To: Richard Mountfort  
Product Manager 23  
Registration Division (TS-767)

From: Carolyn K. Offutt  
Chief, Environmental Processes and Guidelines Section  
Exposure Assessment Branch, HED (TS-769)

Attached, please find the environmental fate review of:

Reg./File No.: 707-145, 707-174

Chemical: Oxyflurofen

Type Product: Herbicide

Product Name: GOAL

Company Name: Rohm and Haas

Submission Purposes: Review aerial spray drift study; Add aerial application to label

ZBB Code: 3(c)(5)  
Action Code: 305

Date In: 21 June 1984  
EFB#: 4413-4414

Date Completed: 13 July 1984  
TAIS (Level II) Days 63 0.2

Deferrals To:

____ Ecological Effects Branch
____ Residue Chemistry Branch
____ Toxicology Branch
Oxyfluorfen

I. Introduction

Rohm and Haas has presented data and requested that aerial application be added to their label of GOAL 1.6E and 2E for use in fallow fields in California and Arizona only.

II. Discussion

After a review of the information provided with respect to the aerial drift study, it was determined that lettuce was used as a biological indicator plant to determine the extent of possible drift in all directions from the field of application. The use of lettuce as a bioassay is acceptable, however there are no references or data that show the dose/response of lettuce to oxyfluorfen.

III. Recommendation

Upon submission of this data, this study will be reevaluated, and the request to include aerial application on the GOAL label will be considered.

Robert W. Holst
Plant Physiologist
Hazard Evaluation Division (TS-769)
DATA EVALUATION RECORD

Chemical: Oxyfluorfen

Formulation: GOAL 1.6E and GOAL 2E (emulsifiable concentrate)

Citation: Holmdal, J.A. 1984. Field drift loss studies from aerial application of GOAL herbicide. Submitted by Rohm and Haas Co., Philadelphia PA (EPA Acc. No. 253548)

Reviewer: Robert W. Holst, Ph.D. 13 July 1984
Plant Physiologist
Hazard Evaluation Division (TS-769)

Title: Spray Drift of GOAL

Materials and Methods: GOAL 1.6E was applied to three fallow fields in California as noted below to evaluate the extent of drift when aerially applied to fields being readied for cotton planting.

<table>
<thead>
<tr>
<th>Study No:</th>
<th>818407</th>
<th>858406</th>
<th>818406</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Appl:</td>
<td>31JAN84</td>
<td>1FEBB84</td>
<td>31JAN84</td>
</tr>
<tr>
<td>Location:</td>
<td>Kern County</td>
<td>Fresno County</td>
<td>Kern County</td>
</tr>
<tr>
<td>Temp: F</td>
<td>78</td>
<td>63</td>
<td>78</td>
</tr>
<tr>
<td>Rel. Hum: %</td>
<td>25</td>
<td>52</td>
<td>25</td>
</tr>
<tr>
<td>Soil Temp F</td>
<td>82</td>
<td>62</td>
<td>82</td>
</tr>
<tr>
<td>Wind Spd: mph</td>
<td>5</td>
<td>5-10</td>
<td>12</td>
</tr>
<tr>
<td>Wind Dir: True</td>
<td>NW</td>
<td>SE</td>
<td>N</td>
</tr>
<tr>
<td>Noz Ort Type:</td>
<td>D-10</td>
<td>D-8,D-10</td>
<td>D-6 w/46 Swirls</td>
</tr>
<tr>
<td>Noz Ort:</td>
<td>Back</td>
<td>Back</td>
<td>Down (90°)</td>
</tr>
<tr>
<td>Press: psi</td>
<td>35</td>
<td>24</td>
<td>35</td>
</tr>
<tr>
<td>Height: ft</td>
<td>10</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>A/C SPD: mph</td>
<td>110</td>
<td>110</td>
<td>65 (helo)</td>
</tr>
<tr>
<td>Appl. Dir.: Crosswind</td>
<td>Crosswind</td>
<td>Crosswind</td>
<td></td>
</tr>
<tr>
<td>Pesticide: ai/A</td>
<td>0.5 lb</td>
<td>0.5 lb</td>
<td>0.5 lb</td>
</tr>
<tr>
<td>Additives: Triton AS-98 at 0.25%</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA:</td>
<td>10</td>
<td>10</td>
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</tr>
</tbody>
</table>

These were full field applications with collection bioassays around the field edges. A diagram of the field layout is provided.

Results: The results of the lettuce bioassay are given on the attached summary sheet provide by Rohm and Haas.

Discussion: No relationship of the extent of injury to lettuce by oxyfluorfen was provided to the agency. Reference was made in the submission that such studies have been undertaken.

Acceptability: This study is not acceptable because the quantities of oxyfluorfen causing the various levels of injury to lettuce were not provided.
The material not included contains the following type of information:

___ Identity of product inert ingredients.

___ Identity of product impurities.

___ Description of the product manufacturing process.

___ Description of quality control procedures.

___ Identity of the source of product ingredients.

___ Sales or other commercial/financial information.

___ A draft product label.

___ The product confidential statement of formula.

___ Information about a pending registration action.

X FIFRA registration data.

___ The document is a duplicate of page(s) ________.

___ The document is not responsive to the request.

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.