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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

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SUBJECT: Exposure Assessment for Workers Exposed to Avermectin B1
Applied to Cotton, Celery, and Tomatoes

TO: William Dykstra
Review Section 1
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The exposure to workers exposed to Avermectin B1 applied to cotton, celery, and tomatoes is expected to be less than that of citrus workers. Exposure during mixing/loading would be roughly twice as high for these crops than for citrus based on acreage differences. However this increase would be more than offset by the reduced exposure during application since airblast application produces significantly higher exposures than ground boom application, as would occur with these crops. In addition, the citrus exposures were predominately based on 50% of the detection limit since the residues of Avermectin B1 were mostly nondetectable. Daily harvester exposure on a given crop is less than the daily mixer/loader/applicator exposure. Since citrus gave MOS's of 350 and 4650 for maternal lethality and teratogenicity respectively, use of Avermectin B1 would yield MOS's in excess of 100.

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