7-19-94

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

JUL 19 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

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Subject: The Ecological Effects Branch's (EEB) review of registrant's request for reevaluation and possible upgrade of guideline 72-4(b), *Daphnia magna* study with Thidiazuron, (old MRID 421320-02; new MRID 430752-01). DP Barcode 201400 - (Chemical Code 120301).

From: for Anthony F. Maciorowski, Chief
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Douglas D. Urban 7/19/94

To: Kathryn Davis, PM 52
(PM Team Reviewer Bill Wooge)
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The Ecological Effects Branch has received a request from NOR_AM to reconsider our evaluation of the following study:

> Blakemore, G.C. and M. Muckerman. 1991. Chronic Toxicity of Thidiazuron to *Daphnia magna* Under Flow-Through Test Conditions. Final Report No. 39114. Nor-Am Study No. 507-AW. Prepared by ABC Laboratories, Inc., Columbia, MO. Submitted by Nor-Am Chemical Company, Pikeville, NC. EPA MRID No. 421320-02.

Our original evaluation of said study, dated 1/6/93 concluded:

> "This study is scientifically sound but does not meet the guideline requirements for a chronic, flow-through toxicity test using the freshwater invertebrate, *Daphnia magna*. Effects on daphnid length were observed at all tested concentrations. The 21-day EC_{50} was 0.68 mg/l mean measured concentration. The MATC was less than 0.10 mg/l mean measured concentration, the lowest concentration tested."

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The registrant on a document titled "NOR-AM Response to EPA/EFGWB Review of a Study (MRID No. 42132002) Under Guideline No. 72-4(b)" made various arguments in favor of their approach to statistical analysis of their data which, in their opinion, presents 0.15 mg/l as a valid NOEC on which to base 0.34> MATC >0.15 (units in mg/l).

The EPA is acquainted with arguments in favor of using a nonlinear regression approach rather than MATCs or LOELs and NOELs but **has not modified its policy of using the MATC**. In our view since a NOEC was not available, a MATC could not be determined and Agency requirements were not met. For the *Daphnia* measurement endpoints in question, notification will be given if the Agency's current policy is significantly modified, otherwise, our original rating of supplemental for said study stands.

If we can be of further assistance, please contact Alvaro A. Yamhure of the EEB staff at (703) 305-6179.

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