Monsanto

FROM (NAME & LOCATION) E. P. Wheeler - St. Louis

DATE : September 11, 1968

CC: Dr. R. E. Kelly
Dr. Scott Tucker
Mr. R. A. Keller
Mr. Cumming Paton

SUBJECT Proposed Protocols for Aroclor Toxicity Studies at Industrial Bio-Test Lab.

REFERENCE

TO : Dr. W. R. Richard

Attached is a copy of a letter from Industrial Bio-Test and proposed protocols for Aroclor toxicity studies. This arrives just as I am leaving for two weeks.

I will take this material with me and if possible send you my comments before the end of next week. If it appears desirable to have a session with Dr. Kelly and Bill Hunt to discuss this matter before I return, I am sure Dr. Kelly will be happy to see you.

EPW

Elmer P. Wheeler

EPW:cjs

DSW 380733

SEP 11 1968

Industrial **BIO-TEST** *Laboratories, Inc.*
1810 FRONTAGE ROAD
NORTHBROOK, ILLINOIS 60062
AREA CODE 312
TELEPHONE 272-3030

September 9, 1968

Mr. Elmer P. Wheeler
Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, Missouri 63166

Dear Mr. Wheeler:

I am submitting a collection of protocols for studies with Aroclors. The studies proposed, with prices, are as follows:

I. Rat Tissue Study

Aroclor I	2 levels
Aroclor II	2 levels
Aroclor III	2 levels
Toxaphene	2 levels
Controls	
Total	$2,700

Additional reference materials could be included for $600 per material (2 levels).

This price is exclusive of analyses. If you choose for us to do all or part of the analytical work, we could work on a cost plus basis or we could provide you with a quotation after we have run through the method.

We found no really useful information in our scan of the literature on the metabolism of chlorinated pesticides. I feel that we can get much information from analysis for tissue residues and from study of urine and feces collected from treated animals. It is not possible to quote for such studies in the absence of fore-knowledge of findings. This could be set up on a cost plus basis with provision to review after the expenditure of a defined sum. One should be able to at least define the problem on a budget of $5,000.

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

Three Aroclors with common controls Exclusive of analytical costs	$15,000

III. Mallard Duck Study

Three Aroclors with common controls Exclusive of analytical costs	$5,000

IV. 3-Generation Reproduction Study in Rats

Three Aroclors with common controls	$35,000

V. 2-Year Chronic Toxicity Study in Rats

Three Aroclors with common controls	$57,500

VI. 2-Year Chronic Toxicity Study in Dogs

Three Aroclors with common controls	$85,000

VII. Subacute Fish Toxicity Study

We have not done such a study but we have built one apparatus which allows investigation of as many as five concentrations of one material plus controls simultaneously for extended periods of time, starting with fingerlings and continuing through a reproduction cycle if this is desired.

If one wanted only to measure the accumulation of test materials over a 90-day period, the cost, using 5 concentrations, would be approximately $1,500 per species for one material, exclusive of analyses. Extending the study through a reproduction cycle would cost an additional $3,500.

In any of these studies, material (urine, feces or tissues) could be retained for analysis to determine species differences relative to accumulation and metabolism.

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The cumulative cost of the defined studies, exclusive of analytical costs and fish studies, amounts to $200,200.

As Dr. Calandra has told you, billings could be arranged to accommodate to your budgetary needs.

Your comments on this program will be welcome and should further personal discussions seem desirable, we will be glad to meet with you either here or in St. Louis.

Sincerely yours,

Otis E. Fancher

Otis E. Fancher, Ph.D.
Director

OEF:DMS
enc.

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