Monsanto

FROM (NAME & LOCATION): R. D. Osland, M.D. - W. G. Krummrich Plant

DATE: November 6, 1974

SUBJECT: PCB Investigation

Company Confidential

TO: F. E. Heisler

cc: E. Kelly, M.D. - A2SA
G. A. Hippe
H. J. Horner

This investigation was prompted by the safety suggestion of Mr. Jim Pace dated June 29, 1974. He suggested that a possible Aroclor in bodies with people working with the materials might be harmful to the laboratory workers. The procedure for handling this investigation was as follows: blood tests were done on the people who had personal contact with the chemical, the samples were submitted to Mr Orville Hicks in the General Offices for Aroclor determination, and the remaining blood samples were submitted to Clinical Laboratories in St. Louis for liver function tests.

The copy of Mr. Hicks work is enclosed for your inspection. The only significance is that the ppb of Aroclor 1254 determination showed infinitesimally small amounts detected. The two people who had the largest amount of Aroclor 1254 in ppb detected showed no obvious clinical change in their serological blood tests. Hemograms were done on all the subjects and these were within normal limits. Because of the wide variation in the reporting of the liver function tests, these were submitted to two laboratories and only confirmed abnormalities by both laboratories will be considered. A copy of these reports in a chart form with the normal variations will be included in this report.

There were two individuals, and w had confirmed elevations of abnormal liver function test: Although these were relatively small they should be taken into consideration. Both of these individuals had no detectable PCB in their blood.

One might conclude from this summation that if there is a "liver abnormality" it is not work related but due to some extraneous cause and perhaps should be investigated from another clinical standpoint.

In summary, six laboratory workers were investigated for their exposure to PCB and it's possible teratogenic, carcinogenic and patho physiological effects. The amount of PCB detected was extremely low. The amount of abnormality discovered in the battery of the liver function test was not conclusive in that there was no consistency to the reported abnormality.

R. D. Osland M.D.
R. D. Osland, M.D.

/ghw

UNIVERSITY INDUSTRIAL CHEMICALS CO.

FROM (NAME & LOCATION): Orville Hicks - T2F - General Offices

DATE: September 18, 1974

SUBJECT:

REFERENCE:

cc: R. G. Kaley - T2F
R. E. Keller - T1B
E. S. Tucker - T2F
Dr. R. E. Kelly - A2SA

TO: Dr. R. D. Osland
W. G. Krummrich Medical Department
1740

The six blood samples and blank tuba were analyzed for PCBs via our normal proceduras. The chromatograms obtained were similar to Aroclor 1254 and were calculated as such. Another peak with a retention time identical to DDE was observed and results are reported below.

Sample		PPB Aroclor 1254	PPB DDE
Reagent Blank		11	n.d. <2
Blood Tube Blank		11	n.d. <2
	8/13	n.d. <5	10
	8/16	35	6
	8/16	n.d. <5	4
8/15		7	6
	8/16	9	9
	8/16	12	5

n.d. = none detected
Figures for people are corrected for blanks

If we can be of further service, please call.

Orville Hicks

db

4-4839

MONS 004135

	CBC	Total Bil.	LDH	SGOT	SGP-T
CL	Normal	[redacted]1.4(.15-1.0)	186(100-225)	[redacted]66 (7-40)	[redacted]30 (0-25)
ICL	Normal	[redacted]1.4(.15-1.0)	[redacted]234(100-225)	34 (5-40)	[redacted]54 (10-30)
CL	N	.88	165	[redacted]53	9
ICL	N	1.0	212	23	11
CL	N	.31	200	[redacted]47	17
ICL	N	.3	[redacted]314	19	22
CL	N	.48	[redacted]286	36	5
ICL	N	.5	[redacted]289	32	19
CL	N	.69	200	[redacted]60	16
ICL	N	.7	[redacted]272	29	22
CL	N	.21	201	[redacted]50	6
ICL	N	.2	[redacted]243	19	5