To: Product Manager Sanders (12)  
TS-767  

Through: Dr. Gunter Zweig, Chief  
Environmental Fate Branch  

From: Review Section No. 1  
Environmental Fate Branch  

Attached please find the environmental fate review of:  

Reg./File No.: 464-LLE, Lorsban 50W Wettable Powder Insecticide  
464-448, Lorsban 4E Insecticide  
464-523, Lorsban 15G Granular Insecticide  
464-547, Lorsban 50-SL Insecticide  

Chemical: Chlorpyrifos [O,O-diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate]  

Type Product: Insecticide  

Company Name: Dow Chemical Company  

Submission Purpose: Conditional uses  

ZBB Code: 3(c)(7)(B)  

Date in: 10/25/79  

Date Completed: JAN 21 1980  

Deferrals To:  

☐ Ecological Effects Branch  
☐ Residue Chemistry Branch  
☐ Toxicology Branch
CONDITIONAL REGISTRATION REVIEW

EPA Reg. No. 464-LLE Lorsban 50W Wettable Powder Insecticide

We have examined the proposed conditional registration of chlorpyrifos as Lorsban 50W Wettable Powder Insecticide for use on apples at the rate of 3/4 - 4 pounds active ingredient per acre, with a limitation of 7 applications per season at the maximum recommended dosage, with a 14 day PHI, and a restriction against grazing livestock in treated orchards.

Environmental Fate Branch concludes that the environmental fate of chlorpyrifos under the proposed conditional use is substantially similar to the environmental fate of chlorpyrifos under the currently registered uses of chlorpyrifos. It is also concluded that rotational crops are not an issue in this proposed conditional use.

R. W. Cook
Review Section #1
Environmental Fate Branch
Hazard Evaluation Division
CONDITIONAL REGISTRATION REVIEW

EPA Reg. No. 464-448 Lorsban 4E Insecticide

We have examined the proposed conditional registration of chlorpyrifos as Lorsban 4E Insecticide for use on grain sorghum at the rate of 0.25 pounds active ingredient per acre, with a limitation of 3 applications per season.

Environmental Fate Branch concludes that the environmental fate of chlorpyrifos under the proposed conditional use is substantially similar to the environmental fate of chlorpyrifos under the currently registered uses of chlorpyrifos. The question of possible residues of chlorpyrifos in rotational crops has been previously resolved in our review of 2/5/76, and such residues are not expected.

R. W. Cook
Review Section #1
Environmental Fate Branch
Hazard Evaluation Division
CONDITIONAL REGISTRATION REVIEW

EPA Reg. No. 464-448 Lorsban 4E Insecticide
EPA Reg. No. 464-523 Lorsban 15G Granular Insecticide

We have examined the proposed conditional registration of chlorpyrifos as Lorsban 4E Insecticide for use on peanuts at the rate of 1-2 pounds active ingredient per acre as a directed spray, with the following restrictions: Do not make more than one application per season as a directed spray nor apply more than 8 pints (4 pounds a.i.) of Lorsban 4E per acre or 4 pounds of chlorpyrifos (active ingredient) per acre per season, and Lorsban 15G at the rate of 7.5 to 15 ounces of Lorsban 15G per 1000 linear feet of row in a 10-18 band and incorporate 1-2 inches, with a limit of one application per season.

Environmental Fate Branch concludes that the environmental fate of chlorpyrifos under the proposed conditional use is substantially similar to the environmental fate of chlorpyrifos under the currently registered uses of chlorpyrifos. The question of possible residues of chlorpyrifos in rotational crops has been previously resolved in our review of 2/5/76, and such residues are not expected.

R. W. Cook
Review Section #1
Environmental Fate Branch
Hazard Evaluation Division
CONDITIONAL REGISTRATION REVIEW

EPA Reg. No. 464-547 Lorsban 50-SL Insecticide

We have examined the proposed conditional registration of chlorpyrifos for use as a preplant slurry treatment of bean, corn, cucumber, and pumpkin seeds to protect seeds and seedlings at the rate of 1 ounce active ingredient per 100 pounds of seed.

Environmental Fate Branch concludes that the proposed conditional use is not a significant environmentally dispersive use. Environmental Fate Branch concludes that the environmental fate of chlorpyrifos under the proposed conditional use is substantially similar to the environmental fate of chlorpyrifos under the currently registered uses of chlorpyrifos. It is also concluded that rotational crops are not an issue in this proposed conditional use.

R. W. Cook
Review Section #1
Environmental Fate Branch
Hazard Evaluation Division