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

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OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: Chlorpyrifos Label Review. HED # 0-1878

TO: Dennis Edwards, PM 12
Insecticide - Rodenticide Branch
Registration Division (H7505C)

FROM: Ameesha Mehta, Chemist *Ameesha Mehta*
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I. INTRODUCTION

Purpose:

Registration Division has requested OREB (formerly known as NDEB) to review Chlorpyrifos use label, the handling Procedures section.

Background:

Dursban TC: a termiticide concentrate manufactured by Dow Elanco contains 42.8% chlorpyrifos or 4 lbs ai per gallon. Application rates range from 0.5% dilution of chemical to maximum concentration of 2.0%. The routes of exposure are primarily via the dermal absorption and some inhalation. The methods of application are trenching, rodding, subslab injection, and low pressure spray of the chemical.

II. DETAILED CONSIDERATIONS

OREB has no data measuring the exposure of workers during

application of Dursban for subterranean termite control. The label requires protective clothing under precautionary statements and handling procedures. Rather than recommending minimum protective clothing, OREB requests, that the second sentence in Handling Procedures simply define minimum protective clothing. An example is "As a minimum, protective clothing is defined as eye protection; chemically resistant gloves and footwear; long-sleeved shirt and long-legged pants or coveralls." Also the wording, "avoid exposure" in the first sentence under Handling Procedures should be changed to "greatly reduce exposure." OREB does not recognize protective clothing as being capable of permitting avoidance of exposure which implies zero exposure.

Since the respiratory exposure in a previously reviewed Chlorpyrifos Lawn Care Study (maximum use) was calculated to be 0.24 ug/kg/day, a minimal amount; OREB does not see the need to require respirator use for this chemical. It is unlikely that the exposures of termiticide applicators would exceed that of lawn care applicators. However, a potential spray application in such as crawl spaces could involve high exposure due to the "enclosed area" and OREB would see the need for respirator use in this category. The Handling Procedures paragraph does specifically state to wear a respirator or mask during application in confined spaces such as crawl spaces; therefore, OREB concludes that specific wording such as "required respirator use" is not essential.

I. CONCLUSIONS / RECOMMENDATIONS

OREB concludes that significant respiratory exposure does not result from the proposed use, except, possibly when applying the termiticide in crawl spaces, to warrant requiring respirator use; and the present label language does specifically state it.

IV. REFERENCES

Jaquith, D. (1/10/90) HED Memo to Dennis Edwards titled, " Re-evaluation of Chlorpyrifos Lawn Care Exposure Study." HED Project No. 9-0609.

cc: A. Mehta/ OREB (H7509C)
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