

W. S. Clark - General Offices

April 21, 1971

SWIFT AND COMPANY, LTD.

R. N. Brell

Peter Marsh - Brussels

→ Dr. R. Pogue

M. J. Harrison
London

I have just received a rather torrid letter from Mr. Marks of Swift and Company, Ltd. I have since talked with Peter Marsh and he has brought me up to date on your activities with this gentleman and it sounds like you have things under control, or at least as well under control as is possible under the circumstances. I have just drafted a letter to Mr. Marks trying to placate him and telling him you are active on the problem. A copy of my letter is attached.

While Swift's problems are evidently more related to acute toxicity than to environmental problems, I thought some comments on terphenyls and their ecological significance might be helpful to you at this time. As you know, we made our decision last spring to withdraw PCBs from open system applications. Needless to say, this decision was made only after much deliberation and evaluation of the data available to us. Based on this study, we concluded that it would be in the best interests of Monsanto, our customers, and the environment to stop selling PCBs into open system applications. We believe that this was a good decision based on the facts available at that time.

All during our evaluation of PCBs in the environment, we attempted to find some evidence that polychlorinated terphenyls (PCTs) were also affecting the ecology. At no time did we find these materials in the environment. Since last spring, we have continued to search for PCTs in the environment and our findings are still the same. PCTs do not show up in the lakes, streams, fish, birds or other natural states.

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While Monsanto would like to be able to say that we have a complete explanation as to why chlorinated terphenyls do not appear in the environment, this is not the case. We believe that in general, they resist biodegradation to a degree similar to the PCBs. However, we do know that the chlorinated terphenyls are much, much less soluble in water than their chlorinated biphenyl analogs. This would certainly make them less available in the streams and lakes, and thus less likely to enter the food chain. Further, judging from 1) the size and configuration of the two molecules, and 2) the relative solubility data of chlorinated biphenyl and chlorinated terphenyl in organic solvents like hexane, one would certainly be lead to the conclusion that the chlorinated terphenyls should be less soluble than chlorinated biphenyls in the fatty tissues of animals. Here again, this would make it more difficult for the chlorinated terphenyls to enter the food chain.

Our current PCB content in our chlorinated terphenyl line is less than 0.4% by weight. We are bringing a plant modification project on stream at the end of this year which will reduce this level to approximately 0.01%. We are confident that this is a level which will not cause any environmental problems.

When Monsanto made its decision last spring to withdraw chlorinated biphenyls from open system applications, and to leave chlorinated terphenyls on the market, we considered all the information which was available to us at that time. The comments given above summarized some of the thinking that went into that decision. Since last spring, we have continued our studies and our evaluations, and have not as yet formed any new data which would tend to change our decision. We fully expect that the chlorinated terphenyl products will remain in our product line.

M. J. Harrison

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I hope these comments will be helpful to you in your discussions with Swift. Let me know if I can provide any additional assistance.

Willis S. Clark

/dbw

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