Project:

Electrical Fluids - Part VI - Air and Water Pollution Control

Objectives:

1. Follow developments in analytical chemistry leading to more sensitive and specific methods for identifying Aroclors in our environment.

2. Keep in touch with laboratories doing research on environmental contamination by Aroclors including Universities, FDA, USDA, Fish and Wildlife Service.

3. Study present methods for disposal of Aroclors and if necessary develop safer ones.

4. Assess possible toxic effects on humans.

Justification:

During studies of the fate of chlorinated organic insecticides, biochemists have isolated unknown chlorinated hydrocarbons which they have tentatively identified as chlorinated biphenyls. These have been shown to be present in some fish, birds, and wild animals from certain areas at concentrations in the parts per million range. Public health authorities have therefore felt that it was necessary to determine whether or not environmental contamination by chlorinated biphenyls is a hazard to human life or health. It is vital that we cooperate in these studies so that we can be sure that the results are valid and so that we can assess the impact of the findings on the Aroclor business. We may need to cooperate in developing disposal procedures which will not result in harmful contamination in order to avoid restrictive legislation.

Status:

At present, we are collecting all available information on this problem. The Medical Department is following the toxicology and will start a test program at Calandra Labs to determine biological effects of trace Aroclor. Research will evaluate the validity of the published analytical identification. Samples of Aroclors, and in some

Prob - PCB identified as envir contaminants

Aroclor - May lead to restrictive Fed & OR State regulations on use

Status: (Continued)

cases of pure chlorinated biphenyl isomers are being made available to government and university laboratories working on this problem for use as calibration standards.

Plans:

Responsibilities	Job	Target Date
REK/ST	(2) Assess validity of ~~analytical~~ lines of her workers methods used by workers in this field.	3/69
WRR/EW/ST	(1) Collect information on all work being done by others in this field.	Continuing
PB/JB/PH	Determine present disposal methods for Aroclors.	3/69
REK/ST Elmer Wheeler	Toxicology - (2) Review with government agencies, Research Institutes. (1) Start outside test program.	8/15/68

Manpower Assignments: (3) Source

	Total Man-Years 1968 T.	NT.
R. E. Keller/Scott Tucker	1.1	
W. R. Richard	.1	
Elmer Wheeler/P. Hodges	.3	
P. Benignus/J. Bryant		

Estimated 1968 Costs:

$25,000 (Calandra Labs for '68)
$25,000 (Metabolic Study)

Job No. Applicable

1630328

Sponsors: E. Wheeler/Scott Tucker
P. Benignus/R. H. Munch

July 18, 1968

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