D.V.N. Hardy, London

23rd February, 1968

Aroclors

DVNH/SS

W.R. Richard, St. Louis

J.W. Barrett London
D. Wood Brussels
R.A. Baxter Ruabon
R.E. Kelly St. Louis
R. Keller J.F. Queeny
C. Paton St. Louis
R. Parks St. Louis
G. Wilde St. Louis

With reference to your letter to Dr. Baxter we note that your available quantities of di- and trichlorobiphenyl isomers are very small indeed. As you know we have already provided samples for Jensen and Widmark (Stockholm), Richardson (Shell, England) and Tatton (Government Laboratory, England), and the residual quantities are now to be reckoned in terms of milligrams. We assume you will be writing appropriately to the Syracuse University Research Corporation.

On your request for information concerning the tests made by the above workers on our samples I can summarise as follows:-

(a) Jensen and Widmark I have seen no development since Widmark's letter of February 27th 1967 addressed to Gene Wilde.

(b) Tatton Copies of a paper entitled 'Chlorinated Hydrocarbons in British Wildlife' by D.C. Holmes, J.H. Simmons and J.O'G. Tatton, Nature Vol 216, Oct 21, 1967 pp. 227-229 were passed to Messrs. Wilde and Buchanan with my letter of 4th November, 1967. This paper confirms the work of Jensen and in particular shows close similarity between gas-liquid chromatograms of (a) extracts of Kestrel liver oil and (b) a commercial polychlorobiphenyl resin.

(c) Richardson Richardson has not published anything so far, but J. Robinson, also of Shell Research Ltd., Tunstall Laboratory, Sittingbourne, Kent has published a paper entitled 'Residues of Organochlorine Insecticides in Dead Birds in the United Kingdom, Chemistry and Industry 1967, pp. 1974-1986. This is a comprehensive review but as far as I can see it does not suggest that any of the residues contain chlorinated polyphenyls.

However, I was in correspondence with Richardson in November, 1967 (copies herewith) which showed that he was satisfied that octochlorobiphenyl was present and that his results are substantially in line with those of Tatton et al. You will note also that he believes that the contamination of bird life is in the valley of our River Witham.

I have judiciously followed up this clue with a view to locating the source of the contamination: there appears to be no operation of any size involving Aroclors within the Witham valley. The nearest is at Kings Lynn with usage for electrical purposes. As NCR represents the greatest off-take of Aroclor and as there is likely to be at least some wastage in the process my suspicion is that it is either in making NCR or possibly in dealing with the scrap that the contamination arises.

So far there is no indication that the Public Authorities are worried.

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