

MEMORANDUM

TO: Dr. Kehoe
FROM: Dr. Cleveland
DATE: 1-28-65
RE: Status of projects in the Toxicology Division

Sponsor - Shell Chemical Company

1. Vapona Insecticide Program.

A. Rats were fed on diets containing Vapona Insecticide in concentration of 0.1, 1.0, 10.0, 100.0, and 1000.0 ppm for a period of fifteen weeks. This phase of the work is completed and has been reported.

B. Rats have been fed on diets containing Vapona in concentration of 0.1, 1.0, 10.0, 100.0 and 500.0 ppm for approximately 17 months. This phase will be completed September 1, 1965.

C. Dogs have been fed on diets containing Vapona in concentrations of 0.1, 1.0, 10.0, 100.0, and 500.0 ppm for 13 months. This phase of the program will be completed in December, 1965.

D. Rats have been fed on diets containing Vapona in concentrations of 0.1, 1.0, 10.0, 100.0 and 500.0 ppm and the original animals and subsequent litters have been mated through 3 successive generations. This phase of the program had just been completed and the report is being written.

If possible this report should reach Shell Chemical Company as early in February as possible as they should like to include it in a petition that is being submitted to FDA.

2. Dieldrin Program

Five groups of monkeys are being fed on diets containing Dieldrin in concentrations of 0.05, 0.1, 0.5, 1.0, and 1.75 ppm. This program has been underway for a period of 16 months and was scheduled for a two year period, tentatively ending in September, 1965, although Dr. Zavon hopes to continue this as a longer term project.

Sponsor - Ethyl Corporation

1. 702-C₁₄

This is a very small project involving approximately 5 dogs and has been underway approximately 2 years, having been continued after the completion of a 90 day program. The purpose is to determine when the animals reach equilibrium after continued ingestion of 702-C₁₄.

2. 702-C

This is a small project determining the character of urinary metabolites of 702. The actual work is completed and the report is in preparation.

Sponsor - United States Public Health Service

1. Lung cancer project.

This involves the inhalation of coal tar fumes. This is a three year project initiated September 1, 1963 to terminate September 1, 1966. The work is approximately 6 months behind schedule and probably will need to be extended for a period of 6 months without additional funds, although Mr. Tye is considering submitting a proposal for renewal and requesting additional funds.

2. Insecticide Project.

This is a program to determine the presence of chlorinated insecticides in human fat, developing methods with the gas chromatograph. The work was begun October 1, 1964 and terminates October 1, 1966.

Sponsor - Colony Development Corporation

Program should begin approximately mid-February, 1965 and be completed by the end of 1965. This involves analytical work by Mr. Tye and Biological work by Dr. Bingham. The latter portion of the program will probably extend into 1966.

Sponsor - Socony Mobil Oil

1. Work on carcinogenesis.

Work is expected to continue through July, 1966.

Sponsor - American Oil Company

1. Experimental work begun in January and August of 1964 and continues to January, 1966.

Sponsor - Standard Oil of Ohio

1. Work begun in March, 1964 and continues through October, 1965.

Public Health Service Grant 43-64-45

This is a two year contract and began in September, 1963 and terminates September, 1965.

Dr. Bingham will apply for a renewal of the grant in spring of 1965.

Army Contract DA-18-108-AMC-170A

This is a two year contract dealing with pulmonary physiology conducted by Dr. Stemmer. The termination of the first contract is in June of 1965. A two year extension of the program has been approved.

U.S. Public Health Service Grant 00H-00165-01

This is a research program involving the toxicity of trivalent chromium being conducted by Jim Pierce and in part supervised by Dr. Stemmer.

Army Contract DA-33-008-AMC-289

This is a program of 9 months duration to evaluate the anti-personnel efficacy of a flame projector expendable one shot.

Army Contract DA-33-008-AMC-266X

This is a contract for a period of 9 months and consists of basic research involving the investigation of magnesium teflon.

On these two contracts Dr. Frank P. Cleveland is designated as the principle investigator. On page 2 of the contract, paragraph e there is the designation of the personnel.

Army Contract DA-18-108-CML-6628

This is a subcontract from Cornell Aeronautical Laboratory and is a basic research project relating the physiological effects of pyrophoric agents.

Sponsor - Eaton Laboratory

This is a project involving human volunteers using chloraseptic as prescribed and determining the excretion of phenol. The project is completed. The report is in progress.

Sponsor - Velsicol

1. Banvel D

This is a reproduction experiment to be carried through 3 generations in rats being fed on various dietary concentrations of Banvel D. The first generation has been completed. The second and third generations will proceed and the project will be completed in 1965.

2. Heptachlor and a mixture of Heptachlor and Heptachlor Epoxide.

This also is a reproduction experiment carried through 3 generations. It is in the same stage as the Banvel D. The first generation has been completed and the second and third generations will be completed in 1965.

3. Dichlorosalicylic Acid Radiotracer

This involves the distribution and excretion of dichlorosalicylic acid and its metabolites in rats. It was begun October 1, 1964. The experimental work is completed. Analyses are in progress and should be completed on or about February 1. The report to be completed approximately March 1.

Future Potential

I have discussed a basic research program to be sponsored by Velsicol in the field of radiotracers and relating to the chlorinated insecticides. Estimated cost was \$10,000 per year. Velsicol is interested but this has to be consummated.

Discussions have been held with Horizons, Inc. of Cleveland, Ohio pertaining to the initiation of a program to evaluate the genic potential of certain free radical compounds. The prime contract will be from the NIH to Horizons and they will subcontract the biological work to us. Final agreements have to be prepared.

A proposal is being prepared for Ethyl Corporation for the long term effects of 702 in rats and dogs and will include a 3 generation reproduction experiment. The proposal is being prepared for consideration by Ethyl.

Drackett Company has indicated that they wish to have a new formulation of their silver polish investigated for determination of its toxicity. This should be awarded in February.

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