RESIDUE CHEMISTRY BRANCH, HED
PETITION REVIEW QUICK FORM

JUL 15 1982

FROM: Jesse E. Mayer, Chemist
Residue Chemistry Branch
HED (TS-769)

THRU: Charles S. Triebilz, Chief
Residue Chemistry Branch
HED (TS-769)

TO: Hoyt Jamerson, PM43
Registration Division (TS-761)
and
Toxicology Branch, HED (TS-769)

1. Petitioner: IR-4 and Ag Expr Statutes of Ms, N.J. & Wv

2. Petition No(s): ZE2682

3. Chemical(s): Chlorpyrifos

4. Tolerance Proposal (RAC's & Levels): Cranberries 0 ppm

5. Tolerance Expression: Chlorpyrifos (O,O-dimethyl 0-(3,5,6-trichloro-2-pyridyl) phosphorothioate and its metabolite 3,5,6-trichloro-2-pyridine)

6. Established Tolerances: 40 CFR 156.342: Various RAC's ranging from 0.01 to 10 ppm on peanut hull

7. Letter(s) of Authorization (if applicable): Letter of 4/28/82 from Dow Chemical USA

8. Formulation(s): Seaborn 4E contains 4 lb a.i./gal 40.72 Chlorpyrifos

9. Inerts Status: All cleared in 40 CFR 156.1001

(Review of 3/4/82, P#1F2575/145322)

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11. Proposed Use(s): Apply either for cranberry weevil control, apply once at 100x and after 100x after 100x. For other insects, use when present but not more than 2/yr, with a 60 day PHI.

12. Plant Metabolism Data on: No metabolism data submitted with petition. Studies on cranberry hop with PPH 3F130. Also studies on corn (3F1356) apples and soybeans (CF 2281).

13. Plant Residues Comprised of: 3,5,6-trichloro-2-pyridyl phosphate, 3,5,6-trichloro-2-pyridyl phosphate, 3,5,6-trichloro-2-pyridyl phosphate (TCP), and parent compound.

14. Plant Metabolism Data Translatable Here: (see #12)

15. Nature of Plant Metabolism Data is not adequately defined. The Residue of Concern is: Duralkar and TCP (see #5)


17. Animal Residues Comprised of: See #5
18. Animal Metabolism Data Applicable Here: None needed since we do not consider that the proposed use involves feed items.

19. Nature of Animal Metabolism Data is not adequately defined. The Residue of Concern is: See #15

20. Analytical Methods (reference or brief description): The sample is extracted with methanol in a basic medium. An aliquot is acetylated and partitioned with benzene. It is chromatographed on an acidic alumina column. The column is eluted with diethyl ether which is part with NaHCO3, followed by acidification and part with HCl. An aliquot of this

21. Method Validation (crop recoveries): Cranberries: 100% recovery

22. Method Validation (control values): <0.03 - 0.06 ppm

23. Residues Determined by Method: 3,5,6-trichloro-2-pyridinol (Chlorpyrifos and intermediate after hydrolysis to TCP in initial step with NaOH) Residues are calculated as chlorpyrifos.

24. Enforcement Methodology is not available.

* If phase is treated with BSA to form the pyridinyl trimethylsilyl derivative, which is determined by GLC.
25. Residue Data (crop and maximum residue from Proposed Use):

Crop (ppm range): 

Crop (ppm range): 

Crop (ppm range): 

Other Comments: * All residues were determined for "Top chlorpyrifos. This calculation probably results in a reporting of somewhat higher residue levels than are actually present from the proposed.

26. Residues will not exceed proposed tolerance on (commodities) 

and will exceed proposed tolerance on (commodities) N/A

27. Livestock Feeding Studies on (species): N/A (2-18)

28. Animal Feeding Levels:

29. Animal Residue Ingestion Levels from Proposed Crop Tolerance Levels (proposed tol. level x % in diet): ppm in beef cattle; ppm in dairy cattle/goats; ppm in hogs; ppm in horses; ppm in sheep; ppm in poultry.

30. Livestock Tolerances are Adequate in (species) , but not adequate in 

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31. Livestock Tolerances Need to be Established: yes/no. If yes (species/levels): ________________________________

32. Other Comments: Although we point out with tolerances are safe for the consumption have already been established for meat and milk in connection with other birds.

33. Other Considerations: Notes from treated bags and drainage ditches from bags were analyzed for residues of chlorpyrifos and/or TCP. Maximum residue reported was 0.006 ppm. There would be no problem if bag water were used to irrigate other crops.

34. Additional Data Needed: None

35. Recommendations: Toxicology considerations for setting we recommend for the proposed tolerances.

36. Other Comments under Recommendations: ________________________________

37. Compatibility with Codex Tolerances: No conflict, see attached Codex sheet

cc: RF, Circ, Reviewer, Thompson, Tox, EEB, EFB, FDA, PP#
Approved: Quick 7/14/82 Schmitt 7/14/82
PM 00131
<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>Petition No. ZE2682</th>
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<td>Chlorpyrifos</td>
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**Codex Status**
- No Codex Proposal
- Step 6 or above

**Residue (if Step 9)**:

- **Crop(s)**: Cranberries
- **Limit (mg/kg)**: 1 ppm

**CANADIAN LIMIT**

- **Residue**: __________

- **Crop**
  - **Limit (ppm)**: __________
  - Rice (on cranberries)

**MEXICAN TOLERANCIA**

- **Residue**: __________

- **Crop**
  - **Tolerancia (ppm)**: __________
  - None (on cranberries)

**Notes**: 

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