Monsanto 1-PCB 8/8/0

FROM (NAME & LOCATION) W. B. PAPAGEORGE - ST. LOUIS

DATE : JULY 17, 1970

SUBJECT :

REFERENCE :

TO : H. S. BERGEN

TO ~~DAH~~ ~~DRR~~ ~~DAO~~ (LAST)

CC: D. S. CAMERON - BRUSSELS
W. S. CLARK
E. M. EMERY - JFQ
M. W. FARRAR - 2ND STREET
R. E. KELLER - 2ND STREET
R. M. KOUNTZ
J. MASON
R. H. MUNCH - 2ND STREET
~~D. A. OLSON~~
W. R. RICHARD
J. R. SAVAGE
J. E. SPRINGGATE
E. S. TUCKER - 2ND STREET
H. A. VODDEN - RUABON
E. P. WHEELER

I reviewed our biodegradation studies with R. Munch, R. Kountz, S. Tucker, E. Emery and J. Savage on Thursday, July 16, 1970.

1. Monsanto-USA Studies

River die-away studies indicated Aroclor 1221 disappears, Aroclors 1242, 1248 and 1254 were undegraded.

Semi-continuous activated sludge studies indicate that selective degradation of specific homologs does occur because peaks normally present in Aroclor 1221, 1242 and 1248 disappear.

2. Monsanto-U.K. Studies

Shake flask studies demonstrate that 2,4'-, 2,2,3- and 2,3,4'- isomers degrade readily. 2,2',4,6-, 2,2',4,4', and 4,4' do not degrade.

Ruabon laboratory also demonstrated by peak analysis that MCS-1016 and Aroclor 1130 are more degradable than Aroclor 1242.

3. Environment Samples

Investigators in both Europe and USA find isomers in wildlife that resemble those in Aroclor 1254. Predominant homologs present in Aroclor 1242 are usually not found except close to industrial plants. Since large quantities of Aroclor 1242 are produced and released to the environment, degradation must be occurring.

EXHIBIT 42

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