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## MEMORANDUM

DATE: July 15, 2008  
TO: Board Members  
FROM: Staff  
SUBJECT: Proposed Revisions to Standards of Practice for Aerial Spraying

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At the June 13, 2008, meeting, the Board reviewed a staff memo about buffer zones and other methods for reducing off-target drift. Following the Board's discussion, the staff was directed to develop ideas about standards of practice for aerial applicators. Currently, Chapter 22 contains standards of practice, but none specific to aerial spraying.

On June 25, the staff met to discuss standards of practice. Some potential ideas may be appropriate for all powered outdoor applications while others may be more appropriate for aerial applications only. In earlier discussions, the staff had already suggested establishing a separate section in Chapter 22 (drift rule) specific to aerial applications.

Consequently, the staff proposes the following possible changes, while acknowledging that some items may ultimately shift between the "all applications" list and the "aerial applications" list:

### **Possible Universal Changes to Standards of Practice Required in Chapter 22**

- Require that applicators use a measuring device calibrated according to the manufacturer's specifications to record wind speed.
- Revise the paragraph requiring equipment to be calibrated from the current "reasonably close to specifications" standard to a "within 5% of specifications." Five percent is a generally accepted guideline found in nozzle guides and Cooperative Extension publications.
- Revise the current requirements for identifying and recording sensitive areas to require that the record be in the form of a map. The current standard is vague about what must be identified and recorded, and how it must be recorded. Some applicators simply record "yes" or "no." A map with the type and location of sensitive areas recorded ensures that the spirit of the requirement is fulfilled.

### **Possible Changes Specific to Aerial Applications**

- Require that weather conditions be measured at the application site. The compliance staff has questioned the value and accuracy of weather readings taken at the loading site, which may be many miles from the application site. This can lead to significant discrepancies, especially in areas near the coast where major differences can be observed within a few miles. However, the staff acknowledges that such a requirement may not be feasible.
- Unless otherwise required by the label, wind speeds should be between 2 and 10 miles per hour when spraying within 1000 feet of a SALO. This change is consistent with recent

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label language for aerial spraying and seeks to avoid applications during inversions and other no-wind conditions. Under these conditions, fine droplets simply diffuse slowly outward or move slowly down-gradient in a defined plume without any significant atmospheric mixing. This situation has the potential to result in high off-target residues in areas directly adjacent to the target area. On the other end of the spectrum, aerial applicators generally do not operate in winds above 10 miles per hour because of the potential for poor efficacy and drift potential.

- Require the aerial applicator to develop generic drift management plans covering different types of applications made, such as one for forestry work and one for agricultural work. The generic drift management plans would be used in conjunction with the site-specific checklists discussed below. [Note: there was no staff consensus on this point, so it is being offered for Board discussion.]
- Require aerial applicators to complete a site-specific drift management checklist when spraying within 1000 feet of a SALO. The checklist would be coupled with the upgraded site maps (described below) provided by the land manager and possibly a generic drift management plan (discussed above), and would serve to document that the applicator took the time to consider each different field and how the applicator planned to avoid off-target drift to the SALOs listed on the site map. This concept is one way to address a staff observation that complaints seem to coincide with circumstances in which a large number of fields are sprayed on the same day.
- As discussed at previous meetings, require upgraded site planning/site map information when conducting aerial applications within 1000 feet of a SALO. In addition to providing a map with sensitive areas and SALOs depicted, the map should be referenced to the longitude and latitude and include field and property boundaries, significant hazards and landmarks and roads (which may become sensitive areas anyway). Information on school bus schedules and other local activities (such as athletic or recreational events) should be provided also.