STATUS UPDATE: BUFFER ZONES FOR AGRICULTURAL FUMIGANTS

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Over the past year there have been significant developments towards the management of off-gassing from agricultural fumigants. The U.S. EPA released risk assessments for a range of fumigants in May 2007, and the California Department of Pesticide Registration has continued the development of regulations for fumigants, including the development of proposed buffer zones. This paper summarizes these developments, and provides perspective in terms of how buffer zones, if developed, could be managed through the collection of sound field study data to define emission rates for a range of application / sealing methods, and how refined modeling can promote more practical buffer zones.

The following issues will be specifically addressed:

- Fixed buffers in comparison to buffers as a function of application rate, applied acres, application & sealing method, region, and season
- Regional differences in cultural practice that are important to consider (such as the differences in water availability between California and the Pacific Northwest)
- Benefits to growers and the public of realistic buffer zones
- Advancements in modeling methods will be summarized, including the release of the updated version FEMS through sullivan-environmental.com.
- A summary of field study enhancements also will be described, emphasizing work on on-field flux analysis, which are used to establish a critically important input to buffer zone assessment, i.e. emission rates.