Spray Drift Work Group Progress Report

November 8, 2006

Scope Statement

Highlights of (draft) statement on scope:

- Agree to focus on:
  - Labeling
  - Practices and equipment to mitigate drift and adverse effects from drift
  - Training and stewardship
- Agree not to focus on:
  - NPDES rule
  - Misuse
  - Volatilization

Meeting Summary

- September, 2006
  - Labeling Permethrin
- November, 2006
  - Labeling 2,4-D
  - Complex issues

Spray Drift Labeling

SDWG identified a number of problems with product labeling designed to mitigate spray drift:

- Inconsistency across products
- Labeling too wordy and too long
- Labeling not enforceable
- Labeling provisions confusing, impractical, and / or contradictory
- Labeling statements poorly organized and presented

SDWG Labeling Recommendations

- EPA should consider pursuing mechanisms (e.g., PR Notice, Label Review Guide) to improve spray drift mitigation labeling:
  - Sharpen language: shorter, clearer, & enforceable, where appropriate
  - Make provisions consistent across different products

SDWG Labeling Recommendations

- EPA also should consider more far-reaching changes to pesticide labeling to ensure that provisions concerning spray drift receive enough prominence:
  - Separate enforceable and advisory label statements
  - Clarify directions for each method of application, e.g., aerial, ground boom, airblast

Issues for Further Discussion

- What is the objective of labeling? Who is target audience?
- How is it connected to risk assessment?
- What is the proper relationship between labeling and training, for ag & consumer users? Enforceability of label important.
- How best to facilitate communication of label requirements between applicator and grower/property owner
- Sensitive sites mentioned on the label

Complex Issues

SDWG discussed:

- What constitutes “harm” from spray drift?
- Design standards vs. performance standards
- Tailoring regulatory restrictions to local conditions
- Determining the real-world impacts of pesticide labeling

What is “Harm”?

Should “harm” be defined as:

- Unreasonable adverse effects on the environment (FIFRA standard)
- Specific adverse outcomes (“No Bad Things” standard)
- Toxics in toxic amounts (CWA standard)
- Drift resulting from not using BMPs (“Minimize Drift” standard)
- Any detectable amount (“No Drift” std.)

SDWG Thoughts on Defining “Harm”

- Indiana initative: “Do not allow pesticide drift in quantities that cause harm.” Harm evaluated based on the following
  - If Federal MCL, tolerance exists, use that as std. for harm. If no tolerance (organic crops)→violation
  - Situational issues contribute to estimate of potential harm, e.g. application near a school
  - Economic harm also counts
  - Observable fish and wildlife damage

SDWG Thoughts on Defining "Harm" (cont.)

- Considerations:
  - Multiple pesticide exposures not covered; all toxicity not known
  - Concern that detected pesticides not necessarily be considered "harm"
  - Utilize FIFRA standard of "no unreasonable adverse effects"
  - Costs borne by those who do not receive the benefit
  - Concern about variability of different humans in sensitivity to toxics

SDWG Thoughts on Defining "Harm" (cont.)

- Considerations**(cont'd)**
  - "Golden rule": Would you want to be on the other side of the fence?
  - Issues of residues that persist and may cause harm later (e.g. swing set, picnic table, children playing in the yard)
  - See what's present, compare to risk assessment values. Are toxicologically "allowable" concentrations really OK?
  - Concerns that highly exposed groups have different circumstances that must be considered
  - Can minimize problems by letting neighbors know in advance that application will occur

Design vs. Performance Standards

Should EPA formulate regulatory restrictions for spray drift in terms of design standards or performance standards?

- Design std. = telling user what to do
- Performance std. = telling user what result to produce

SDWG Thoughts on Design vs. Performance Standards

- Commercial applicator representative prefers performance based standards
  - Allows use of experience-based drift mitigation practices
  - Some design standards actually increase drift potential
- Regulatory representative prefers blend of performance and design standards
  - Easier to observe compliance if design standards are used
  - Easier to enforce
- Should be able to measure effectiveness of regulatory restrictions
- More comprehensive discussion of the private applicator case needed, e.g. growers who do their own applications

Tailoring Restrictions to Local Conditions

Addressing this issue involves:

- Balancing the need for a “level playing field” with the reality that “one size does not fit all”
- Determining what local conditions to consider
- Determining when and how to incorporate local conditions into decision-making

SDWG Thoughts on Tailoring Restrictions to Local Conditions

- Local conditions typically trigger more restrictive conditions
- Take into consideration 303(d)-listed water bodies: Additional requirements might be necessary
- Endangered species regional bulletins web site
- Concern about label statement
  "Applicators must follow all applicable state and local requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed"

SDWG Thoughts on Tailoring Restrictions to Local Conditions

(cont'd.)

- Best working through local regulatory entities, where they exist; problem of who will evaluate local conditions where regulatory authority doesn't exist
- Mapping can help to publicize sensitive sites
- Explore the use of existing tools (e.g., CA alert system, Ag Commissioners, ag extension) to include issues related to local conditions and crops

Assessing Real-World Impacts

Addressing this issue involves:

- Matching risk assessment models with real-world conditions
- Determining the impact of labeling on user behavior and risk
- Determining the extent of compliance

SDWG Thoughts on Assessing Real-World Impacts

- Iterative testing of models against real-world conditions
- Need more data on effectiveness of the label in preventing incidents: AAPCO survey enhanced?
- More resources needed for states & tribes to do enforcement/training/certification/monitoring
- More monitoring, preferably by an objective entity
- Need a new EPA process to test and develop labels? Focus groups? Surveys? New person with expertise in communicating information?

Next Steps

- EPA to update SDWG on permethrin and 2,4-D labels
- Revisit issues that need more discussion
- Begin preparation of report for PPDC

SDWG Thoughts on Assessing Real-World Impacts