

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

DATE: 1949 Mar 11

DOC#: API095

DOCUMENT DESCRIPTION: Minutes of API Subcommittee on Carcinogenicity

Recd. 3/21/49

CONFIDENTIAL

MINUTES

SUBCOMMITTEE ON CARCINOGENICITY

March 11, 1949

Dr. Horton

A meeting of the Subcommittee on Carcinogenicity was convened at 10 A.M., Friday, March 11th, 1949, at 15 West 51st Street, New York City.

MEMBERS PRESENT:

A.E. Hoag
J.P. Holt
W.R. Levis
M.N. Newquist
McIver Woody

R.S. Bonsib
A.E. Dooley
H.G.M. Fischer
H.P. Lankelma
K.G. MacKenzie

GUESTS:

A.W. Horton - University of Cincinnati
J.J. Phair - University of Cincinnati
D.V. Stroop - American Petroleum Institute

TOTAL IN ATTENDANCE - 13

MEMBERS ABSENT:

L.E. Curtis
T.M. Frank
T.J. Kelly
C.A. Swan

L.C. Beard
~~A.J. Koeving, Jr.~~
H.H. Zuidema

Dr. J.J. Phair, Professor of Preventive Medicine, University of Cincinnati, was introduced. Minutes of the meeting of February 1st were approved.

Dr. Horton reported that his laboratory equipment is being assembled and his new facilities will be available about May 1st. In the meantime, he is visiting refineries and studying the various types of catalytic cracking units and their operation for the purpose of making the proper choice of samples.

He stated that Shell had offered to cooperate in a pilot-plant operation to yield samples which could be used to determine effects of variables, such as natures of

911230 BinEulM 01588

feed, temperature, rate of through-put, etc. He thought this approach to the problem might yield valuable data and samples that could be studied concurrently with: (a) the search for an analytical tool, and (b) the animal testing of the list of materials recommended by the technical advisors to the Subcommittee in its January 31st, 1949 meeting.

Dr. Holt said that before deciding on the inclusion of the pilot plant approach, the technical advisors should be consulted.

Mr. Fischer felt that the pilot plant phase, while of scientific interest, might not answer the practical problems because of the great variations in feed stocks. He feared that it might bog down the animal testing program and believed that it should receive a low priority until answers to the practical phases of the problem had been obtained.

Mr. Bonsib agreed with Mr. Fischer's comments because of the many variations in feed stocks.

Dr. Horton replied that refinery samples would present these same variations and complications. It was his plan to get the pilot plant runs on three selected feeds containing; 0, 30 and 60 per cent aromatics respectively.

Mr. Lankelma, while agreeing with Mr. Fischer, believed that sooner or later this phase would have to be a part of the study.

Mr. MacKenzie thought that the nature of the charge stock was of minor importance compared to operating conditions; and that one run on a paraffinic stock should settle the question of the effects of time and temperature.

Mr. Fischer said that his company had tested samples from different feed stocks and had concluded that fluid-catalytic cracking operations presented a carcinogenicity problem. He recommended that the analytical study be given priority.

Dr. Horton urged that Shell's offer be considered because of the time required to prepare the samples. He pointed out that oil 3632 was being fractionated and that the fractions would be tested on animals. An attempt was being made to isolate the carcinogens in hope of obtaining an analytical tool.

It was the unanimous opinion of the Subcommittee that the analytical work on oil 3632 should go ahead.

Dr. Horton said that this analytical work may be long and complex; he thought that the other phases should not be delayed.

Dr. Holt divided the problem into four aspects:

1. Does a problem exist? That was the question two or three years ago. Work to date indicates that there is a potential problem.

2. Where does it exist; in what operations, oils, fractions, materials, etc. is there a hazard that requires protective measures?
3. Can these operations be changed to control the problem?
4. Development of a technique to eliminate animal testing.

If a study of the processes were added, there would not be sufficient facilities available. He recommended that a list be made of all samples to be studied and that the Subcommittee then schedule them for priority in testing.

Mr. Fischer said that such a list of samples had been approved at the last meeting of the technical advisors and that Dr. Horton was to collect the samples listed and report to the Subcommittee. The proposed schedule of testing them and the analytical work on oil 3632 should be continued concurrently. His personal view was that samples obtained from a pilot plant run should be placed way down on the list.

Dr. Horton estimated that when the new facilities are available about June 1st, 4,500 mice could be handled which would mean that 150 to 200 samples could be undergoing tests at one time.

Dr. Hoag said that the first oils to study were those to which exposures are now occurring, in order to determine control measures.

Dr. Newquist was of the opinion that, while it was very important to test various oils in order to determine which ones present a hazard and call for protective measures; nevertheless, the analytical work should be continued. Also, because of the limited number of samples that can be tested, the pilot plant studies should get under way.

Dr. Woody said that this question would be up for discussion again at the April meeting in Detroit and that, in the meantime, Dr. Horton would discuss it with Dr. Kehoe and Dr. Heyroth.

✓ Dr. Holt proposed that Dr. Horton prepare a summary showing the total number of samples that may be desirable to study at Cincinnati between July 1949 and July 1951 and the order in which they should be studied. Dr. Horton agreed to submit such a list by May 15th.

Reporting on the National Cancer Conference recently held in Memphis, Dr. Hoag said that Dr. Holt and Mr. Fischer were to be congratulated on their handling of the subject. Dr. Newquist added that the cancer question was now an open story. He also commended Dr. Holt for his presentation; no hysteria was aroused and what was said was not embarrassing.

Dr. Woody submitted a revision of our confidential memorandum of April 2nd, 1948 proposed by Dr. Curtis. On page 3, the third sentence in the last paragraph was changed to read as follows:

"Experiments in the laboratory have shown that certain of the high-boiling materials from these newer processes cause the development of tumors and cancers on mice."

and the foot-note was omitted.

Dr. Phair said that he planned to get acquainted with the medical directors of the various companies to see what medical records are available and to determine whether epidemiological techniques could be applied to advantage. The long "incubation period" was one of the factors that complicated the problem. The adoption of control measures might be better than attempts to eliminate the hazard. In response to a question from Dr. Newquist, Dr. Phair said that a cancer registry for the petroleum industry was an inherent objective of the control program. He added that he had doubts as to the successful enforcement of laws requiring the reporting of cancer cases, as has been proposed by some investigators.

✓ The next meeting of the Subcommittee will be held in Detroit April 1st, 1949.

A.E. Dooley
Secretary

McIver Woody
Chairman