MINUTES

AROCLOR - WILDLIFE; REVIEW OF BIO-TEST STUDIES

MONSANTO GENERAL OFFICES
MEDICAL DEPARTMENT
ST. LOUIS, MISSOURI

September 19, 1969

TO:

Those Present	Not Present
M. W. Farrar	W. R. Richard
W. H. Hunt	
R. E. Keller	
R. E. Kelly	
E. S. Tucker	
E. P. Wheeler	

The above attendees reviewed with O. E. Fancher, Director, Industrial Bio-Test Laboratories, the biological results to date of their feeding studies and the consolidation of tissue samples for residue analysis by the Analytical Group of the Applied Sciences Section.

A detailed analysis of the currently planned analytical support work for the Aroclor - Wildlife project was prepared for this meeting, Table I. The analysis includes a listing of studies, manpower requirements and a dollar cost for the analytical support of each study. In brief, it was ascertained that there were at least five separate Bio-Test feeding studies in progress or planned which would require 105 man weeks to analyze the estimated 1340 samples being generated, at a cost of $63,000. An additional $18,000 of work not involving Bio-Test is also outlined in the Table.

Meeting Objectives

I. Review Bio-Test feeding studies with special regard to the scheduling and reduction of the number of samples to be analyzed.

II. Status review of the biological results, to date, of Aroclor - Wildlife Bio-Test feeding studies.

With these facts in mind, each Bio-Test study listed in Table I was critically reviewed to determine if the number of samples requiring residue analysis could be decreased without appreciably effecting the results.

1. Rat Tissue Study

Actions: - Delete residue analysis of rats fed chlorinated naphthalenes and pesticides.

Pool male and female animals.

2. Chicken Toxicity, Reproduction, and Meat and Egg Residue Study

Actions: - Pool larger numbers of eggs.

- Analyze only fat, muscle, and liver tissues.

- Restrict analysis to one, no effect level for each Aroclor.

3. Mallard Duck Study

Action: - Equivalent to Study No. 2.

4. Two Year Chronic Toxicity in Rats

Actions: - Delete 9 month sacrifice.

Actions: (Cont'd)
- Pool all male and female animals.
- Restrict analysis to one, no effect level for each Aroclor.

5. Fish Toxicity Study

Actions: - None; study design requires this number of samples.

6. Rat Reproduction Study

Actions: - Addition of 2nd litter, 1st generation, rat pups to be analyzed.

7. Two Year Chronic Toxicity Study in Dogs

Actions: - Addition of selected tissues for residue analysis.

TABLE II
AROCLOR - WILDLIFE ANALYTICAL SUPPORT REVISED
(Bio-Test Section Only)

	No. Samples	Man Weeks	$ Cost
I. Residue Determinations			
A. Biological Residues (Bio-Test)			
1. Rat Tissue Study	40	3	1,800
2. Chicken Toxicity, Reproduction, and Meat and Egg Residue Study (3)	~~96~~ 200	~~8~~ 16	~~4,800~~ 9,600
3. Mallard Duck Study	96	8	4,800
4. Two Year Chronic Toxicity in Rats (1)	160	12	7,200
5. Fish Toxicity Study (2)	60	9	5,400
6. Rat Reproduction Study (4)	10	1	600
7. Two Year Chronic Toxicity Study in Dogs (5)	40	3	1,800
	502	44	26,400

It is important to note that neither Table I nor the revision take into account work done by the Spectroscopy Group (GC/Mass), duplicate analysis of samples, nor any additional method development required.

The results, to date, of the biological studies were issued in progress reports distributed by Dr. Fancher.

Additionally, arrangements were made to have Bio-Test store tissue samples in Chicago until they can be analyzed.

E. S. Tucker

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Attachment