101201
SHAUGHNESSEY NO.

24
REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 12-2-83 OUT 2/17/84

FILE OR REG. NO. 3125-EUP-182

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 11-7-83

DATE RECEIVED BY HED 11-30-83

RD REQUESTED COMPLETION DATE 2-20-84

EEB ESTIMATED COMPLETION DATE 2/16/84

RD ACTION CODE/TYPE OF REVIEW 3752/EUP

TYPE PRODUCT(S): I, D, H, F, N, R, S Insecticide

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. W. Miller (16)

PRODUCT NAME(S) Monitor 4

COMPANY NAME Mobay Chemical Corporation

SUBMISSION PURPOSE Submission of data in response to previous review

SHAUGHNESSEY NO.	CHEMICAL, & FORMULATION	% A.I.

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

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

TO: William Miller
Team 16
Registration Division

THRU: David Coppage
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THRU: Clayton Bushong
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SUBJECT: Mobay Chemical Corporation's Submission Of Data In Response To A Previous Review For An EUP On Soybeans: File 3125 EUP - 182.

Mobay requested an EUP on soybeans (Faatz, 9-3-82). The application rates would be 0.25 to 1.0 lb ai as a foliar spray. Applications would be made as needed with a minimum of 14 days between applications, and no closer than 60 days before harvest. A maximum of 4 pints (16 oz) per acre will be applied per season. The EUP stated a maximum of 50,000 acres would be treated.

EEB concluded that an EUP of this magnitude could cause adverse effects. This opinion was based on a known avian field kill on cabbage with an application rate of 1/2 to 1 lb ai. Also, 50,000 acres is a large acreage for the usual EUP.

This review, and others prior to and after the EUP request, stated that a short-term avian field study is necessary to complete a hazard assessment. In response, Mobay has submitted a study "Toxicity of MONITOR® 6 lbs/gal EC to Juvenile Bobwhite Quail and New Zealand Rabbits Under Simulated Field Conditions." This study has been referenced previously, but no data evaluation record exists.

EEB has examined the document, and it does not satisfy the request for an avian short-term field study. Monitor is a strong acetylcholinesterase (AChE) inhibitor. Previous research on other AChE inhibitors show that a AChE depression of 50% is considered a threating exposure, and AChE inhibition of 80 + % can be considered as cause of death. However, test organisms do not necessarily show signs of intoxication at the 50% level. In the submitted test, only direct signs of intoxication or death were noted along with monitoring

of weight gain and loss. The test is unable to determine the extent of exposure because AChE inhibition was not determined, and no residue samples were taken. These data are necessary to make an accurate assessment in light of the known bird kill in Wisconsin.

EEB still considers the request for an avian short-term field study still outstanding.

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Ecological Effects Branch, HED

Wayne C Faatz 2/17/84