Monsanto

FROM (NAME & LOCATION): E. S. Tucker - R&D Labs - 1700 So. 2nd - St. Louis

DATE: May 19, 1969

SUBJECT: AROCLOR SAMPLES FROM WGK

REFERENCE:

cc: R. E. Keller - So. 2nd
C. F. Buckley - WGK
W. R. Richard - GO
E. P. Wheeler - GO
P. B. Hodges - GO

TO: Michael A. Pierle
TSD - WGK

Analysis of the WGK sample by EC/GC produced the following results.

	Aroclor 1242 Found
Sludge from Sauget Village Waste Treatment Plant	0.86 ± 0.02%
Waste Water from Village Effluent	Interference*
Sludge from Mississippi River 300' downstream of Plant Outfall	16.4 ± 0.3 ppm**
Waste Water from Aroclor Production Department	1.20 ± 0.05 ppb

*Aroclor 1242 present but the background was so intense a quantitative estimate could not be made. Probably slightly less than solubility limit ~10-100 ppb.

**Peaks with longer retention times indicated the presence of Aroclor 1254 so the number shown is slightly high for Aroclor 1242. Content slightly low for the total Aroclor content.

GC/Mass analysis confirmed the presence of mono, di, tri and tetra polychlorinated biphenyls in the Sauget sludge sample.

E. S. Tucker

db

Attaches December 1967 memo from Harley

TRAN 007564

MM REV. 11-65

STLCOPCB4024941

Monsanto

D.V.N. Hardy, London

12th January, 1967

Aroclor - Sweden

DVNH/ARW

FILE	✓	3
Destroy		
JTG		
WHH	✓	✓
MNJ	✓	✓
REK	✓	✓
RAM		
EPW	✓	✓

JAN 16 1967.

TO

P.G. Benignus, St. Louis
G.R. Buchanan, St. Louis
D.S. Cameron, Brussels
Dr. R. Emmet Kelly, St. Louis
G.R. Graham, New York
R.A. Steenrod, St. Louis
D. Wood, Brussels
J.A. Evans, London
R.A. Baxter, Ruabon

On 2nd January 1967 Mr. A. Richardson of Shell Chemicals' Tunstall Laboratory, Sittingbourne, Kent talked with me over the telephone concerning the Swedish Press report relating to the identification of "Polychlorinated Biphenols" as trace contaminant in sea birds, fish etc. Richardson has been working for some years on the similar problem with insecticides such as DDT, which are known to have wide distribution in trace quantities. He had already found that the chlorine-containing residue contained substances more stable than DDT. and just as Sören Jensen reports he has obtained spectrographic evidence that these are very similar if not identical with Aroclors. He has obtained samples of Aroclors 1242, 1254, 1262 and 5460 from us, and would now like to have small samples of any chemically pure Aroclor constituents which we may be able to supply. Milligram quantities would suffice for his purpose.

Mr. Richardson was quite sure that the compounds reported to be "polychlorinated biphenols" are really meant to be polychlorinated biphenyls and as support he has sent me a copy of the synopsis of a paper entitled "Pesticide Analysis: Presence of Polychlorinated Biphenyls at Residue Analysis of Biological Samples" by Sören Jensen and Gunner Widmark (photocopy attached).

I discussed with Richardson the soundness of Jensen's claims, and was assured that his work and findings are sound. Jensen is on the staff of the Institute of Analytical Chemistry, University of Stockholm. A note on the staff and work of the Institute is attached. From this you will see that Jensen is wholly concerned with the analysis of chlorinated pesticides and with the work of stations for routine analysis.

I would be glad if Dr. Baxter and Dr. Buchanan would arrange to send me milligram samples of any pure Aroclor constituents that may be available at Ruabon and St. Louis respectively.

COMPANY CONFIDENTIAL

D.V.N. HARDY

TRAN 007566

STLCOPCB4024942