

US EPA ARCHIVE DOCUMENT

6-28-82

FILE COPY

Date Out EFB: JUN 28 1982

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Registration Division (TS-767)

From: Dr. Willa Garner, Chief *S. Ceegeer (Acting)*
Review Section No. 1
Environmental Fate Branch
Hazard Evaluation Division (TS-769)

Attached please find the environmental fate review of:

Reg./File No.: 352-372

Chemical: Oxamyl

Type Product: Insecticide

Product Name: VYDATE L Insecticide/Nematicide

Company Name: Dupont

Submission Purpose: Groundwater analyses on Long Island due to use on potatoes

ZBB Code: ?

ACTION CODE: 400

Date In: 3/18/82

EFB # 246

Date Completed: 6/28/82

TAIS (level II)	Days
60	2

Deferrals To:

 Ecological Effects Branch

 Residue Chemistry Branch

 Toxicology Branch

1/2

1. INTRODUCTION

1.1 Dupont has submitted reports of their soil and groundwater analyses of 1980 (dated August 1981, accession # 246983) and of 1981 (dated January 1982, accession # 246982) for oxamyl due to its use on Long Island potatoes. Refer to previous EFB reviews.

2. DISCUSSION OF THE 1980 DATA

2.1 Oxamyl was applied to 8 potato fields on Long Island at 3 - 11 pounds active ingredient/A during the 1980 season. Analysis of well water from wells 30 - 300 feet from the treated fields and 12 - 65 feet deep showed no detectable residues (< 5ppb) when analyzed during April-December, 1980. See attached tables.

2.2 Potato fields, receiving up to 6 applications of oxamyl, totaling up to 10 lb ai/A, showed no detectable residues at depths greater than 24 inches. Sampling was done between 13 and 215 days post-treatment.

3. DISCUSSION OF THE 1981 DATA

3.1 Established wells sampled in 1980, an established well not previously sampled and 3 newly drilled wells were sampled in 1981 for oxamyl residues. Residues were not detected (<5.0 ppb) in any of the established wells but were found in the newly drilled wells at the level of sensitivity (5.0 - 5.4 ppb) on one of the early sampling days. All later samplings showed no detectable residues in the wells. The registrant explained that the residues found in the newly drilled wells were probably due to leaching of oxamyl along the outside of the newly drilled wells following a recent application that was followed by 3 days of rainfall that totaled 0.86 inches.

3.2 Potato fields were treated in 1980 with 6 - 8 lb ai/A and followed in 1981 with 5.4 - 10.0 lb ai/A over the potato-growing season. Residues of 0.02 ppm and greater were found at depths up to 80 inches at one location after the in-furrow application. However, at the end of the season and even after several foliar applications, no residues were detected (<0.02 ppm) in soil at any depth. See the attached table.

4. CONCLUSIONS

4.1 The field monitoring data allow us to conclude that use of oxamyl on potatoes on Long Island, NY (per label directions) will not result in contamination of groundwater at levels greater than 5 ppb.


Samuel M. Creeger
June 28, 1982
Section #1/EFB
Hazaed Evaluation Division