MONSANTO CHEMICALS LIMITED
RESEARCH AND DEVELOPMENT DEPARTMENT

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AROCLOR - ENVIRONMENTAL CONTAMINATION

Discussions with Mr. A. Taylor of the Infestation Control Laboratory of the Ministry of Agriculture and Fisheries.

INTRODUCTION

As a result of telephone calls from Mr. Taylor, discussions were set up with him at Monsanto House. He is in charge of the Chemical Section of the Infestation Control Laboratory, Tolworth, which is part of the Animal Health Division of the Ministry of Agriculture and Fisheries. He is rather more a dedicated analytical chemist than a civil servant and was largely responsible for bringing together the meeting on PCBs at the Ministry of Agriculture Headquarters in Whitehall Place on Wednesday, 17th September, which was attended by Lidgett and Parry.

SUMMARY

1. The Infestation Control Laboratory is normally concerned with the problems of infestation from insect and vertebrates and is also the centre for the Government approval system on pesticides. There are four sections, of which the Chemistry Section supplies to the others complete analytical services. As would be expected, their relationship with the Laboratory of the Government Chemist in London is good and also their contacts with the Nature Conservancy, Department of Agriculture and Fisheries for Scotland, and Tunstall Laboratory, Shell Research and other similar laboratories are continuous. On the other hand Taylor himself expressed strong views on the lack of scientific integrity demonstrated by some members of the Nature Conservancy, particularly Moore.

2. Taylor went to great lengths to tell us that he was violently opposed to "witch-hunts" and asserted that if he had not drawn the 17th September meeting together, there would have been a far greater hue and cry on PCBs than we are now experiencing. He is a man of very considerable nervous intensity and is suffering at the moment from cancer of the throat (recently radiologically treated). Our opinion is that we are dealing with a scientist of considerable ability and of high moral integrity. Full collaboration with him is therefore probably well worthwhile.

3. Taylor's laboratory has been concerned for very many years with analysis of land birds and vertebrates for pesticides' residues. He states that he has looked for PCBs over the last few years and never found them. This puzzles him greatly, particularly with the increasing evidence on the presence of PCBs in a wide spectrum of sea birds and marine life. He does not believe that the present analytical methods are as accurate as some people would assert, but seems satisfied that he can detect in his own laboratory very small quantities of PCBs. This type of statistical information is not published and is perhaps a valuable addition to our information that PCBs in the U.K. are not widely spread through animal and bird life.

4. The work at Tolworth on PCBs is concerned with perfecting analytical methods and possibly bird toxicological work. They are proposing to work with up to 6 pure isomers and would like our help in providing such or giving information through which some of them might be synthesized. Taylor volunteered that a sandwich student at Tolworth might very well be available for such synthetic work.

   He would like 2-5 grams of any pure isomers up to 6 in number that we might be able to supply. He would not be interested in looking at isomers which are not normally contained in commercial PCBs.

5. He referred to two reports which might be useful for information, namely the Nature Conservancy Report for 1968 just issued, and the Triennial Report for the Infestation Control Laboratory issued about a year ago. He also referred to the fact that the book "Chemical Fall-Out" is, in his opinion, almost a personal attack on Dr. Robinson at the Tunstall Laboratory of Shell. We might have to be a bit careful of interpretation of this comment because Taylor certainly seems to personalize matters.

6. Taylor would very much like to know all information that we might be able to make available to him on the toxicological tests being carried out in the U.S. Also what are our opinions concerning this unique relationship of PCBs with marine life and sea birds. He clearly believes that it is most important to establish reliable toxicological data so that the emotional views of such organisations as the Nature Conservancy can be reduced to more scientific arguments.

ACTIONS

Arising from these discussions there are three specific actions:

1. Pass to Mr. Taylor on a confidential basis all information on Monsanto U.S. toxicological trials thought appropriate by MC - Barrett will discuss this in St. Louis in the week beginning December 8th.

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2. Inform Mr. Taylor what samples are available of pure isomers, followed by supply to him of any that we have and are acceptable. In the absence of sufficient pure isomers, supply Mr. Taylor with information on synthetic routes available.

3. Follow up with discussion on Analytical techniques between R.A. Lidgett and Taylor's laboratory.

There were two further areas of action which we said that we would consider:

4. Possible encouragement of work in universities (Dr. M.J. Perkins of Kings College specifically mentioned) on synthesis of pure isomers. There might well be Science Research Council or other Government funds available for such work.

5. Involvement of Monsanto in a broader and more rigorous survey of distribution of PCBs in salt and fresh-water fishes, in land birds and mammals in the U.K. This obviously needs much more consideration but we should certainly accumulate as much information as is available and the Triennial Report referred to above of the Infestation Control Laboratory should be valuable in this respect. There are also two important personalities whom we should approach, namely Beverton of National Environmental Research Council and Holden of the Pitlochry Laboratory. The former is important because of the overall importance of NERC on any survey work, and the latter important because of his position in the OECD Committee which will certainly be concerned with overall survey in Europe and maybe the world.

2.12.69

J.W. BARRETT