

3/4/88

Shaughnesy No.: 128845

Date Out of EAB: \_\_\_\_\_

To: Robert Taylor  
Product Manager #25  
Registration Division (TS-767C)

From: Paul Mastradone, Acting Chief  
Environmental Chemistry Review Section #1  
Exposure Assessment Branch/HED (TS-769C)



Thru: Paul F. Schuda, Chief  
Exposure Assessment Branch/HED (TS-769C)



Attached, please find the EAB review of ...

Reg./File #: 352-UUA

Chemical Name: DPX-M6316

Type Product: Herbicide

Company Name: E.I. du Pont de Nemours

Purpose: Review Registrant Response to EAR Review of 1/22/88 on the Confined

Rotational Crop Study

Date Received: 2/18/88

Action Code: 111

Date Completed: 3/4/88

EAB#(s): 80439

Monitoring Study Requested: \_\_\_\_\_

Total Reviewing Time: \_\_\_\_\_

Monitoring Study Voluntarily: \_\_\_\_\_

Deferrals To: \_\_\_\_\_

Ecological Effects Branch

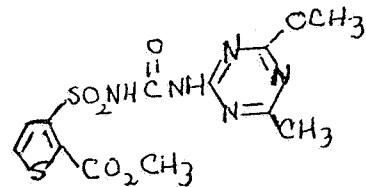
Residue Chemistry Branch

Toxicology Branch

1. CHEMICAL: DPX-M6316

Trade Name: Harmony

Chemical Name: Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)-amino]carbonyl]amino]sulfonyl]-2-thiophencarboxylate



2. TEST MATERIAL: N/A

3. STUDY/ACTION TYPE: Response to the 1/22/88 EAB review of a Confined Rotational Crop Study (Accession #403403-18) submitted for full registration of DPX-M6316 on wheat and barley.

4. STUDY IDENTIFICATION: N/A

5. REVIEWED BY:

Pat Ott  
Chemist  
EAB/HED/OPP

Signature: Pat Ott  
Date: 3/8/88

6. APPROVED BY:

Paul Mastradone  
Acting Chief  
Environmental Chemistry Review Section #1

Signature: Paul Mastradone  
Date: MAR 18 1988

7. CONCLUSIONS:

All points raised in the 1/22/88 EAB review of the confined rotational crop study have been satisfactorily addressed:

1. What is the recovery for the method for soil and the 3 plant types in the 0.001-0.01 ppm range?

Registrant Reply: Plant recoveries ranged from 76-102% (89% average); soil recoveries were 68-104% (94% average).

2. Was a storage stability test run to demonstrate little or no degradate deterioration with time, under freezer storage conditions? How long were samples stored before analysis?

Registrant Reply: Data presented in Table 10 indicate no substantial deterioration of triazine metabolites in plants. The aerobic soil metabolism study done for the triazine amine degradate indicated a half-life of about 8 months, indicating stability in soil at room temperature, so soil samples frozen should not suffer from deterioration. Frozen samples were stored no longer than 7 months (Table 2a and 2b, this submission).

3. Was identity of degradates by HPLC confirmed by another detection method?

Registrant Reply: Two different HPLC column systems, resulting in significantly different retention times for the radioactive compounds found were used.

4. Why was a leafy vegetable not included?

Registrant Reply: The normal rotated crops after application of DPX-M6316 to wheat or barley are field crops, not vegetable crops. This input was received from Dr. Robert Holst (EAB), after the review had been returned to RD. This opinion was also verified by the registrant. The rotated crops chosen (beets, peas, and sunflowers) is acceptable.

8. RECOMMENDATIONS:

The Subpart N data requirement for 165-1, Confined Accumulation Studies on Rotational Crops, is satisfied for the registration of DPX-M6316 for wheat and barley.

9. BACKGROUND:

Reported Results: (from 1/22/88 EAB review)

1. Plant Tissue

a. 45 Day Post-Treatment Study

The principal degradate was the triazine amine. At maturity, <0.01 ppm total radioactive residues were in beet roots, beet foliage, peas, pea pods, sunflower seeds and sunflower seed heads. Pea foliage and sunflower foliage contained 0.053 and 0.015 ppm, respectively, at maturity. Of this, the triazine amine accounted for 0.032 ppm in the pea foliage. In the sunflower and beet foliage, none of the individual metabolites exceeded 0.01 ppm.

b. 74/75 Day Post-Treatment Study

Peas, beet tubers, beet foliage, sunflower seeds and sunflower seed heads contained <0.01 ppm radioactivity (based on the triazine amine). Pea foliage contained 0.04 ppm and sunflower foliage contained 0.01 ppm total <sup>14</sup>C radioactivity, calculated as the triazine amine.

2. Soil

The major degradate found was the triazine urea, present at <0.01 ppm during the entire study.

10. REVIEW OF INDIVIDUAL STUDIES: N/A

11. COMPLETION OF ONE-LINER: N/A

12. CBI APPENDIX: N/A