



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

007707

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM JUN 7 1983

DATE:

TO: T.A. Gardner, PM# 17
Registration Division (TS-767)

SUBJECT: EPA Registration No. 10182-EUP-19. Nitrosamine
Contamination of Pesticide Products Containing
Cypermethrin.

Tox Chem. No. 271DD

WAB

Background

The ICI Americas Inc. has notified EPA (letter dated 4/26/83) that their products (see list below) containing the synthetic pyrethroid cypermethrin contain detectable levels of nitrosamine contaminants. These impurities have been traced to the supplier of the [redacted] the technical cypermethrin.

According to information provided by the ICI Americas Inc., the levels of the nitrosamines (chemical structures not provided) in the technical cypermethrin range from [redacted]. The range for the several CYMBUSH products is [redacted] nitrosamines. A sample of DEMON WP had the nitrosamine level of [redacted]. The company also indicated that certain earlier preparations of cypermethrin contained nitrosamines in excess of the ranges indicated above.

The company (ICI) has indicated that future production of cypermethrin will be made with [redacted] of nitrosamines so that technical cypermethrin will contain considerably less than 0.5 ppm of the contaminant.

Recommendations:

Toxicology Branch (TR) is not concerned at this time with nitrosamine contamination of less than 1 ppm in the

MANUFACTURING PROCESS INFORMATION IS NOT INCLUDED

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technical cypermethrin (refer to FR 45: No. 124, Wednesday, June 25, 1980). Residue Chemistry Branch (RCB), however, must confirm that the nitrosamine content is less than 1 ppm as indicated. Note: There are several other synthetic pyrethroids which use [redacted] in their manufacture (e.g., permethrin, deltamethrin, tralomethrin, etc.) and there are several different chemical companies which manufacture these chemicals. Thus, TB requests that RD obtain nitrosamine information on all synthetic pyrethroids from the several different manufacturers. The nitrosamine levels of the synthetic pyrethroid products must be assured to be less than 1 ppm (as recommended in FR 45 No. 124, Wednesday June 25, 1980).

List of ICI products containing cypermethrin:

- CYMBUSH® 2E Insecticide
- File Symbol 10182-AU
- CYMBUSH® 3E Insecticide
- File Symbol 10182-AL
- CYMBUSH® 3E Insecticide
- EUP No. 10182-EUP-19
- CYMBUSH® OL Insecticide
- EUP No. 10182-EUP-25
- CYPERMETHRIN Technical
- File Symbol 10182-AI
- DEMON® WP
- File Symbol 10182-TR
- DEMON® WP
- EUP No. 10182-EUP-GE

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6/2/83

MANUFACTURING PROCESS INFORMATION IS NOT INCLUDED