Chlorothalonil Protocol Review

Samuel Creeger, Chemist
Environmental Fate Branch/HED (TS-769)

Clayton Bushong, Chief
Ecological Effects Branch/HED (TS-769)

THRU: Dr. Willa Garner, Head, Section #1
Environmental Fate Branch/HED (TS-769)

THRU: Dr. David Severn, Chief
Environmental Fate Branch/HED (TS-769)

The following comments pertain to the protocol titled, "Aquatic Field Study to Support FIFRA Registration Requirements for Bravo 500". The protocol was prepared by Biospherics for Diamond Shamrock.

A. Comments

1) Section 2.4 - Specify that the pond bottom sediment be sampled to at least 5 cm.

2) Section 2.8 - Specify that the pond bottom sediment be taken to at least 5 cm. Suspended sediment should also be analyzed for residues.

3) Section 2.11 - A definition of Manning's N and of maximum interception storage are needed.

4) Section 2.12 - Provide the pH and cation exchange capacity of the soil.

5) Section 2.14 - Provide copy of the analytical methods used.

B. Response to EEB questions

1) I would require water and sediment samples be analyzed for parent compound, DS-3701 and 3-cyano-2,4,5,6-tetra benzamide. I also would require analysis for compounds formed as a result of anaerobic soil metabolism. However, an anaerobic soil metabolism study has not yet been received telling us if anaerobic soil metabolites form that are different than the aerobic soil metabolites.
2) I do not know the parameters used in making your hazard assessment. However, if no residues are found in the pond and sediment after rainfall events representative for that time of year, then it can be assumed that runoff would not occur in another study or under use conditions under situations similar to this experiment.

3) Soil sampling of the treated field is not needed.

4) I would recommend that this concern be addressed to the registrant. Have them provide statements and proof that the compounds will not degrade while refrigerated.

5) I cannot define "Mannings N" at this time. See comment A(3) above.

6) I would ask for copies of all analytical methods used including recovery data.