MEMORANDUM

SUBJECT: Command Herbicide - Estuarine and Marine Testing

TO: Douglas D. Campt, Director
    Registration Division (TS-767-C)

The Ecological Effects Branch, Hazard Evaluation Division, has reviewed FMC's request for extension of the time allotted to repeat two estuarine/marine acute studies on Command herbicide. We do not feel that the time constraints originally placed on FMC (to have the two studies redone and submitted by April 7, 1986) were unreasonable. However, we will concur with the request for extension.

Anne Beals

John W. Melone, Director
Hazard Evaluation Division (TS-769-C)

cc: J. Akerman
    M. Slimak
    R. Taylor

**683**
MEMORANDUM

SUBJECT: Command Marine and Estuarine Testing

FROM: Douglas Campt, Director
Registration Division

TO: John Melone, Director
Hazard Evaluation Division

Registration Division is completing the registration tolerance actions for FMC's new herbicide Command. We appreciated the recent expedited reviews by your Ecological Effects Branch on several of the aquatic studies.

In the review (copy attached) two of the estuarine/marine studies were determined to be invalid. One of the conditions Ecological Effects Branch demanded was a April 7, 1986 completion for these studies. Registration Division has informed FMC the two studies need to be repeated and have received, in writing, a commitment to do the studies.

The studies will utilize mysid shrimp and sheepshead minnow. The studies will be submitted in 4 months (June 5, 1986). This date goes beyond the April 7th date in the EEB memo, but the date is the best the company could do given the limited number of facilities available to do such studies and their earlier experiences with submitting studies that the Agency determines to be invalid. Battelle - New England Marine Research Laboratory has been authorized to do the studies.

Please let me know if you or your staff wants to discuss this matter.

cc: J. Akerman
R. Taylor (PM-25)
M. Slimak
MEMORANDUM

SUBJECT: Command herbicide - data gaps

FROM: Allen W. Vaughan, Entomologist
  Ecological Effects Branch
  Hazard Evaluation Division (TS-769-C)

THRU: Norman J. Cook, Head-Section #2
  Ecological Effects Branch
  Hazard Evaluation Division (TS-769-C)

THRU: Michael W. Slivak, Chief
  Ecological Effects Branch
  Hazard Evaluation Division (TS-769-C)

TO: James Akerman, Chief
  Herbicide Fungicide Branch
  Registration Division (TS-767-C)

EEB has been instructed by Steven Schatzow to relay the following information to RD.

Conditional registration of Command herbicide for use on soybeans is acceptable under the following conditions:

1. FMC must have the two invalid estuarine/marine acute studies redone and have the data submitted within a time-frame acceptable to EEB. We have determined that the data must be submitted no later than April 7, 1986.

2. The LC50 values from both tests must be such that no potential for hazard to estuarine organisms is indicated, based on the aquatic EEC. Specifically, LC50 values must be greater than 5 ppb.

Failure to meet either of the above conditions will result in automatic cancellation of the conditional registration for Command herbicide.
FMC Corporation
Agricultural Chemical Group
2000 Market Street
Philadelphia Pennsylvania 19103
215 299 6000

February 5, 1986

Mr. James Akerman
Deputy Division Director
U.S. Environmental Protection Agency
Office of Pesticide Programs
Registration Division (IS-767C)
Crystal Mall, Building 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Dear Mr. Akerman:

Subject: Command Herbicide
Pesticide Petition No. 4F3128
Command Technical
EPA File Symbol 279-GNLE
Command 4 EC Herbicide
EPA File Symbol 279-GNLG
Command 6 EC Herbicide
EPA File Symbol 279-GNLU

FMC Corporation agrees to repeat the acute LC50 marine and estuarine organism studies to support the registration of the proposed Command Herbicide products. As we agreed, the studies will utilize Mysid shrimp and the fathead minnow as the test organisms. Battelle-New England Marine Research Laboratory has been authorized to conduct these studies on our behalf. Final reports will be submitted to the Agency in four months.

Sincerely,

[Signature]
Eunice M. Cuirle
Registration Specialist

cc: J.J. Lauber