CHLORINATED BIPHENYLS

CHRONOLOGICAL EVENTS

11-22-66 - JENSEN LECTURE, WENNER-GREN CENTER MEETING, STOCKHOLM

12-15-66 Report of New Chemical Hazard - New Scientist Dec. '66
(Jensens Work)
First published report about PCB

12-29-66 Widmark letter to Monsanto
Head of Institute of Analytical Chemistry
University of Stockholm, Sweden
Found unknowns to be polychlorinated biphenyls
made by Monsanto, et al - used GC/Mass.
Sea eagle - 80 ppm polychlorinated biphenyls
- 80 ppm pesticides
- 40 ppm mercury
No knowledge of biological significance in living organisms.
Collaboration started with Dept. of Toxicology/Carolin Institute.
Would like to work with Monsanto Toxicologists on problem.

1-10-67 Press Release, LKB Instrm. Co.
(Jensens Work)

1-26-67 D. Wood letter to Buchanan
Visited Sweden
Confirmed chlorinated biphenyl report of Jensen

1-30-67 Editorial in Chemical Engineering
Covers Jensens work

2-13-67 Wilde letter to Kelly

2-21-67 Hardy letter to Kelly
of - Jensen may have jumped gun in blaming chlorinated biphenyls

2-21-67 Kelly letter to Wilde - No need to contact Swedish people

2-27-67 Widmark letter to Wilde
Reviews lecture at Baeyer in Germany

2-27-67 Kelly letter to

3-16-67 Wilde letter to Kelly - Widmark Letter

5-67 S.A.O.A.C. - Pub. - Widmark 50 1069 (1967)

10-21-67 Holmes, Simmons, Tatton - Nature 216 227 (1967)
Confirms work of Jensen

PRR 021889
SCM 037311

11-1-67 Hardy letter to at
Status of work at ?

11-2-67 Richardson letter to Hardy
Confirmed by GC/Mass. Aroclor 1254 in eggs from 100 ppm feeding studies - confirmed Govt. Labs.

Kelly
EXHIBIT NO. 19
R.G. 12/12/80

HARTOLDMON0011697

12-30-67 Holden, Marsden - Nature 216 1274 (1967)
- PCB in seals
- PCB appears in birds with aquatic environment - suggests river contamination.
- Human in UK contain little PCB <0.1 ppm in fat.
- Suggests pollution is of aquatic origin - if air more would be found in human fat.
- Cons, found & LD_{50} - unlikely that residues of PCB constitute direct toxic hazard.

1-8-68 Heininger letter to Robson/Anagnostopoulos.
- Birdsall, Wisconsin Alumni Res. Foundation (WARF)
- Studies to be on shore birds
- Funded by U.S. Dept. of Interior, Fish & Wildlife Service
- Suggested that Monsanto-WARF work openly

1-16-68 Wilson letter to Gentlemen/Monsanto
- Res. Chemist, U.S. Dept. of Interior
- Fish & Wildlife Service
- Investigation of chlorinated polyphenyls in avian and animal tissues

1-26-68 Lincer letter to Patterson, MCL
- Res. Assistant, Syracuse Univ. Res. Corp., New York
- Wanted polychlorinated biphenyl references & materials

2-8-68 Spencer letter to Richard
- Consultant, Nat. Ag. Chemicals Assoc-
- Interferences with chlorinated hydrocarbons

2-13-68 Baxter letter to Richard - Ref. to Syracuse

2-19-68 Richard letter to Baxter - Aroclor 5a status

2-23-68 Hardy letter to Richard

4-26-68 Paton letter to Kelly

5-3-68 Newell letter to Hunt
- Chairman Dept. of Ag. & Environmental Toxicology, Stanford Res. Institute
- Toxicological results/birds & fish/enzyme induction stimulated
- Recommended tests in cooperation with Monsanto rather than seek govt. support
- Med. Dept. recommended no action.

5-6-68 Kelly memo to Robson/Anagnostopoulos - Reference to 5-3-68

5-20-68 Richard to Davis and back

5-23-68 Richard to Davis and back

PRR 021890

SCH 031312

HARTOLDMON0011698

7-15-68	Glasgow, Chief Pesticides - requested info on Aroclors Ref. Stds. Section Dept. Health, Education & Welfare Blickenstaff - USDA - quality control for formulations Dykstra - USDI - Pautuxent, Maryland Labs - Aroclor sent
7-31-68	Paton Memo
8-23-68	Wheeler to Early, trip plan
9-5-68	Wheeler plan memo for visits
9-11-68	Wheeler memo to Richard - Biotest Protocols
10-9-68	Risebrough - Confidential pre-publication PCB in fish & birds Comments from Monsanto solicited
10-21-68	Wheeler to Richard - Risebrough paper
11-1-68	Risebrough to Conkin - Publication Review
11-6-68	Wheeler to Richard
11-13-68	Conkin to Risebrough - Comments on review of manuscript
11-14-68	Wheeler memo to Richard
11-27-68	Paton to Richard Include Aroclor 5460
11-68	Gunther - Prof. of Entomology & Chemistry, Univ. of Calif. School of Ag. Sciences Dept. of Entomology Citrus Res. Ctr & Ag. Expt. Sta. - Riverside State USDA Research Area Committee including Hawaii DDT & chlorinated hydrocarbons
12-3-68	Gunther to Paton - Request for Aroclor Sas.
12-9-68	Wheeler to Richard - Calendra Minutes
12-9-68	Richard to Wheeler - Calendra Minutes
12-14-68	Risebrough - Nature 220 1098 (1968)
12-19-68	Richard to Tucker - DDT, et al
12-20-68	Wheeler to Calendra - Letter of authorization
12-23-68	Bryant to Harris - Rome Pollution Laboratory
12-30-68	Richard to Kuhn - Legal problems
12-30-68	Tucker to Richard - Chlorinated Naphthalenes

HARTOLDMON0011699

12-31-68	Tucker ~~to Jacker~~ memo - Aroclor at Anniston
1-7-69	Wheeler to Richard - Aroclor Wildlife
1-9-69	Wheeler to Richard - Meeting
1-10-69	Wheeler to Calendra - Feeding of Halowaxes
1-16-69	Wheeler to Tucker - Widmark Paper
1-21-69	Wheeler to Fancher - Proceed with chickens
1-21-69	Wheeler to Richard - Pesticide Structures
1-23-69	Hodges to Buckley - Aroclors in Plant Effluents
1-24-69	Paton to Keller, et al - Montar
1-30-69	Tucker to Wood - Update
2-4-69	Wood to Tucker - Reply
2-7-69	Tucker to Wheeler - Pesticide Sas.
2-10-69	Wheeler to Fancher - DDT, et al sas.
2-24-69	Perlman - San Francisco Chronicle
2-25-69	Tucker to Keplinger
2-25-69	Tucker to Wheeler - Widmark's Paper
2-25-69	Tucker to Wheeler/Richard - Anniston River Results
2-26-69	Notes on meeting - Burgen, et al
2-26-69	Tucker to Stark - Solubility
2-28-69	Rough Draft - Keller - Position Statement
3-4-69	Tucker to Richard - Combustion
3-4-69	Wheeler to Wood - Dept. of Fish & Game
3-5-69	Paton to Richard - DDT on Trial

PRR 021892

SCM 037314

R. E. Keller 6c
3/10/69

HARTOLDMON0011700

ORIGINAL

IN THE COURT OF COMMON PLEAS
PHILADELPHIA COUNTY

IN RE: PAOLI RAILROAD YARD)
PCB LITIGATION,)
)
)
)
) MASTER FILE
) NO. 90-0609-C-6

EXHIBITS TO THE
DEPOSITION OF R. EMMET KELLY, M.D.
DECEMBER 11-12, 1990

GORE REPORTING COMPANY
408 OLIVE STREET ST. LOUIS, MISSOURI
241-6750

HARTOLDMON0011701