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Dr. Ellen M. Thoms
Dow AgroSciences
3225 S. MacDill Ave., #129-258
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Dear Dr. Thoms:

I wish to address your query regarding the interpretation of the following research publication:

Scheffrahn RH, Osbrink WLA, Hsu R-C and Su N-Y, Desorption of Residual Sulfuryl Fluoride from Structural and Household Commodities by Headspace Analysis Using Gas Chromatography. *Bull. Environ. Contam. Toxicol.* **1987**, 39: 769-775.

Apparently some individuals and organizations are using Scheffrahn et al. 1987 to suggest that structural fumigation with sulfuryl fluoride (SF) results in long-term exposure (up to 40 days) of significant amounts of SF to occupants of fumigated buildings. In response to this I offer the following clarifications:

- 1) This study was not conducted to simulate human exposure trials. It was designed to ascertain the absolute residue capacity of different structural matrices from exposure to SF. Previous data were already available that allowed USEPA to determine that 5 ppm is the threshold limit value for human exposure to SF.
- 2) Matrices were fumigated at 10 and 100-fold the drywood termite concentration.
- 3) After aeration, these fumigated materials were packed into sealed glass vials in order to collect all residues desorbing from these commodities. Relative to a building, the vials had many orders of magnitude greater ratio of commodity to unventilated airspace.

Therefore, it is inappropriate to compare the findings of Scheffrahn et al. 1987 with actual residue levels present after the fumigation of a structure. More recent data confirm that current aeration procedures insure that immediate reentry levels remain below toxicologically significant levels (5 ppm) and, furthermore, concentrations will continue to drop precipitously in structural airspace.

Sincerely,

Rudolf H. Scheffrahn
Professor of Entomology