

FILE NAME: Oil Industry and American Petroleum Institute (API)

DATE: 1947 Aug 26

DOC#: API007

DOCUMENT DESCRIPTION: Meeting Minutes & Attendee List - API
Medical Advisory Committee - Subcommittee on Carcinogenicity

API MEDICAL ADVISORY COMMITTEE

Minutes of Meeting of Subcommittee on Carcinogenicity

August 26, 1947

A meeting of the Subcommittee on Carcinogenicity was held at 26 Broadway, New York City, on Tuesday, August 26th, 1947. Those present were:

Dr. A. E. Hoag	- Socony-Vacuum Oil Company, Inc.
Dr. J. P. Holt	- Standard Oil Company (New Jersey)
Dr. M. N. Newquist	- The Texas Company
Dr. McIver Woody	- Standard Oil Company of New Jersey
Dr. L. C. Beard, Jr.	- Socony-Vacuum Oil Company, Inc.
Mr. R. S. Bonsib	- Standard Oil Company (New Jersey)
Mr. H. G. M. Fischer	- Standard Oil Development Company
Mr. H. R. Warrick	- The Texas Company

The purpose of the meeting was to review a progress report from the Kettering Laboratory and formulate plans for the remainder of the current year.

Dr. Heyroth's letter of the 23rd was presented covering 72 mice that have died and were also examined histologically. Aside from one spontaneous mammary gland carcinoma which occurred in the control group, no tumors were found except in those mice which were painted with sample number W-3632. Of the original 20 mice in this group, 17 died and were examined. One animal (38 applications) showed pronounced acanthosis. Another animal (32 applications) showed hyperkeratosis with slight acanthosis. In four of the animals (29, 22, 28, 16 applications) skin sections were not remarkable. In one other animal, there was no gross evidence of any skin tumor and no skin sections were made. Up to the present (29 weeks), no tumors have appeared in animals painted with methyl cholanthrene. Dr. Heyroth has promised to submit a more detailed report at the conclusion of the experiments.

Actions taken:

- 1 - The fact that the mice tested with methyl cholanthrene have not shown cancer after 29 weeks, raises three questions:
 - (a) Is the methyl cholanthrene applied in sufficient concentration (.3% in benzene)?
 - (b) Is benzene the proper vehicle for our tests with methyl cholanthrene? It has been suggested that benzene may be a co-carcinogen and in view of its high volatility may evaporate so rapidly as to allow the methyl cholanthrene to remain on the skin in a dry, powdered or crystalline form which is easily lost. Why not use mineral oil as a vehicle, using a high boiling, highly refined, non-toxic white oil (such as Nujol) preferably applying the methyl cholanthrene in various concentrations? This would tie in with the physical and chemical analyses being conducted on oils that have shown toxic properties. A series of comparative tests should be instituted, employing both benzenes and the non-toxic white oil as vehicles containing various, but identical, concentrations of the methyl cholanthrene.

For Information Only - Not For Publication

- (c) Where was the methyl cholanthrene obtained and is it the "real stuff"?
- 2 - Mr. Fischer reported on the results of the special investigation of carcinogenic oils being carried on by the Standard Oil Development Company, which indicate:
 - (a) Insofar as is known, the hydrocarbon type carcinogen consists of a condensed ring structure having at least 4 rings. This means that their boiling range is relatively high and very likely not lower than 700° F. Therefore, any carcinogen present in heavy, catalytic cycle oil can be assumed to have at least a structure consisting of at least 4 rings.
 - (b) Such being the case, domestic fuel oils are safe as far as carcinogenicity is concerned.
 - (c) However, heavy industrial fuels, heavy industrial distillate fuels, asphalts and like materials are potentially dangerous if they contain catalytically cracked fractions of the type described under (a) above.
 - (d) The danger threshold lies at or above 700° F. ASTM; anything boiling below that point should be safe.
- 3 - It was the consensus of those present that it would be advantageous for the companies who have conducted or who have plans for research work on this problem to submit their findings to the Subcommittee.
- 4 - It was the opinion of the Subcommittee that research work on this problem should be expanded and greatly accelerated.
- 5 - It was the opinion of those present that a full-time, properly qualified research worker should be assigned to this project.
- 6 - (a) It is desirable to assemble data regarding (1) nature, (2) frequency and (3) duration of exposure of employees and customers to intermediate or commercial products containing as a constituent heavy, catalytic distillates or residua which contain fractions boiling above 700° F. Also, to obtain the number of (1) employees and (2) customers so exposed. In order to obtain uniformity, Dr. Woody will outline the procedure for survey and approach the companies to conduct the above survey.
 - (b) Employees who may be exposed to the substances mentioned above should be examined at least annually by the plant physician, observing the entire skin of the body particularly for evidence of warts, papillomata and other skin conditions.
 - (c) It seems desirable that the type and number of employees exposed to the above substances be restricted as much as possible and that suitable precautionary measures be taken to eliminate exposure.

For Information Only - Not For Publication

- (d) Dr. Woody will seek the advice of Mr. Stroop as to the companies that are to be invited to participate in this survey.
- 7 - Inasmuch as the Medical Advisory Committee has approved a Cancer Registry in principle, Dr. Woody will write to the members of the Medical Advisory Committee, asking them to obtain approval from their respective managements to submit the indicated data (in code if desired) concerning all cases of cancer occurring among their employees.
- 8 - The technical advisers of the Committee will be asked to meet and formulate their ideas as to the analysis of any samples, especially those found to be carcinogenic.
- 9 - At the first opportunity, Dr. Kehoe will be asked whether he can take on additional work and whether the contract with the Kettering Laboratory could be revised so that the Committee could employ a research worker and place him in the Kettering Laboratory on loan, with the understanding that he would devote his entire time to work outlined by the Committee. Then a conference would be called to outline the work to be done. Mr. Stroop will be asked whether funds will be available to employ the man as soon as he has been selected. Dr. Holt pointed out that at almost any university where industrial hygiene is taught, it should be possible to find one or two graduate students who would gladly devote their entire time to a research project such as we have in mind.

McIver Woody, M.D.
CHAIRMAN

McIW:EH

9-5-47

AMERICAN PETROLEUM INSTITUTE
50 WEST 50TH STREET
NEW YORK 20, N. Y.

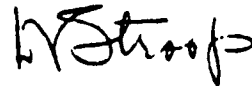
August 22, 1947

Mr. Hugh W. Field
The Atlantic Refining Co.
260 So. Broad Street
Philadelphia 1, Pa.

Dear Mr. Field:

Mr. John R. Suman, Chairman, Committee on
Safety, has appointed you associate member of the Medical
Advisory Committee to succeed Dr. T. G. Delbridge, as
requested by Mr. Robert H. Colley.

Very truly yours,



D. V. Stroop

DVS:d

cc: Members and Associates of
Medical Advisory Committee
Members of Safety Committee
of Board of Directors
R. E. Allen
W. R. Boyd, Jr.
Robert H. Colley
Dr. M. N. Newquist
Lacey Walker