DISCONTINUATION OF THERMINOL FR SALES

* Would go to Vice Presidents/Business Group Directors only plus Specialty Products Group field sales/Regional Managers.

1. Q.* Why has Monsanto decided to discontinue Therminol® FR heat transfer fluid sales?

   A. We have previously written to all Therminol® FR heat transfer fluid customers alerting them to the precautions necessary in handling and using these PCB-containing products. Earlier this year we stopped selling Therminol® FR fluids for new heat transfer fluid systems. We also discontinued sales of make-up Therminol® FR fluid to food-related applications and worked with these customers in converting FR fluid to non-PCB heat transfer liquids (e.g., Therminol 55 and Therminol 66). We have now decided to discontinue all Therminol® FR heat transfer fluid sales in the U.S.A. and Canada for the following reasons:

      1) The publicity on PCBs has led customers to ask their suppliers to confirm the absence of PCBs in the products the customers buy from these suppliers. Accidental leakage from a PCB heat transfer system could result in product being sold with PCB contamination unknown to both supplier and customer.

      2) There is potential customer liability on products they sell (e.g. the Holly Farms versus Monsanto lawsuit for $56 $\bar{M}$ involves other companies besides Monsanto including the user of PCB heat transfer fluid).

3) Some states are taking independent action to control PCB discharges into the environment (e.g., Michigan and Ohio).

4) Bill A-200 (?) is pending in the Michigan State Legislature to limit the sale of PCBs.

5) If the Toxic Substances Bill now before Congress passes, there is every likelihood that PCBs would be among the first materials considered for stringent controls.

2. Q.* Who within Monsanto decided to discontinue Therminol® FR heat transfer fluid sales?

A. This action was decided by Monsanto's Board of Directors at their monthly meeting in December, 1971.

3. Q.* Does this action mean Monsanto is getting out of the heat transfer business?

A. No. The sales ban applies only to the FR series of fluids (Therminol® FR-Lo Temp, Therminol® FR-O and Therminol® FR-1). The FR series is the only one that contains PCBs. All other Therminol® heat transfer fluids (Therminol® 55, 66, 77 and 88) are PCB free.

4. Q.* Are you banning sales of all Therminol® fluids?

A. No. Not all Therminol® FR fluids contain PCBs. Therminol FR series (i.e., FR-Lo Temp, FR-O and FR-1) are the only ones containing PCBs. All other Therminol® fluids (i.e., Therminol® 55, 66, 77 and 88) are PCB-free.

5. Q. * What replacements are available from Monsanto for Therminol® FR fluids?

A. The most likely Monsanto replacements are Therminol® 55 or 66. We must advise you that none of Monsanto's remaining Therminol® heat transfer fluids are fire resistant. We suggest you work closely with your insurance company during conversion from Therminol® FR fluids. As stated in our letter of December 15, 1971, Monsanto has a team of engineers available to assist you in conversions. They may be contacted by telephone at (314) 694-2514 or by writing Dr. Cumming Paton, Monsanto Company, P.O. Box 14617, St. Louis, Missouri 63178.

6. Q. * What other fire resistant heat transfer fluids are available from Monsanto?

A. Unfortunately we have none available and will not have one available in the foreseeable future.

7. Q. * What other fire-resistant heat transfer fluids are available in the U.S.A. or Canada?

A. The only fire resistant heat transfer media we know of are high pressure water and molten salts. Both of these systems have disadvantages which may rule them out as replacements for many existing Therminol® FR systems.

8. Q. * Could I obtain PCB fluids outside the U.S.A. or Canada?

A. PCBs are manufactured in France, West Germany, Italy and Japan. The decision on imports is yours to make. We would suggest, however, you may want to consider such a course of action very carefully in light of the reasons we gave for withdrawing PCBs from the heat transfer market (See answer to Question 1).

9. Q. Will Monsanto's ban on PCBs for sale in heat transfer systems apply world-wide?

A.

10. Q. Will a world-wide ban on Therminol FR sales go into effect immediately?

A.

11. Q. Have any of your competitors in PCB manufacture announced a similar ban?

A. No. However, we believe they are considering restrictions on PCB sales. Bayer has already made an announcement to this effect. Furthermore, certain European countries (e.g., Sweden) have taken action limiting the imports of PCBs. Other countries could well follow suit.

12. Q. * Why has Monsanto acted so precipitately on Therminol ® FR sales?

A.

13. Q. Why is Monsanto giving overseas customers longer to convert than its U. S. A. and Canadian customers?

A.

14. Q. This latest policy on Therminol ® FR sales is not consistent with Monsanto's previous differentiation between "open" and "closed" PCB systems. Why is Monsanto changing its policy?

A.

15. Q. By banning Therminol ® FR sales is Monsanto admitting that PCBs are the toxic, dangerous chemicals that many scientists, ecologists and writers have been suggesting for over two years?

A.

16. Q. The FDA recently stated (FDA Press Conference September 29, 1971) that the alarm over PCBs is greater than the facts justify. FDA also rejected an outright ban on PCBs as some critics have called for. The FDA does not believe PCBs are an imminent hazard. In view of these FDA statements why has Monsanto acted so precipitately in apparent contradiction of FDA?

A.

17. Q.* We do not dispute Monsanto's reason for its decision on Therminol® FR fluids; our strong criticism of Monsanto concerns the lack of warning by Monsanto that they were going to ban Therminol® FR sales. Why were we given no warning?

A. We believe warnings were given. We communicated our decision that no new heat transfer systems would be sold Therminol® FR. In addition, we have encouraged remaining "make-up" customers to consider converting to a non-Therminol® FR fluid either before or at the time for the next "make-up".

18. Q.* We believe it is impossible to convert all Therminol® FR systems in the U.S.A. and Canada on the day your decision was received. That means heat transfer systems are still operating on FR fluid; why can't we have another drum or two to last until such time as we can shut down our plant for conversion?

A. Monsanto believes that lee-way in the matter of filling Therminol® FR orders after its decision was communicated could lead to stock-piling, thus prolonging the time when PCBs could be a pollution threat to the environment. One of the key reasons for establishing a team of engineers at Monsanto is to give advice and assistance on how to handle such situations. Assistance may be obtained by calling (314) 694-2514 at Monsanto's St. Louis headquarters.

19. Q. From recent PCB production figures given out by Monsanto, there are other applications besides heat transfer for PCBs. What action has Monsanto taken on PCBs in these other applications?

A.

20. Q. We see that dielectric applications are by far the biggest user of PCBs. Shouldn't they be the ones to be shut down?

A.

21. Q. I buy PCB for both dielectric and heat transfer uses, Why can't I get one but not the other?

A. .

22. Q. * How long will the engineering team be available to help on conversions?

A. We would hope most customers will have converted to non-FR fluids in the first four months of 1972. However, the engineering team supplements the ongoing team of Monsanto heat transfer fluid specialists. Monsanto's heat transfer fluid specialists are always available to assist customers where possible.

23. Q. Is there any possibility Monsanto's replacement heat transfer fluids may be discontinued as abruptly as Therminol® FR?

A.

24. Q. * What evidence do you have that Therminol 55 and 66 will not give similar problems to the ones that have arisen with Therminol® FR?

A. We will send you bulletins on Therminol 55 or 66 which contain relevant data on this subject.

25. Q. What is the attitude of FDA and USDA on Therminol ® 55 and 66 as replacements for Therminol ® FR?

A.

26. Q. * Your letter of December 15, 1971 states that refunds on returned Therminol ® FR fluids will not be given after March 1, 1972. Does this mean I must convert to another fluid by then?

A. Not necessarily. The refund policy applies only to unopened drums of Therminol ® FR you may be carrying as inventory in your warehouse.

27. Q. I just filled my Therminol FR system in early 1971. The fluid is in excellent condition and could probably be reclaimed by Findett to be as good as new. Will you allow me credit if I return the drained fluid by March 1, 1972?

A.

28. Q. Are you banning Therminol FR fluids because Monsanto admits liability in the Holly Farms lawsuit?

A. We admit no liability in the Holly Farms lawsuit. We point out that Holly Farms sued the user of PCB heat transfer fluid as well as Monsanto.

29. Q. I have read of the Holly Farms lawsuit against Monsanto. Have you other lawsuits pending on PCBs. If any, what are they about?

A.

30. Q. Does Monsanto know of any cases where plant employees have suffered illness or harm because of PCBs and Therminol ® FR in particular?

A.

31. Q. What should I tell my employees if they ask why we are switching from Therminol FR to a more hazardous fluid as far as fire safety is concerned?

A.

32. Q. Does Monsanto consider PCB to be a toxic and dangerous substance to humans and wildlife?

A.

33. Q. Monsanto has made great play in its press statements on the safety aspects of PCBs with respect to their use in dielectrics. In heat transfer, we chose Therminol ® FR solely on the grounds of safety where we could protect the lives of our employees, neighbouring citizens and valuable property. Why does Monsanto discriminate on safety? Why use safety as an excuse for continued PCB sales in one area and not in another?

A.

34. Q. Was any pressure put on Monsanto by government agencies, environmental groups or other quasi-official groups to ban Therminol ® sales?

A.