Monsanto

FROM (NAME & LOCATION): W. B. Papageorge B2SK

DATE: February 10, 1975

SUBJECT: AROCLOR 1260 - HEW STUDIES

REFERENCE:

TO : H. S. Bergen - B2SL

cc: [redacted] Bishop - C2SA
G. L. Bratsch - B3NA
K. W. Easley - 1920
F. J. Fitzgerald - B3SA
T. L. Gossage - B2SL
G. J. Levinskas - A2SC
C. Paton - B2SC
W. R. Richard - T3A
G. Roush - A2SA
E. Tillman - A2SA
W. W. Withers - B2SA
P. L. Wright - A2SC

The following met on Thursday, February 6 to review the results of a rat feeding study recently completed by Dr. Renate Kimbrough, Center for Disease Control, HEW:

T. L. Gossage	W. R. Richard
G. J. Levinskas	G. Roush
W. B. Papageorge	E. Tillman
C. Paton	W. W. Withers
	P. L. Wright

George Levinskas summarized a meeting held at the National Cancer Institute, Washington, D. C. on January 31, at which sections of liver tissue from Dr. Kimbrough's study were reviewed. Discussion relating to interpretation, significance and required action followed. The following conclusions were drawn:

1. Cancerous liver cells were observed in approximately 8% of the rats exposed to Aroclor 1260 in Dr. Kimbrough's study.

2. This effect was not observed in similar studies conducted for Monsanto Company by Industrial Bio-Test Laboratories.

3. This difference in observed effects could be due to the difference in rat strains used in the two studies.

4. Dr. Kimbrough will in all probability present and/or publish her findings as soon as she can.

5. NIOSH has Dr. Kimbrough's data and certainly, following publication of this information and in the absence of any contradicting reports, the regulatory agencies will be pressured into reviewing their policies and regulations relating to polychlorinated biphenyls. As in the past there will very likely be limited attempts made to distinguish between types of commercial mixtures of polychlorinated biphenyls. The cancer cell formation observed in Dr. Kimbrough's study with Aroclor 1260 under conditions unique to that test will in all probability be quickly and without scienfific basis assumed to occur with all polychlorinated biphenyls.

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The following action plan was developed and is recommended for adoption:

Action	Responsibility	Dates Start	Dates Complete	Estimated Cost
1. Publish the results of the Monsanto studies conducted by Industrial Bio-Test Laboratories.	G. Roush J.F. Stapleton	Immediately	July 1, 1975	-
2. Obtain services of cancer specialist to review both studies and interpret significance to current PCB applications.	G. Roush	Immediately	April 1, 1975	$2000 - $5000
3. Obtain National Cancer Institute interpretation.	G. Roush	Following 2 above.		-
4. Discuss with NIOSH, OSHA, FDA, EPA.	G. Roush K.W. Easley W.B. Papageorge	Immediately following 2 and 3 above.		-
5. Discuss with key customers	G. Roush T.L. Gossage W.B. Papageorge	Coincident with 4 above.		-
6. Complete WOK plant employee exposure study.	G. Roush	Immediately	April 1, 1975	
7. Conduct study of Aroclor 1260 with rats to determine effect at 24 months when exposure is withdrawn at 18 months.	G. Roush	Immediately	March, 1977	$ 70,000
8. Conduct study of Aroclor 1260 with second species (hamster?) to establish if species differences exist.	G. Roush	Immediately		$ 70,000

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Action	Responsibility	Dates		Estimated Cost
		Start	Complete	
9. Conduct 2-year rat feeding study with Aroclor 1016.	G. Roush			$ 85,000
10. Review rat liver sections from Monsanto A-1242 study.	G. Roush	Immediately		$2000 - $5000

MDNS 030358

A possibility does exist that Dr. Kimbrough may be interested in conducting some of the animal feeding studies listed in the action plan. Medical Department representatives will explore this possibility.

W. B. Papageorge/jw

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