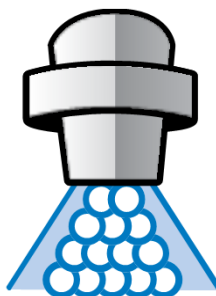
Å Drift retardants

Drift Retardants

As Mitigation Measures

CROSSHAIR™

DEPOSITION AID
DRIFT MANAGEMENT AGENT



IN-PLACE®

DEPOSITION AID AND DRIFT MANAGEMENT AGENT

CROSSHAIR™
DEPOSITION AID
DRIFT MANAGEMENT AGENT





CROSSHAIR is a deposition and drift management agent that reduces the number of spray droplet fines (< 100 microns) and increases the VMD (Volume Median Diameter) of the spray droplets.

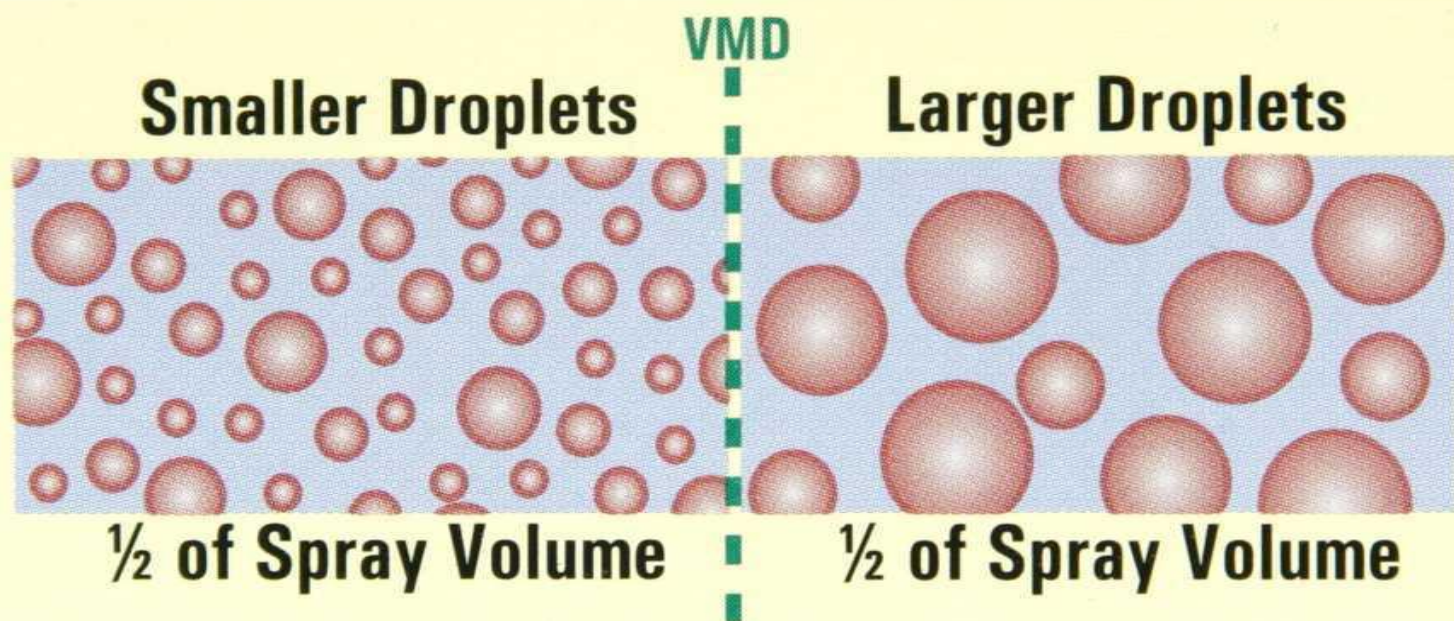


*Figure 1: Droplet size is generally given as VMD
(Volume Median Diameter).*



CROSSHAIR generates a more uniform droplet size spectrum which results in enhanced deposition and coverage of the spray on the targeted surface.

CROSSHAIR™
DEPOSITION AID
DRIFT MANAGEMENT AGENT



250 Micron
8 Droplets

125 Micron
64 Droplets

500 Micron
1 Droplet

Doubling Your Droplet Size Reduces Your Coverage By A Factor of 8

Deposition Type Products



■ Emulsions

- ■ **Invert** - IN-PLACE® (WECO)
- **Micro** - CROSSHAIR™ (WECO), InterLock®
- ■ **Macro** - Halt®, Liberate®, Place, Coverall
- **Large particle** - Grounded®

■ Polymers

- ■ **Petroleum** - EDT (WECO), Bronc® Max EDT (WECO), Bronc® Triple™ (WECO), Bronc® Plus Dry EDT (WECO), Guide-It, Arrow four®, Sta-Put, Reign®, Control™
- **Guar Gum** - Array®, Zenith™, Vector®

Revised 12-17-11



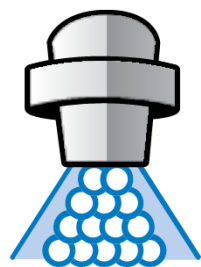
Poorest Choice



Be Careful



Best Choice



IN-PLACE®

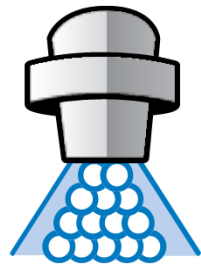
DEPOSITION AID AND DRIFT MANAGEMENT AGENT



IN-PLACE® is a unique deposition and drift management agent that
“WRAPS THE ACTIVE INGREDIENT”
into uniform size capsules.



IN-PLACE® is CDPA certified ***

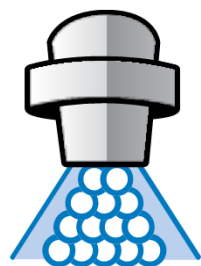


IN-PLACE®

DEPOSITION AID AND DRIFT MANAGEMENT AGENT



- Å Wraps the active ingredient into an invert suspension
- Å Forms uniform size capsules (**@ 105 micron**)
- Å Gives capsules a positive charge
- Å **Protects the active ingredient from evaporation**
- Å Reduces Chemical Trespass (off target movement)



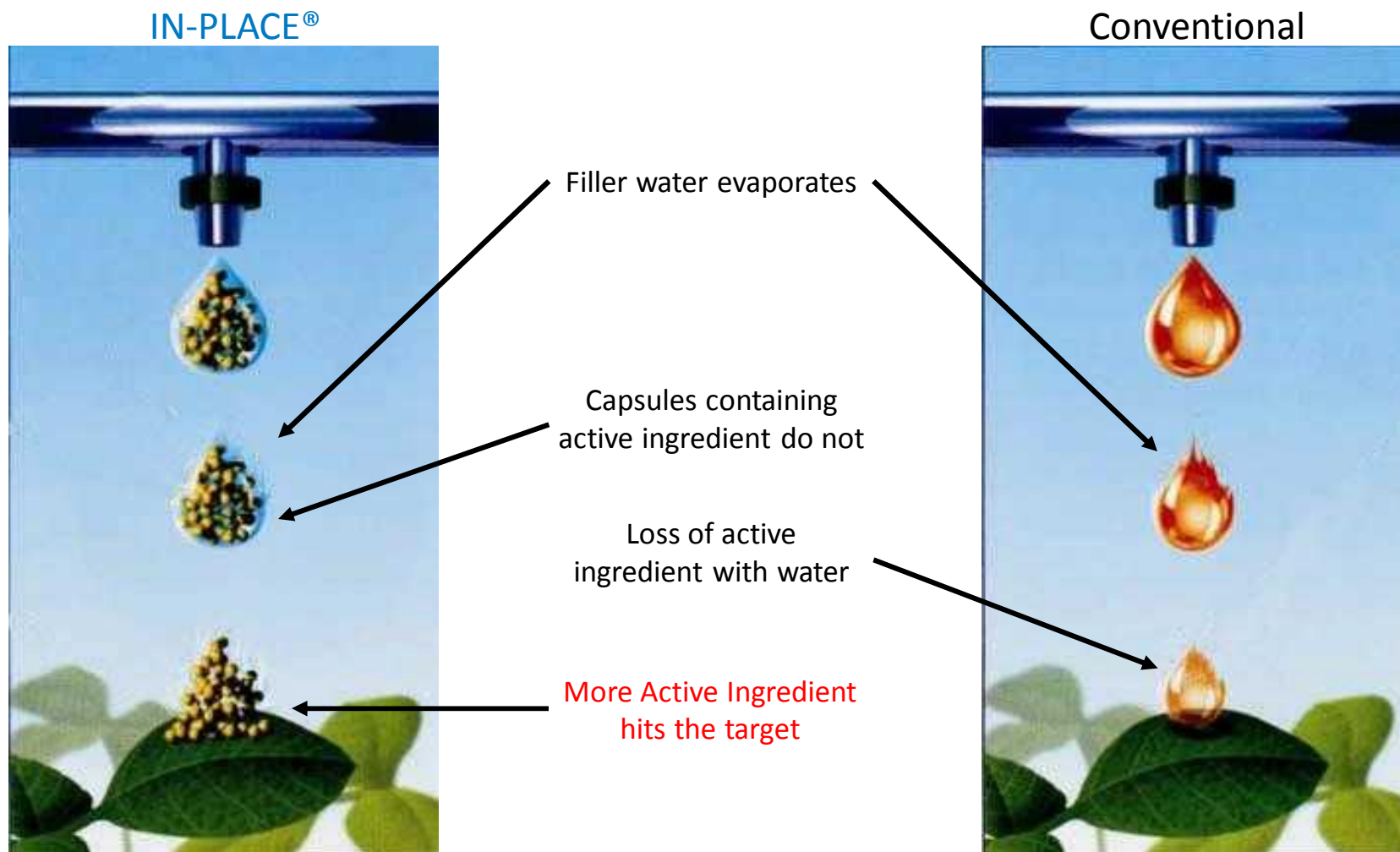
IN-PLACE®

DEPOSITION AID AND DRIFT MANAGEMENT AGENT



- The best DRT product: IN-PLACE®
 - Invert Emulsion product – **Treats the Pesticide**
 - Doesn't change the viscosity of the water.
 - Only premix with EC and AS formulations
 - Use rates vary based on pesticide formulation type
 - EC/AS - DF/WP – LF
 - Formulation type also determines the mixing order.
 - **When mixed properly with all the pesticides in the tank the fines < 105 microns contain no pesticide.**

APPLICATION COMPARISON WITH IN-PLACE®



Review: Example Mitigations

- Å Reduced pesticide rates
- Å Buffer strips
- Å Spray indicator dyes
- Å Weather condition monitoring
 - ï Such as wind speed and direction
- Å Different application techniques
 - ï Such as ground instead of aerial application to minimize off-target movement
- Å Drift retardants

CCR 6556 - Recommendations

Å In addition to the requirement of Section 12003 of the Food and Agricultural Code, each recommendation shall include:

- a. Total acreage or units to be treated;
- b. Concentration and volume per acre or other units;
- c. Worker reentry interval, if one has been established; preharvest or preslaughter interval; and label restrictions on use or disposition of the treated commodity, by-products or treated area;
- d. Criteria used for determining the need for the recommended treatment; and

e. Certification that alternatives and mitigation measures that would substantially lessen any significant adverse impact on the environment have been considered and, if feasible, adopted.

Å In addition, the recommendation shall designate the pest by accepted common name.

Thank you!

Any questions?