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## MEMORANDUM

DATE: June 5, 2008  
TO: Board Members  
FROM: Staff  
SUBJECT: Buffers and Other Approaches to Minimizing Off-Target Drift

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At the May 2, 2008, meeting, the Board reviewed a staff memo about the definition of Sensitive Area Likely to Be Occupied (SALO). Following the Board's discussion, the staff was directed to develop ideas around buffer zones for consideration at the next meeting.

The staff met to discuss buffer zone ideas on May 29. There was little staff support for relying on buffers as a primary approach to minimizing off-target movement of pesticides. There are a lot of variables involved in the movement of fine droplets and vapors. The most appropriate buffer will vary with every application, and will even differ for different SALOs for the same application. Setting one buffer that would be protective of all SALOs under all circumstances would require establishing a distance prohibitively large. Large buffers would not be necessary for a number of applications in which reduced-risk pesticides are applied (such as Bt) or when Accuflo or similar needle-style nozzles are used.

Consequently, the staff advocates establishing only a minimum setback (buffer) for all aerial applications, coupled with the use of a standard of harm and promotion of best management practices, forming a three-pronged approach to minimizing off-target movement. Using a standard of harm allows the applicator more flexibility in determining the appropriate measures to minimize off-target impacts. Appropriate downwind buffers can be spelled out in the Best Management Practices (BMPs), which must be developed on a parallel track. Each of the three elements is discussed in detail below:

### 1. Minimum Setback (Buffer)

The Board has heard from members of the public about the anxiety that a spray aircraft passing close to their home may cause. Moreover, anecdotal evidence suggests that aerial applicators are generally uncomfortable being asked to spray directly adjacent to residences. Consequently, it appears prudent public policy would include a minimum setback from occupied buildings for aerial spraying.

In Chapter 29, the BPC recently established a 25-foot minimum buffer for outdoor broadcast applications next to waters of the state. While 25 feet will not guarantee that waters will not be impacted, it does remind applicators that spraying up to the water's edge is not appropriate. Likewise, a minimum buffer for SALOs will not prevent drift, but it will remind applicators that

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spraying right up to occupied properties can result in negative consequences, including harm to the occupants or their animals, or even monetary penalties.

In order to develop a recommended buffer size, the staff reviewed a number of pertinent labels and setbacks prescribed by other states. Aerial buffers contained on reviewed pesticide labels (*see Appendix*) ranged from 50 feet to 200 feet. Aerial buffers in various state laws ranged from 100 feet to ¼ mile.

Based on this review, the staff proposes a minimum buffer for SALOs of at least 200 feet. It should be noted that several states have adopted buffers specific to certain types of occupied buildings, such as schools, daycares, and health care facilities, etc.

## **2. Standard of Harm**

During his term as the regional representative to State FIFRA Issues Research and Evaluation Group (SFIREG), Henry inquired how other states were regulating aerial spraying and drift. A handful of states (Wisconsin, Indiana, and Arizona) adopted variations of the American Association of Pesticide Control Officials' (AAPCO) model regulatory drift language, and report this has proven to be a very useful deterrent. Those states have also created definitions of harm (*see Appendix*). The AAPCO model is as follows:

*“Do not apply this product in a manner that allows spray to drift from the application target site and/or cause harm to humans, animals or other non-target sites (AAPCO 2007).”*

Under this approach, if a complaint is received alleging harm, the state collects samples from the complainant's property. If a pesticide residue is detected, and there is evidence that the complainant was harmed, it becomes a violation. The drawback to such an approach is determining whether harm has occurred. Wisconsin takes a “strict liability” approach, such that any off-target residue on a property where harm could have occurred results in a violation. Arizona and Indiana use their definitions to make case by case evaluations. A list of considerations could be developed so that violations could be treated differently based on their level of impact and/or risk.

## **3. Best Management Practices (BMPs) for Minimizing Drift**

This topic will require reconvening the Technical Committee or a similar group to review the many BMP documents, both draft and final, that have been published recently, and subsequent development of our own BMP document. The staff sees this as a project that could be done in a similar manner to the turf BMP development. The committee would develop a draft document and bring it to the Board for review, then the draft would be circulated throughout the applicator, grower, and environmental communities, as well as to the general public, and their input would come back to the committee for incorporation or dismissal and a new draft would come to the Board for final approval.