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MEDICAL ADVISORY COMMITTEE
29TH MEETING

April 25, 1960
Council Room, The Manger Hotel
Rochester, New York

MEMBERS PRESENT:

J. W. Osborn, M. D., Chairman
Leo J. Wade, M. D., Vice Chairman
L. E. Renes, Secretary

W. O. Armstrong, M. D.
V. C. Baird, M. D.
(Rep. by E. R. Herman)
C. H. Baylor, M. D.
R. G. Birrell, M. D.
(Rep. by E. A. Turcot)
F. F. Boys, M. D.
G. H. Collings, M. D.
Kieffer Davis, M. D.
(Rep. by Paul Heerwagen, M. D.)
R. E. Eckardt, M. D.
T. M. Frank, M. D.
T. J. Kelly, M. D.
E. K. Linder, M. D.
C. R. Miller, M. D.
T. H. Mitchell, M. D.
J. C. Ruddock, M. D.
G. M. Saunders, M. D.
(Rep. by A. C. Pabst)
Ralph Schneider, M. D.
W. Wayne Stewart, M. D.

TECHNICAL ADVISORS PRESENT:

W. H. Barcus
E. K. Daniels
A. E. Dooley
Geo. Entwistle
H. W. Gerarde, M. D.
J. H. Johnston
P. K. Kuhne
C. A. Neilson
A. C. Pabst
Jack Spence
(Rep. by G. M. Wilkening)
N. K. Weaver, M. D.

MEMBERS ABSENT:

R. M. Adams, M. D.
T. E. Allen, M. D.
J. W. Crookshank, M. D.
L. E. Curtis, M. D.
K. R. Fourcher, M. D.
F. D. Gassaway, M. D.
R. Emmet Kelly, M. D.
E. P. Luongo, M. D.
B. S. Miller, M. D.
R. C. Page, M. D.
R. J. Potts, M. D.

OTHERS PRESENT:

Philip Drinker, Consultant	-	Harvard University
E. O. Mattocks	-	American Petroleum Institute
Lloyd Pickett, M. D.	-	Gulf Oil Corporation
Enrique Quino	-	Esso Standard
John R. Scott, M. D.	-	Carter Div., Humble Oil & Refining Co.
H. van Raalte, M. D.	-	Royal Dutch Shell (The Hague)
Robert A. Wise, M. D.	-	Humble Div., Humble Oil & Refining Co.

I. OPENING REMARKS

Chairman J. W. Osborn, M. D., welcomed all members present. He introduced the following guests: John R. Scott, M. D., Lloyd Pickett, M. D., Enrique Quino, Paul Heerwagen, M. D., H. van Raalte, M. D., and Robert A. Wise, M. D.

II. APPROVAL OF MINUTES OF 28TH MEETING

The chairman stated that, inadvertently, part of Appendix J to the report of the Subcommittee on Specialty Petroleum Products had been omitted when the minutes of the 28th meeting were distributed. One was a report from Carl A. Nau, M. D., and the other was a report from B. B. Reeve, M. D., to J. W. Osborn, M. D., concerning Dr. Reeve's attendance at the American Association of Poison Control Center's meeting. These omissions were distributed to the Medical Advisory Committee members and Technical Advisors on April 19th.

ACTION: It was regularly moved, seconded, and unanimously passed that the minutes of the 28th meeting of the Medical Advisory Committee, held November 8, 1959, be approved as distributed together with the subsequent additions to Appendix J.

III. SUBCOMMITTEE REPORTS

A. Operating Subcommittee

J. W. Osborn, M. D., chairman of the Medical Advisory Committee, indicated that the only thing to report related to budget which will be discussed later. The minutes of this meeting are attached as Appendix A.

B. Atmospheric Pollutants

Chairman J. C. Ruddock, M. D., reported on the activities of his subcommittee. The minutes of this subcommittee are attached as Appendix B.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted.

Dr. Ruddock read his subcommittee's proposal in answer to Mr. Porter's request for advice from the Medical Advisory Committee as to the need for a research study on the carcinogenicity of auto exhaust. This is given in Appendix B.

ACTION: It was regularly moved, seconded, and unanimously passed that this part of the report be accepted.

C. C_9 - C_{12} Aromatics

In the absence of Kieffer Davis, M. D., chairman of the subcommittee, T. M. Frank, M. D., read the report of progress of the study of C_9 - C_{12} aromatic research together with the recommendation of the subcommittee relating to further study. The report of this subcommittee is attached as Appendix C.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted.

D. Dermatology

Leo J. Wade, M. D., chairman of the subcommittee, reported on the activity of this group.

E. Epidemiology

In the absence of G. M. Saunders, M. D., chairman of this subcommittee, C. H. Baylor, M. D., reported on the activities and recommendations of this subcommittee relative to a study of heart effects in oil employees. It was suggested that this subcommittee prepare a brief questionnaire which might be used to obtain the desired information. A copy of this subcommittee's report is attached as Appendix D.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted.

F. Medical Policies and Administrative Practices

Ralph Schneider, M. D., chairman of the subcommittee, reported on the activities of this group. A copy of his report is attached as Appendix E.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted.

G. Physical Agents

J. W. Osborn, M. D., announced that J. H. Hege, M. D., had resigned from the Medical Advisory Committee. Dr. Osborn appointed G. H. Collings, M. D., chairman of this group. Dr. Collings' report was in two parts: (1) Recommendation to continue support of research by Dr. Glorig at the American Academy of Ophthalmology and Otolaryngology in amount of $2,500 for the year 1961-1962. (2) Recommendation to discharge the Physical Agents Subcommittee or charge it with a specific assignment or transfer the responsibility to the Industrial Hygiene Subcommittee. A copy of this report is attached as Appendix F.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be amended by deleting the recommendation to discharge the Physical Agents Subcommittee and that the amended report be accepted.

H. Carcinogenicity

R. E. Eckardt, M. D., reported on the activity of this subcommittee. His report is given as Appendix G.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted.

I. Specialty Petroleum Products

C. H. Baylor, M. D., chairman of this subcommittee, reported on the activities of the group. A copy of his report is given as Appendix H.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted.

J. Toxicological Reviews

H. W. Gerarde, M. D., chairman of this subcommittee, reported on its activities. A request was made that Dr. Gerarde and his subcommittee edit the Toxicological Reviews before submitting them to the members of the Medical Advisory Committee for their comments. A copy of Dr. Gerarde's report is attached as Appendix I.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted and that the subcommittee on Toxicological Reviews edit all future revised reviews before submitting them to the Medical Advisory Committee for their comments.

K. Industrial Hygiene

Mr. George Wilkening reported for Chairman Jack Spence on the activity of this group. A copy of this report is attached as Appendix J.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted.

IV. REPORTS BY LIAISON MEMBERS

A. Joint Committee for Dermatitis Study - No report.

B. Smoke and Fumes - J. C. Ruddock, M. D. indicated he is maintaining close liaison with the Smoke and Fumes Committee of the Division of Refining. He reported on the activities of this group. A copy of his report is attached as Appendix K.

C. American Standards Association - The liaison with the American Standards Association committees were discussed in the Industrial Hygiene Subcommittee meeting.

D. Interdivisional Committee on Labeling - Dr. Allan Dooley reported on House and Senate bills before the current congress which relate to mandatory labeling of household-type chemicals sold in interstate commerce. Mr. Dooley also reported on the proposed revision of the API Labeling Manual, 2511. A copy of his report is attached as Appendix L.

E. First Aid Training - T. M. Frank, M. D. reported on the activity of the Subcommittee on First Aid of the Central Committee on Accident Prevention of the API. This subcommittee is studying the desirability of adopting mouth-to-mouth breathing as the choice method of resuscitation.

F. Wax Committee - R. E. Eckardt, M. D., chairman of the Advisory Committee to the Wax Research Project, reported on the activity of this group. In summary, the Advisory Committee has (1) submitted data with recommendations to the Food and Drug Administration for clearance of a Type 1 wax and a request for a year's extension of a Type 2 wax, (2) established an Analytical Subcommittee which has prepared an ASTM Method for determining the absorptivity of waxes. The group is also studying the need to standardize other tests used in complying with the FDA wax specifications. (3) started additional feeding tests to continue the study on Type 2 waxes, and (4) planning to continue the wax research project at the same level of expenditure of $150,000 per year. (5) received an extension of a year from the FDA for Type 1 and Type 2 petroleum waxes.

G. Quarantine Service, The U. S. Public Health Service - No report.

H. Interdivisional Committee on Petroleum Food Additives - No report.

V. BUDGET FOR 1961-1962

The following budget was proposed:

Atmospheric Pollutants	$ 5,000
C9 - C12 Aromatics	10,000
Noise	2,500
Specialty Petroleum Products	15,000
Toxicological Reviews	5,000
Consultant	3,000
Administrative Expense	1,000
	$41,500

ACTION: It was regularly moved, seconded, and unanimously passed that a budget of $41,500 be recommended to the Medical and Health Committee for the year 1961-1962.

VI. NEXT MEETINGS

The next meeting of the Medical Advisory Committee will be held in conjunction with the Annual Meeting of the API in Chicago on November 11, 12, 13, and 14, 1961.

It was indicated that the Industrial Hygiene Association is planning to hold its spring meeting at a time and place different from the spring meeting of the Industrial Medical Association in 1961. At this time, the Industrial Medical Association had indicated that they are planning to hold their meeting in Los Angeles on April 11, 12, 13, and 14, 1961. The Industrial Hygiene Association group is tentatively planning to hold their meeting in Detroit on April 18, 19, and 20, 1961.

ACTION: It was regularly moved, seconded, and passed that, assuming the IMA spring meetings are held as now indicated and the IHA spring meetings are held as indicated, the Medical Advisory Committee and its subcommittees hold their spring meetings in Detroit on the 15th, 16th, and 17th of April, 1961. There were 22 for this motion and 4 against.

(Secretary's Note: Since this action, the meeting dates of the IMA and AIHA have been changed. Because it is necessary to make meeting room arrangements at the earliest possible moment, the date of the MAC and Subcommittee meetings must be established as soon as possible. The chairman will announce the time and place of these meetings in the very near future.)

VII. NEW BUSINESS

A. Chairman Osborn reported it was with deep regret that he learned of the death of N. J. Gothard, of Sinclair Refining Company, who was one of the original members of the Medical Advisory Committee.

B. The question of submitting gratis copies of Toxicological Reviews to various organizations was discussed extensively by the various members of the committee. The attached list, Appendix M, was agreed upon as a desirable starting point.

ACTION: It was regularly moved, seconded, and unanimously passed that the amended list shown in Appendix M be used for the gratis distribution of Toxicological Reviews.

C. The chairman extended to R. E. Eckardt the congratulations of the Medical Advisory Committee on being elected President of the Industrial Medical Association. The group extended Dr. Eckardt their best wishes.

Reported by
L. E. Renes, Secretary

Approved:
J. W. Osborn, M. D., Chairman

7/6/60

MINUTES OF THE MEDICAL ADVISORY COMMITTEE'S OPERATING SUBCOMMITTEE

Sunday, April 24, 1960
6:00 P. M.
The Manger Hotel
Rochester, New York

THOSE PRESENT:

J. W. Osborn, M. D., Chairman
Leo. J. Wade, M. D., Vice Chairman
L. E. Renes, Secretary
V. C. Baird, M. D. Past Chairman
(Represented by E. R. Herman)

C. H. Baylor, M. D.
G. H. Collings, M. D.
Kieffer Davis, M. D.
(Represented by T. M. Frank, M. D.)
H. W. Gerarde, M. D.
E. O. Mattocks
J. C. Ruddock, M. D.
Jack Spence
(Represented by G. M. Wilkening)

MEMBERS ABSENT:

R. E. Eckardt, M. D.
G. M. Saunders, M. D.
Ralph Schneider, M. D.

VISITOR:

Philip Drinker - Harvard University

I. INTRODUCTORY REMARKS BY CHAIRMAN

J. W. Osborn, M. D., chairman of the Operating Subcommittee, welcomed those present. He indicated that regrets had been received from: Jack Spence, chairman of the Industrial Hygiene Subcommittee (represented by George Wilkening); Kieffer Davis, M. D., chairman of the Subcommittee on C9 - C12 Aromatics (represented by T. M. Frank, M. D.); V. C. Baird, M. D., past chairman of the Medical Advisory Committee (represented by Ed Herman); Ralph Schneider, M. D,; G. M. Saunders, M.D., and R. E. Eckardt, M. D.

II. APPROVAL OF MINUTES

ACTION: It was regularly moved, seconded, and unanimously passed that the minutes of the November 8, 1959 meeting of the Operating Subcommittee be approved as distributed.

III. PROGRAM SUBCOMMITTEE

Chairman Osborn indicated that the Program Subcommittee had not been appointed for 1960. The Operating Subcommittee is to handle what small amount of work has to be done in planning the programs. The primary job is to plan for the closed round table discussion at the fall meeting of the Medical Advisory Committee. This year the Industrial Hygiene Subcommittee is to put on the program.

IV. OIL MIST

The Industrial Hygiene Subcommittee has been assigned the work on oil mist. The chairman of the Industrial Hygiene Subcommittee has appointed a task group to search for source of data and information on this subject.

V. SUBCOMMITTEE POLICY QUESTIONS

A. Atmospheric Pollutants

Dr. Ruddock indicated that he has requested a date with Dr. Goldblatt for a meeting in New York on May 18th to discuss publication of his report on the medical aspects of atmospheric pollutants. Dr. Ruddock will review, with Dr. Goldblatt, his plans to request a grant-in-aid from the Public Health Service.

Dr. Ruddock reported that the President of the API requested the Medical Advisory Committee to initiate a study to determine whether an investigation should be started on the possible carcinogenic properties of exhaust gases.

Chairman Ruddock requested $5,000 be placed in the budget for the year 1961-1962 for use of the subcommittee to continue their study on the Medical Aspects of Atmospheric Pollution. It was pointed out that there is still $1155.85 left in the fund raised by the Division of Refining to study the medical aspects of atmospheric pollution.

B. C9 - C12 Aromatics

This subcommittee is requesting $10,000 for the year 1961-1962 to be spent only if needed. It is hoped that the C9 - C12 experimental work will be completed by July 1, 1961.

C. Carcinogencity

No budgetary requirements or policy matters to be discussed.

D. Dermatology

No budgetary requirements or policy matters to be discussed.

E. Epidemiology

No budgetary requirements or policy matters to be discussed.

F. Medical Policies and Administrative Practices

No budgetary requirements or policy matters to be discussed.

G. Physical Agents

Subcommittee requests $2,500 for the year July 1, 1961 to June 30, 1962 for a grant to the Committee on Noise at the Academy of Ophthamology and Otolaryngology. There was considerable discussion as to whether the Medical Advisory Committee should grant varying amounts of money from year to year for the study of noise or settle on some small sum, such as a thousand dollars, which could be assured the Committee on Noise. It was generally agreed that $2,500 should be granted now to the Committee on Noise.

Dr. Collings proposed that the duties of the Physical Agents Subcommittee be transferred to the Subcommittee on Industrial Hygiene. Subsequent discussion resulted in a recommendation that the Physical Agents Subcommittee continue its activities but strike out item 2 in its present short-term goal of its scope of activities.

H. Specialty Petroleum Products

The subcommittee requested $5,000 for the year 1961-1962 to continue work being done by Dr. Daeschner, $5,000 for Dr. McKay, and $5,000 for Dr. Carl Nau.

Dr. Gerarde is endeavoring to work out the difficulties which the technicians working for Dr. Daeschner and Dr. McKay are having in applying Dr. Gerarde's analytical method for determining aromatics in human blood.

I. Toxicological Reviews

It is recommended that $5,000 for the year 1961-1962 be put in the budget to continue the work being done by Dr. Drinker in his revision of toxicological reviews.

It was generally agreed that the revision of the old toxicological reviews should be completed before writing any new ones. It was pointed out that the proposed revisions to the old toxicological reviews have been completed by Dr. Drinker.

J. Industrial Hygiene

No policy or budgetary requirements.

VI. DR. GOLDBLATT'S REPORT

Chairman Osborn will work with Drs. Wade and Ruddock to try and get Dr. Goldblatt's report published as soon as possible. No estimate, at the present time, is possible as to the cost for such a publication.

VII. 1961-1962 BUDGET

It was agreed that $1,000 should be placed in the budget for Administrative Expenses which are used to pay the travel expenses for Drs. Daeschner and McKay and others if they are required to attend subcommittee meetings or the meetings of the Medical Advisory Committee.

Atmospheric Pollutants	$ 5,000
C9 - C12 Aromatics	10,000
Noise	2,500
Specialty Petroleum Products	15,000
Toxicological Reviews	5,000
Consultant	3,000
Administrative Expense	1,000
	$41,500

API 07605

VIII. REQUEST TO INVESTIGATE NEED FOR RESEARCH ON CARCINOGENIC PROPERTIES OF AUTOMOBILE EXHAUST

The request from Mr. Porter to the Medical Advisory Committee to study the possible need for research on carcinogenic properties of automobile exhaust was

presented by Chairman Osborn. It was pointed out that the conference with Dr. Goldblatt for May 18th, may be helpful in determining any recommendations which Dr. Goldblatt has as to possible fields of research. Chairman Osborn will set up a subcommittee, if necessary, to make the desired study, the results of which will be reported to the Medical and Health Committee as soon as possible.

IX. GRATIS DISTRIBUTION OF TOXICOLOGICAL REVIEWS

The list of possible institutions to receive gratis copies of toxicological reviews had been submitted to the members of the Medical Advisory Committee. Their comments were reviewed by the Operating Subcommittee. A suggested list was developed which is attached to the minutes of the Medical Advisory Committee, as Appendix M.

X. NEXT MEETING

The subcommittee meetings of the Medical Advisory Committee will be held on Friday and Saturday, November 11 and 12, 1960; in Chicago; the Operating Subcommittee on Sunday evening, November 13, 1960; and the Medical Advisory Committee on Monday, November 14, 1960. The midyear meeting of the Medical Advisory Committee is somewhat uncertain since the time and place of the Industrial Medical Association and the Industrial Hygiene Association are not firm. The officers of the committee will establish a desirable date for the midyear meeting of the Medical Advisory Committee and its subcommittees.

XI. ADJOURNMENT

The meeting adjourned at 11:00 P. M.

Reported by
L. E. Renes, Secretary

APPROVED:
J. W. Osborn, M. D., Chairman

REPORT OF SUBCOMMITTEE ON ATMOSPHERIC POLLUTANTS

John C. Ruddock, M. D., Chairman

MINUTES

Friday, April 22, 1960
The Manger Hotel
Rochester, New York

Five members of subcommittee attended and 20 visitors. The visitors were given the privilege of the floor for all discussions.

The minutes of the last meeting, held November 6, 1959, at the Conrad Hilton Hotel in Chicago, Illinois, were approved as circulated.

The chairman opened the meeting with remarks pertaining to the general aspects of air pollution and his activities since the last meeting of the subcommittee. In brief, the trends developing from researches in air pollution are that the possibility of acute effects are becoming more remote and further future researches are centering on chronic lung diseases which might be caused by contact with minute amounts of pollutants repeatedly over a long period of time, i.e., cancer, emphysema, chronic bronchitis, bronchiectasis, etc. It is becoming more evident that the air pollutant problem does not arise nor is caused by effluents from refineries but is caused from the combustion and burning of petroleum products, particularly the automotive exhaust.

The itinerary of travel by Dr. Goldblatt in his letter of April 5, 1960, was approved. He will arrive in New York on May 17, 1960 and will visit Washington and Cincinnati and depart from New York on June 10, 1960.

Much discussion was had concerning the methodology of printing, publishing, editing and distributing Dr. Goldblatt's report. The general opinion was that his report should not be printed in its present form. It is noted that Mr. Mattocks, Dr. Drinker, Dr. Osborn, Dr. Wade, and the chairman will meet with Dr. Goldblatt in New York on May 18, 1960, and will resolve definitely such matters as: (1) Date of final completion of report, (2) Type and character of editing, and (3) Publication of report by USPHS, API or other and extent of distribution. (Note: It was suggested by Dr. Drinker that the report be filed as it is, in the American Documentation Institute in Washington, D. C. Anyone may then obtain a microfilm copy at a nominal cost.)

The scope and function of the subcommittee was adopted as read by the chairman, copy of which is attached.

The Smoke and Fumes Committee has requested that the Subcommittee on Atmospheric Pollutants be represented at their meeting in Detroit on May 10, 1960. Mr. T. B. Rendel and Mr. Herman Barcus were appointed by the chairman to attend this meeting as liaison representatives.

It was approved that the MAC request an allocation of $5,000 for the year 1961-1962 to continue the initial review of and critical evaluation of: literature and researches, contemplated, in progress or completed, in the field of air pollution as it affects the health of the individual and the community, restricting the studies to those pollutants from the petroleum industry.

Mr. Chairman, I move the acceptance of this portion of the report.

The question was put and this portion of the report was accepted unanimously.

Discussion brought out the fact that in the area of epidemiology conclusions can not be made on the effect of air pollution on health because the facts are not available. A letter was read in which the President of the API requests that the MAC report to the Medical and Health Committee of the Board of Directors as soon as possible regarding the advisability of instigating research on possible health aspects of atmospheric pollution, especially that part contributed by the use of petroleum products, particularly as applied to automobile exhaust. This elicited much discussion both pro and con among the subcommittee members and visitors. It was finally the conclusion of the subcommittee that the chairman of the MAC should refer this to an appropriate subcommittee to report back to the MAC at its November meeting on the advisability and feasibility of instigating such a research program, as suggested by the President of the API.

John C. Ruddock, M. D., Chairman
Subcommittee on Atmospheric
Pollutants

SCOPE AND FUNCTION
SUBCOMMITTEE ON ATMOSPHERIC POLLUTANTS

FUNCTION:

1. To accumulate and critically evaluate information on matters of health concerning atmospheric pollutants for which the petroleum industry may be responsible.

2. To be cognizant of technical researches being conducted by the petroleum industry, through the Smoke and Fumes Committee, as well as those technical researches being carried out by the U. S. Public Health Service, various state health departments, universities, institutes and individuals and also those researches carried out by Air Pollution Control Districts everywhere. These researches should be considered in terms of pollutants of environmental air and pollutants of ambient air.

3. To follow-up researches on atmospheric pollutants that have not been published and that are incomplete with regard to the effect of pollutants on the health of the individual and the community.

SHORT TERM GOALS:

1. To keep the Medical Advisory Committee informed of all developments in the field of air pollution and the effects of individual constituents of air pollution on the health of the individual and the community, especially those pollutants attributed to the petroleum industry by reason of their operations.

2. To disseminate among the membership of the Medical Advisory Committee such reports, publications and bulletins which might be of interest to the members in the field of air pollution.

3. To accept assignments and report to the Medical Advisory Committee on any matters relating to atmospheric pollutants.

4. To instigate such research projects which might determine the effect of air pollutants on the health of the individual and the community and to suggest methods or policy to the Medical Advisory Committee, based on the evaluation of facts, which might clear or lessen the liability of the petroleum industry for air pollution.

LONG TERM GOAL:

To continuously keep the Medical Advisory Committee advised of all developments in this field in order that research may be developed to confirm facts towards determining whether or not air pollutants, as related to the petroleum industry, are a medical hazard or a nuisance.

REPORT OF SUBCOMMITTEE ON C_9 - C_{12} AROMATICS

Kieffer Davis, M. D., Chairman

The Subcommittee on C_9 - C_{12} Aromatics met in The Manger Hotel, Rochester, New York, on April 22, 1960. Five members were present or represented and about 10 guests were in attendance.

A progress report by Dr. Carl A. Nau, chief investigator, was read. It was in the nature of an extension of a similar report presented to the subcommittee in November 1959.

1. It confirmed and carried further the report of work done on white rats exposed to C_9 - C_{10} and also C_{11} - C_{12}, each in varying concentrations and exposure to benzene as a positive control.

2. In addition, it bore the first reports on exposure of monkeys to C_9 - C_{10} and to C_{11} - C_{12}. The data and observations were supplemented by a motion picture which showed by the neurologic effects and irritation of these chemicals on monkeys and rats.

3. Both rats and monkeys showed decided effects; irritation of skin unprotected by fur, narcotizing and tremor production, although both types of animals showed rather prompt recovery over night.

4. In addition, the development of cataracts among rats showed a high incidence after exposure to C_9 - C_{10} and to benzene for a long time.

5. Blood changes in the rats were present but in general were not strikingly uniform.

Dr. Nau's general conclusions are:

1. Early manifestations of toxicity is a shift in the poly-lymph ratio.

2. A fall in white blood cell count in rats will only persist if exposure is continued and prolonged.

3. Rapid formation of cataract has been observed in rats exposed to 616 PPM of C_9 - C_{10} (after cessation of exposure) and in rats exposed to 50 PPM of benzene (during and after the termination of exposure).

4. Exposure of monkeys to 200 PPM C_9 - C_{10} leads to appearance of tremors and other symptoms of central nervous system stimulation. Some degree of tolerance to continued exposure may develop. There is a fall in white blood cell count in the exposed monkeys. The lower values resulting persist with continued exposure.

5. There are no significant changes from the normal in monkeys exposed to 50 PPM C_9 - C_{10}.

C_{11} - C_{12}

6. Monkeys exposed to 200 PPM of C_{11} - C_{12} showed some slight evidence of tremor, localized irritation as well as central nervous system stimulation. These changes were not invariably observed.

7. Monkeys exposed to 50 PPM showed no significant changes from the normal. However, diarrhea occurred quite frequently in monkeys exposed to 200 PPM and or 50

PPM C_{11} - C_{12}. It is believed that this effect is related to and caused by this material getting into the gastro-intestional tract.

Proposals To Complete The Study Of C_9 - C_{12} Aromatics:

1. Complete microscopic studies for possible significant findings.

2. Statistical evaluations for changes herein reported.

3. Electrocardiographic studies of exposed monkeys.

4. Continue exposure of monkeys as per previous proposals.

5. Determine threshold tolerance for odor in humans.

6. Compile, evaluate and report significant data with impressions and conclusions stated as supported by findings.

7. Determine reasonable permissible levels of exposure (200 PPM is probably too high based on these early findings on monkeys).

Much work is still to be done but Dr. Nau hopes to complete it by July 1, 1961. Since there is no assurance that new findings may not occur and demand further study beyond July 1961, the subcommittee recommends an appropriation of $10,000 be made for the fiscal year July 1962, which will be expended only if necessary.

T. M. Frank, M. D., Acting Chairman
Subcommittee on C_9 - C_{12} Aromatics

REPORT OF SUBCOMMITTEE ON EPIDEMIOLOGY

George M. Saunders, M.D., Chairman

In a report submitted by the subcommittee on November 9, 1959 and accepted by the Medical Advisory Committee, it was pointed out that in order to accomplish meaningful and useful results of studies, the active and voluntary participation of medical personnel in units of member companies would be required. Areas proposed for preliminary trial studies were:

1. A study of the comparative frequency of myocardial infarction among "blue collar" and "white collar" refinery workers, and

2. A study of the present health status of truck drivers.

It was stated in the report that methods and procedures would be defined in a protocol if cooperation of suitable medical units were assured. To date, only two communications have been received by the chairman of the subcommittee offering to provide information. One unit offered to provide statistics on the health status of truck drivers, the frequency of myocardial infarction and the results of proctoscopic examinations. The other unit offered to provide data on myocardial infarction and truck drivers.

The subcommittee appeals again for volunteers to provide information on two trial subjects - myocardial infarction and health of truck drivers. If several units can provide data, then details on methods of collecting and reporting data will be worked out by the subcommittee.

Pre-requisites for the proposed study of myocardial infarction are:

1. A concentrated population of refinery workers,

2. Certain characteristics of the population must be known, such as the total number, age, sex and, preferably, race, job categories, length of service and a record of health experience,

3. An in-plant medical service adequately staffed and equipped to provide reliable diagnoses, and

4. Adequate individual medical records.

The methods to accomplish the suggested study of the health status of truck drivers would be relatively simple. Recent health examination records of truck drivers from an unbiased sample would be collected and analyzed to provide data on various characteristics including types and frequencies of abnormalities.

It is requested that any member of the Medical Advisory Committee who believes he could collect data on these two studies communicate with the chairman of this subcommittee.

The subcommittee does not request any funds for the coming year.

George M. Saunders, M. D., Chairman
Subcommittee on Epidemiology

REPORT OF SUBCOMMITTEE ON MEDICAL POLICIES AND ADMINISTRATIVE PRACTICES

Ralph Schneider, M. D., Chairman

The Subcommittee on Medical Policies and Administrative Practices met April 23, 1960 with five members and eight guests present.

Since the last report, in November 1959, this subcommittee has met and re-drafted the "Guiding Principles in Regard to the Scope, Objectives, and Functions of Medical Program in Petroleum Operations" to include those changes prepared by the members of the Medical Advisory Committee at their meeting in November 1959.

It is recommended that this new draft, copy attached, now be sent to each member of the Medical Advisory Committee so that they may either (1) Reject it, (2) Accept as it is, or (3) Accept it with whatever indicated changes they propose. The final document, if any, will then be recommended to the Medical Advisory Committee in November 1960 for adoption.

Ralph Schneider, M. D., Chairman
Subcommittee on Medical Policies
and Administrative Practices

GUIDING PRINCIPLES IN REGARD TO THE SCOPE, OBJECTIVES, AND FUNCTIONS OF MEDICAL PROGRAMS IN PETROLEUM OPERATIONS

Introduction

The term "occupational health program" means a program provided by management to deal constructively with the health requirements of employees and employers in relationship to employment.

The term "occupational medicine" is that branch of medicine which deals with the relationship of man to his occupation, for the purpose of the prevention of disease and injury and the promotion of optimal health, productivity, and social adjustment.

Occupational Health Programs

Although a person's health is primarily the responsibility of the individual himself, an occupational health program represents management's recognition of its obligation to provide a safe work environment and its opportunity to assist in promoting optimum health among its employees. While circumstances may affect the extent of certain services which may enter into a comprehensive health program, a high quality of professional service must be preserved at all times.

Cooperation between physicians, industrial hygienists, nurses, technicians and other personnel of the occupational health program and management personnel responsible for the employment, safety and well-being of employees is essential. Occupational health personnel should cooperate also with private and official community agencies providing health, safety, employment and welfare services.

Through the years many forms of occupational health programs have been developed from which has emerged an acceptable basic pattern. Experience indicates that success can best be assured when:

1. The program

   a. Observes the basic principles of medical service to the individual and conforms to medical customs in the community.

   b. Complies with existing laws.

   c. Emphasizes prevention and health maintenance rather than the treatment of injury and disease.

   d. Utilizes community medical resources when adequate or when they can be developed reasonably.

2. The professional personnel participating in the program

   a. Maintain high standards of professional service and conduct for the benefit of employee and employer alike.

   b. Cooperate and maintain proper liaison with other professional colleagues in the community and with the appropriate professional associations.

   c. Are engaged and compensated, and carry on their activities, with accepted ethical principles.

From time to time, problems arise out of a misunderstanding of the proper scope of occupational health programs as contrasted with medical programs for personal (non-occupational) illness of employees. It is, therefore, essential that employers, employees, and physicians recognize the fundamental distinction between these two types of programs.

The occupational health program providing medical care for personal (non-occupational) illnesses and injuries must be oriented to the work environment and to the health of the employee in relation to his job. On the other hand, when service rendered under occupational health programs exceeds the limits described hereafter, the occupational health program becomes to that extent a medical care program for personal illness and should be so recognized by all concerned.

Medical Care Programs for Personal (Non-occupational) Illness

These programs owe their existence to certain factors and circumstances in the employer-employee relationship not directly related to occupational health considerations. A major objective of such programs is to distribute the cost of medical service so as to lighten the economic burden on the employee. Some programs include dependents and/or retired employees as well as the employed group. They are usually designed to provide medical, surgical, and hospital care.

Such personal medical care programs include both diagnostic and therapeutic services, and may be limited or comprehensive in scope. These programs are separate and distinct from occupational health programs, the objectives, activities, facilities and personnel of which are described in the remainder of this statement.

Objectives of Occupational Health Programs

The objectives of an occupational health program are:

1. To promote the healthful nature or the greatest possible freedom from health hazards of its operation and of the environment and products of its operation.

2. To facilitate the placement of individuals according to their physical capacities and their emotional make-up in work which they can reasonably perform with an acceptable degree of efficiency and without endangering their own health and safety or that of their fellow employees, and

3. To encourage personal health maintenance.

The achievement of these objectives benefits both employers and employees in terms of improved employee health, morale, and productivity.

Activities to Attain Objectives

In order to attain these objectives the following activities (and the maintenance of appropriate records) are essential:

1. Survey and knowledge of the work environment from a health standpoint. This requires periodic inspections of the entire premises used by employees, including provision for, and appropriate participation in, the procedures and tests required to detect and appraise health hazards. Such inspections and appraisals provide current information on health aspects of work conditions, processes and substances used, which information is essential in evaluating symptoms, signs, and clinical laboratory data related to the deferential diagnosis of disease.

This information, including those relating to stress and mental health, will aid in evaluating any health hazards that may exist and in making appropriate recommendations for preventive or corrective measures.

2. Health examinations. Unrealistic and needlessly stringent standards of medical fitness defeat the purposes of health examinations and of maximum utilization of the available work force.

Health examinations should consist of:

a. An initial examination to determine the health status of the individual in order to facilitate suitable placement in employment. This examination should include (1) his family and personal medical history; (2) his occupational history; (3) a physical examination, and (4) other procedures to help determine the individual's employability and his capacity for work.

b. Subsequent examinations carried out at suitable intervals and designed to detect any sign or symptom of ill health related to employment conditions, to evaluate the health status of the individual in order to determine whether his health is compatible with his job assignment, and to forestall long-term disability by early detection of disease.

All examinations must be conducted by physicians with such assistance from associated personnel as may be required. Prior to each examination, the individual should be advised as to its constructive purpose and value. At the conclusion of an examination, the physician should discuss his findings meaningfully with the individual. :When health defects are found, the physician should explain to the individual the importance of obtaining further medical attention, and encourage him to consult his personal physician.

3. Medical records. The maintenance of accurate and complete medical records of every individual from the time of his first examination or treatment is a basic requirement. Except when otherwise required by law, the confidential character of these records, including the results of health examinations, must be rigidly observed by all members of the occupational health staff, and such records must remain in the exclusive custody and control of the medical personnel. The patient should be informed of all pertinent health findings except when such disclosures would have an adverse effect on his health and well-being. A private physician or other agency may be provided with a report of health findings when the patient so designates. Disclosure of health information should not be made without the approval of the patient except when essential to fulfill the legal obligations, and then, only to the extent necessary to fulfill such obligations.

4. Medical treatment. Every employee should be encouraged to have a personal physician.

a. Medical care required by workmen's compensation laws for occupational injury or illness should be directed toward optimum rehabilitation of the employee. The attending physician may be a member of the occupational health staff or any physician in the community willing and qualified to perform the essential services.

b. Medical care in case of non-occupational injury or illness is not a function of an occupational health program, with the limited exceptions noted below.

Emergency cases should be given the attention required to prevent loss of life or limb or to relieve suffering until the patient is placed under

the care of a personal physician.

For minor disorders, first aid or palliative treatment may be given if the condition is one for which the individual would not reasonably be expected to seek the attention of a personal physician, or to enable the individual to complete his current work before consulting a personal physician.

In occupational health programs, requests for repetative treatment of even minor personal disorders should be discouraged, and such individuals should be referred to their personal physicians.

c. The best interests of a patient are served by cooperation and communication between their personal physicians and physicians in charge of occupational health programs. In this way, prompt restoration of employees to suitable employment is encouraged.

5. Health and safety education. A high standard of occupational health cannot be achieved without familiarity with, and the observance of, fundamental health principles. The development of an understanding of these rules and the promotion of their observance is an essential task in which an occupational health staff can render very valuable assistance.

An occupational health program should promote the education of employees in matters of personal hygiene and health and encourage the use of safeguards provided to protect against any hazards to health which may be inherent in their jobs. The most favorable opportunities for carrying on health education and conseling will be afforded during visits to health facilities and through periodic inspections of the employee's place of work.

Health and safety education involves the cooperative efforts of health, safety, and operating personnel. Such education should include not only the encouragement of habits of cleanliness and orderliness but also instruction, in collaboration with the employee's immediate supervisor, in safe work practices and in the use and maintenance of available personal protective clothing and equipment.

Experience has shown that health education is unlikely to be successful unless the employer demonstrates his sincere and continuing interest in the health of his employees. Likewise, employees should be encouraged to participate in the planning and conduct of health education activities and make full and effective use of occupational health services and facilities available to them.

An occupational health program to be effective and acceptable to the employee, must be staffed by objective and competent personnel who create an atmosphere of warm, sincere, and positive personal helpfulness.

Personnel

All phases of an occupational health program should be under medical supervision. This requires the appointment of a medical director, full or part-time, who is a qualified doctor of medicine. Training and/or experience in occupational medicine is desirable. The medical director should have a responsible role in the development and interpretation of medical policy. He should administer the health program and be directly responsible to a designated official at the policy-making level of management. Additional physicians, as consultants or associates, may be required for an effective program. The duties of these physicians should be clearly defined by the medical director.

Qualified associated personnel, selected and directed by the physician in charge, are essential to the proper functioning of an occupational health program. According to program needs, these may include industrial hygienists, nurses, first-aid attendants, and laboratory and clerical personnel.

The industrial hygienist should have the knowledge and training necessary to survey and evaluate the work environment as well as the processes and products of the operation in order to make necessary recommendations to correct and control any existing or potential hazards to health.

A nurse should be a graduate of an accredited school of nursing, registered and legally qualified to practice nursing where employed. Training and/or experience in occupational health is desirable. She should assist the physician in the supervision of the health of employees while at work and in their health education. Her professional duties and nursing procedures should be clearly defined in writing by the physician to whom she is responsible.

One or more qualified first-aid attendants, known to all employees, should always be available during working hours. They should receive periodic refresher instruction and be provided with specific written instructions by the physician in charge.

Facilities

The facilities of an occupational health program may be available at the place of employment or in the community. When provided on the employment premises, facilities should:

1. Be located in a quiet area, readily accessible to employees;

2. Be sufficiently spacious, well lighted, ventilated and heated;

3. Include waiting, consultation, examining and treatment rooms, and toilet facilities, to insure adequate privacy and comfort; and

4. Have appropriate medical and laboratory equipment.

It may also be desirable to provide a rest or recovery room, dressing rooms and facilities for laboratory and radiological examinations.

Conclusions

Specific and detailed recommendations as to personnel facilities, and other aspects of individual occupational health programs obviously are beyond the scope of this statement. It is recommended that the local medical society be consulted to assure that a given program is in agreement with the objectives of this statement and with established community practices.

REPORT OF SUBCOMMITTEE ON PHYSICAL AGENTS

G. H. Collings, Jr., M. D., Chairman

The Subcommittee on Physical Agents met at 2:00 P. M. on April 23, 1960 in The Manger Hotel, Rochester, New York.

Two principal topics were discussed and acted upon:

A. It was the consensus that support should be continued to Dr. Glorig and his work on noise and deafness; since the petroleum industry has a noise problem, it is interested in finding better solutions to this problem and should support work of this type. It is recommended to the Medical Advisory Committee that support be continued to Dr. Glorig in the amount of $2,500 for the year 1961 - 1962.

B. According to the present statement on scope, the Subcommittee on Physical Agents has three functions:

1. To keep the Medical Advisory Committee informed on new developments related to physical agents,

2. To prepare a bibliographical review of the literature on physical agents,

3. To accept any assignments from the Medical Advisory Committee.

Function No. 1 is also a function of the Subcommittee on Industrial Hygiene which is charged with keeping the Medical Advisory Committee informed on new developments in the whole field of industrial hygiene.

Function No. 2 is obviously too large a task and an undesirable one for the Subcommittee on Physical Agents to undertake.

Function No. 3 is understood for any subcommittee and need not be stated. There have been no assignments from the Medical Advisory Committee.

Consequently, the Subcommittee on Physical Agents really has no significant duties. A survey of a large number of Medical Advisory Committee members failed to elicit any substantial activities that the Subcommittee on Physical Agents might undertake. Consequently, it is the recommendation of the Subcommittee on Physical Agents that it be discharged. If, however, the Medical Advisory Committee feels that there are duties which the subcommittee should undertake, the present members stand ready and willing to carry out the wishes of the Medical Advisory Committee.

G. H. Collings, Jr., M. D.
Chairman, Subcommittee on
Physical Agents

REPORT OF SUBCOMMITTEE ON CARCINOGENICITY

R. E. Eckardt, M. D., Chairman

The Subcommittee on Carcinogenicity met in the Directors Room of The Manger Hotel in Rochester, New York, on Friday, April 22, 1960. The subcommittee presented to Dr. Kehoe a number of suggestions made by subcommittee, Medical Advisory Committee members, and associates. Dr. Kehoe agreed to take these suggestions under consideration and to issue a revised report in advance of the fall meeting of the Medical Advisory Committee. In addition, it was agreed that a brief abstract or summary would be prepared.

The subcommittee considered briefly the question of its scope and continuation, but decided to make its recommendations on both these topics for the fall meeting of the Medical Advisory Committee.

The subcommittee did not believe it could, at this time, consider the question of the carcinogenicity of the inhalation of oil mists.

The subcommittee believes that suggestions for the continuation of certain phases of the research at The Kettering Laboratory are beyond the scope of its functions but, perhaps, fall within the province of the Advisory Committee on Fundamental Research on Composition and Properties of Petroleum. It proposes that the suggestions of The Kettering Laboratory be transmitted by the Medical Advisory Committee through the Medical and Health Committee to the Advisory Committee on Fundamental Research on Composition and Properties of Petroleum through the Research Committee of the Board of Directors for their consideration.

R. E. Eckardt, M. D., Chairman
Subcommittee on Carcinogenicity

(G-2)

Copy

MEMORANDUM APRIL 20, 1960

TO: Dr. R. A. Kehoe

FROM: Dr. A. W. Horton

Subject: Possible Further Development of Experimental Findings of API Project

A number of the petroleum companies are currently interested in assessing the possible carcinogenic activity of various intermediates and products of refining operations by chemical methods. At the termination of the API project, the development of analytical procedures for the benzo c - phenanthrenes and certain other polycyclic carcinogens were left in an incomplete stage.

Tritium-labeled polycyclics are now available. Combining our presently available instrumentation for liquid scintillation counting with the previously developed procedures for chromatography, absorption spectrophotometry, and mass spectrometry, a worthwhile development in this area is possible if the Subcommittee on Carcinogenicity feels that it might be desirable from their viewpoint.

sgd: A. W. HORTON

AWH:bk

REPORT OF SUBCOMMITTEE ON SPECIALTY PETROLEUM PRODUCTS

C. H. Baylor, M. D., Chairman

The subcommittee met at 2:00 P.M., April 22, 1960, in the Manger Hotel, Rochester, New York.

Members Present: Drs. Ralph Schneider and Horace Gerarde, Messrs. George Entwistle and R. C. Cole (represented by L. E. Renes); and Dr. C. H. Baylor, Chairman

Members Absent: Dr. W. W. Stewart and Mr. J. W. Hammond

Visitors: Drs. J. C. Ruddock, C. R. Miller, T. H. Mitchell, J. W. Osborn, T. M. Frank, Carl Nau; Mr. E. O. Mattocks

The subcommittee:

I. Discussed briefly the reasons for changing the name of the subcommittee from the original one (Subcommittee on Economic Poisons) to its present title.

II. Discussed the scope and function of the subcommittee as requested by the chairman of the Medical Advisory Committee in line with the memorandum dated March 28, 1960 of Mr. E. O. Mattocks to the Operating Subcommittee.

The subcommittee generally agreed that the scope and function as described in this memorandum could be construed to cover a tremendous field of activities and information. The members agreed that the subcommittee could implement these duties and responsibilities only within the limits of its time and membership.

The subcommittee plans to review this outline with improvements in mind.

III. Summarized the present status of the kerosine study as follows:

A. The quantitative colorimetric method for the determination of hydrocarbons in rat blood as devised by Dr. Gerarde has not worked out satisfactorily on human blood for Drs. McKay (University of Vermont), Daeschner (Baylor University), and Nau (Galveston). These doctors have communicated with Dr. Gerarde regarding these difficulties. At present Dr. Gerarde is rechecking the method using human blood. He has informed the subcommittee that he thinks three months should suffice to perfect the method.

B. Until this simplified method is satisfactory it will not be possible to collect a satisfactory clinical experience with kerosine ingestion and inspiration regarding its pathological physiology and best method of treatment.

C. Considerable work remains to be done in this field in view of the controversy between the medical groups for and against gastric lavage in the treatment of this emergency.

D. The subcommittee thinks that these differences between rat and human blood as uncovered by these experiments may lead to valuable knowledge over and beyond that for which the experiments were originally devised.

E. The subcommittee wishes to express its gratitude to these investigators and especially to Dr. Gerarde and his company who have participated in these studies without financial assistance from the A.P.I.

F. In view of the importance and difficulties encountered in the kerosine study, the subcommittee requests from the A.P.I. Medical Advisory Committee a further grant for 1961 - 1962 of $15,000. This sum will be allotted to the various investigators depending upon their needs, results, and number of cases studied. In view of the transfer of Dr. Daeschner from Houston to Galveston the subcommittee feels it advisable to continue a clinical contact with the Jefferson Davis Hospital in Houston since this institution appears to have the greatest number of patients suffering from kerosine intoxication. This plan may be arranged through Dr. Daeschner or some other pediatrician at this hospital.

IV. The subcommittee requested Mr. George Entwistle to join the American Association of Poison Control Centers as a representative of the A.P.I. Medical Advisory Committee and act as a liaison officer at the meeting of this association in Chicago in October 1960. Mr. Entwistle agreed to accept this additional responsibility. It is requested that the Medical Advisory Committee will endorse this action by the subcommittee.

V. Dr. Ruddock suggested to the subcommittee that it look into a problem which has arisen in certain West Coast hospitals and will likely be encountered elsewhere sooner or later. Doctors in these hospitals have found no oil as yet that will retain its lubricating properties for surgical instruments when it has been subjected to sterilizing procedures adequate to kill all staphylococci.

Mr. L. E. Renes informed the group that experience at Phillips Petroleum Company along these lines has shown that heating certain oils to 250° F for twenty (20) minutes will eliminate the staphylococci. These two experiences need comparative studies to arrive at satisfactory conclusions.

C. H. Baylor, M. D., Chairman
Subcommittee on Specialty
Petroleum Products

REPORT OF SUBCOMMITTEE ON TOXICOLOGICAL REVIEWS

H. W. Gerarde, M. D., Chairman

1. The Medical and Health Committee has approved the publication of the revisions of the Toxicological Reviews on Benzene, Toluene, and Xylene.

2. First drafts of the reviews on Cumene, Styrene, Cyclohexane, and Kerosine have been circulated to the members of the Medical Advisory Committee.

3. Comments and suggestions received from the members will be incorporated in the second drafts, which will be re-circulated prior to balloting members for approval for publication.

4. Additional first drafts of old reviews have been received from Prof. Drinker which completes his revision of pre-existing Toxicological Reviews.

5. Prof. Drinker will be requested to prepare new Toxicological Reviews in accordance with a request received from the Interdivisional Committee on Labeling.

6. An allocation of $5,000 is requested in the 1961 - 1962 budget for the preparation of the new reviews.

H. W. Gerarde, M. D., Chairman
Subcommittee on Toxicological
Reviews

REPORT OF SUBCOMMITTEE ON INDUSTRIAL HYGIENE

J. A. Spence, Chairman

The subcommittee met on April 23, 1960 with seven members and twelve guests present.

Liaison members reported on the activities of the American Standards Association Committee Z-37, Toxic Dusts and Gases, Z-4, Industrial Sanitation, and Z-62, Industrial Hygiene Standards. The Z-4 Committee is inactive, the Z-37 Committee has recently circulated drafts of new material to their Editorial Subcommittee and the Z-62 Committee has recently prepared new information on industrial hygiene standards.

The preparation of information on Industrial Hygiene Aspects of Petroleum Refining Processes is proceeding on schedule. It is expected that information on 1) reforming, 2) cracking, 3) alkylation, and 4) isomerization processes will be completed at the time of the November meeting of the Medical Advisory Committee.

Information on current exposures of petroleum industry personnel to C_9 - C_{12} fractions is being developed by subcommittee members. Such information is designed to supplement the toxicity data recently developed by the C_9 - C_{12} Subcommittee.

The health hazards associated with metallic carbonyls in petroleum operations were discussed by subcommittee members. Although available information indicates that the procedures being employed in refineries help minimize the formation of or exposure to metallic carbonyls, the subcommittee plans to continually follow this potential problem and report findings. The Oil Mist Study Group has recently canvassed a large number of people in industry, agriculture, insurance, and government in an attempt to assemble available health and hygiene experience with oil mists. Replies from these groups have yielded limited information on 1) complaints of workers, 2) results of air sampling, and 3) a generally expressed interest in the subject. Little definite information was obtained. Out of the review of information assembled, the Study Group proposes the following:

1) Letters will be written to all members of the Medical Advisory Committee soliciting information on A) experience with and data on oil mist studies or complaints due to oil mists and B) suggestions for sources of additional information.

2) The Study Group will not pursue the carcinogenic aspects of this subject since another subcommittee exists for consideration of this area.

3) A literature survey will be made by members of the Study Group.

4) The Study Group will analyze findings obtained from the above procedures and will be prepared to take additional steps on the basis of these results.

G. M. Wilkening, M. D.
Acting Chairman
Subcommittee on Industrial Hygiene

REPORT OF LIAISON MEMBER TO THE SMOKE AND FUMES COMMITTEE

The chairman of the Subcommittee on Atmospheric Pollutants is the liaison member of the Medical Advisory Committee to the Smoke and Fumes Committee. I enjoy an excellent relationship with this technical group in the Division of Refining. I am kept advised of technical researches in progress that have been instigated by this group and, in turn, advise them concerning medical aspects of air pollution. I was invited and attended, as a representative of the Medical Advisory Committee of the API, a meeting called by the U. S. Public Health Service in New York on December 19, 1959, to outline researches instigated by medical and technical groups in the API. In addition, I attended, on March 21, 1960, a meeting called by the U. S. Public Health Service, in New Orleans, to formulate standard sampling techniques for researches in air pollution.

The Subcommittee on Atmospheric Pollution will have a representative at the next Smoke and Fumes Committee meeting.

John C. Ruddock, M. D., Chairman
Subcommittee on Air Pollution

REPORT OF LIAISON MEMBER TO INTERDIVISIONAL COMMITTEE ON LABELING

S-1283 - Federal Hazardous Substances Labeling Act - (The Magnuson Bill) was amended in the Senate Committee on Interstate Commerce Committee along the lines recommended last year by the Inter-Industry Group (CSMA, MCA, API, Association of Soap and Glycerine Manufacturers). This amended bill, which is acceptable to the Food and Drug Administration, was reported out on February 24th and passed by the Senate on March 29th.

House 5260 - which is identical to the original S-1283 was the subject of a House Subcommittee hearing on March 14th. Representatives of CSMA, MCA, and FDA recommended that H-5260 be amended to agree with amended S-1283. The AMA made the same recommendation it had made last year to the Senate. The AFL-CIO representative was asked to file his statement because the subcommittee wished to adjourn.

S-1283 as amended would appear to exempt kerosine as a hazardous substance. This has occurred because of the recommendation of the LPGA. As amended, the bill reads:

> "The term 'hazardous substances' shall not include substances stored and intended for use as fuel in a heating, cooking, or refrigeration system.

The API Interdivisional Committee on Labeling has, as its principal 1960 assignment, a revision of the API Labeling Bulletin 2511.

Allan E. Dooley

MEDICAL AND OTHER PUBLICATIONS

Journal of the American Industrial Hygiene Association
AMA Archives of Industrial Health
Journal of the American Medical Association
Annals of Occupational Hygiene
API Abstracts
Transactions of the Association of Industrial Medical Officers
British Journal of Industrial Medicine
Industrial Hygiene Digest
Journal of Occupational Medicine
Science (American Association for the Advancement of Science)
Journal of American Public Health Association
Industrial Medicine and Surgery

NATIONAL MEDICAL ASSOCIATIONS

American Conference of Government Industrial Hygienists
American Public Health Association
National Clearing House for Poison Control Centers
Occupational Health Institute
U. S. Public Health Service
National Safety Council

STATE MEDICAL ASSOCIATIONS

Medical Association of the State of Alabama
519 Dexter Avenue
Montgomery, Alabama

Alaska Medical Association
P. O. Box 2569
Juneau, Alaska

Arizona Medical Association, Inc.
401 Security Building
Phoenix, Arizona

California Medical Association
Room 2000
450 Sutter Street
San Francisco 8, California

Colorado State Medical Society
835 Republic Building
1612 Tremont Place
Denver 2, Colorado

Connecticut State Medical Society
160 St. Ronan Street
New Haven, Connecticut

Medical Society of Delaware
Norman L. Cannon, Secretary
1208 Delaware Avenue
Wilmington, Delaware

Medical Society of the District of Columbia
1718 M. Street, N. W.
Washington 6, District of Columbia

Florida Medical Association, Inc.
Box 1018
Jacksonville, Florida

Medical Association of Georgia
875 West Peachtree Street, N. E.
Atlanta, Georgia

Hawaii Medical Association
Mabel Smyth Memorial Building
Honolulu 13, T. H.

Idaho State Medical Association
364 Sonna Building
Boise, Idaho

Indiana State Medical Association
23 East Ohio Street
Indianapolis 4, Indiana

Iowa State Medical Society
529 36th Street
Des Moines 12, Iowa

Kansas Medical Society
315 West Fourth Street
Topeka, Kansas

Kentucky State Medical Association
620 South Third Street
Louisville 2, Kentucky

Louisiana State Medical Society
1430 Tulane Avenue
New Orleans 12, Louisiana

Maine Medical Association
142 High Street
Portland 3, Maine

Medical and Chirurgical Faculty
of the State of Maryland
1211 Cathedral Street
Baltimore 1, Maryland

Massachusetts Medical Society
22 Fenway
Boston 15, Massachusetts

Michigan State Medical Society
606 Townsend Street
P. O. Box 539
Lansing, Michigan

Minnesota State Medical Association
496 Lowry Medical Arts Building
St. Paul 2, Minnesota

Mississippi State Medical Association
860 Milner Building
Jackson, Mississippi

Missouri State Medical Association
623 Missouri Building
St. Louis, Missouri

Montana Medical Association
T. R. Vye, Secretary
Billings, Montana

Nebraska State Medical Association
1315 Sharp Building
Lincoln 8, Nebraska

Nevada State Medical Association
William A. O'Brien, III, Secretary
505 Chestnut Street
Reno, Nevada

New Hampshire Medical Society
18 School Street
Concord, New Hampshire

Medical Society of New Jersey
315 West State Street
Trenton 8, New Jersey

New Mexico Medical Society
223-224 First National Bank Building
Albuquerque, New Mexico

Medical Society of the State of New York
386 Fourth Avenue
New York 16, New York

Medical Society of the State of
North Carolina
203 Capital Club Building
Raleigh, North Carolina

North Dakota State Medical Association
Eltinge Building
Box 1198
Bismarck, North Dakota

Ohio State Medical Association
1005 Hartman Theatre Building
Columbus 15, Ohio

Oklahoma State Medical Association
1227 Classen Drive
Oklahoma City, Oklahoma

Medical Society of the State of
Pennsylvania
230 State Street
Harrisburg, Pennsylvania

Rhode Island Medical Society
106 Francis Street
Providence 3, Rhode Island

South Carolina Medical Association
120 West Cheves Street
Florence, South Carolina

South Dakota State Medical Association
300 First National Bank Building
Sioux Falls, South Dakota

Tennessee State Medical Association
319-325 Doctors Building
Nashville, Tennessee

Texas Medical Association
1801 North Lamar Boulevard
Austin, Texas

Utah State Medical Association
42 South Fifth East
Salt Lake City, Utah

Vermont State Medical Society
128 Merchants Row
Rutland, Vermont

Medical Society of Virginia
1105 West Franklin Street
Richmond, Virginia

Washington State Medical Association
1309 Seventh Avenue
Seattle, Washington

West Virginia State Medical Association
302 Atlas Building
Charleston, West Virginia

State Medical Society of Wisconsin
704 East Gorham Street
Madison 3, Wisconsin

Wyoming State Medical Society
H. B. Anderson, Secretary
Casper, Wyoming

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AMERICAN PETROLEUM INSTITUTE

MEDICAL ADVISORY COMMITTEE
30TH MEETING
9:00 A. M.
Monday, November 14, 1960
Conrad Hilton Hotel, Chicago, Illinois

MEMBERS PRESENT:

J. W. Osborn, M. D., Chairman
Leo J. Wade, M. D., Vice Chairman
L. E. Renes, Secretary

W. O. Armstrong, M. D.
C. H. Baylor, M. D.
R. G. Birrell, M. D.
F. F. Boys, M. D.
G. H. Collings, M. D.
J. W. Crookshank, M. D.
L. E. Curtis, M. D.
Kieffer Davis, M. D.
R. E. Eckardt, M. D.
T. M. Frank, M. D.
R. Emmet Kelly, M. D.
T. J. Kelly, M. D.
E. K. Linder, M. D.
B. S. Miller, M. D.
C. R. Miller, M. D.
T. H. Mitchell, M. D.
M. R. Plancey, M. D.
C. L. Samuelson, M. D.
Geo. M. Saunders, M. D.
Ralph Schneider, M. D.
W. W. Stewart, M. D.

TECHNICAL ADVISORS PRESENT:

W. L. Avrett
W. H. Barcus
C. T. Brown
E. K. Daniels
A. E. Dooley
H. E. Elkin
George Entwistle
P. D. Halley
J. W. Hammond
N. V. Hendricks
J. H. Johnston
J. T. McCoy
E. W. Midlam
A. C. Pabst
J. B. Rather
J. A. Spence
F. S. Venable
J. K. Voorhees
N. K. Weaver, M. D.
G. M. Wilkening

MEMBERS ABSENT:

R. M. Adams, M. D.
T. E. Allen, M. D.
V. C. Baird, M. D.
K. R. Fourcher, M. D.
F. D. Gassaway, M. D.
E. P. Luongo, M. D.
R. C. Page, M. D.
R. J. Potts, M. D.
J. C. Ruddock, M. D.
G. A. Sinclair, M. D.

OTHERS PRESENT:

J. C. Calandra, M. D. - The Pure Oil Company
W. J. Coppoc - Texaco Incorporated
E. V. Henson, M. D. - Standard Oil Company (Indiana)
E. O. Mattocks - American Petroleum Institute

I. OPENING REMARKS

The chairman reported that McIvor Woody, M. D. had written a note indicating his delight in seeing that the 16th year of the committee's existence was beginning so auspiciously. Unfortunately, he was not able to attend the meeting.

Dr. Philip Drinker had planned to attend the meeting but, due to an untimely sickness, had been unable to come at the last minute.

The chairman announced the following new members: M. R. Plancey, M. D.; C. L. Samuelson, M. D.; and G. A. Sinclair, M. D. The following new Technical Advisors were announced: J. T. McCoy; J. K. Voorhees, and J. B. Rather. The following guests were introduced: Dr. W. J. Coppoc, Texaco Incorporated; and E. V. Henson, M. D., Standard Oil Company (Indiana).

II. PRESENTATION OF CERTIFICATE OF APPRECIATION

Mr. C. E. Spahr, Chairman of the Medical and Health Committee, presented a Certificate of Appreciation to John C. Ruddock, M. D. Due to the untimely death of Dr. Ruddock's wife, he was unable to be present. The Certificate was received by his assistant, M. R. Plancey, M. D.

III. APPROVAL OF MINUTES

ACTION: It was regularly moved, seconded, and unanimously passed that the minutes of the April 5, 1960 meeting of the Medical Advisory Committee be approved as distributed.

IV. SUBCOMMITTEE REPORTS

A. Operating Subcommittee

J. W. Osborn, M. D. reviewed the actions of the Operating Subcommittee. The report of this group is attached as Appendix A.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted.

B. Atmospheric Pollutants

J. W. Osborn, M. D. explained that John C. Ruddock, M. D., chairman of the subcommittee, was unable to attend the meeting due to the death of his wife. The Operating Subcommittee suggested that the following telegram be sent to J. C. Ruddock, M. D.: "The Medical Advisory Committee at its meeting November 14 were deeply grieved when they learned at this time of your wife's passing. Your associates share your sorrow and wish you to know of their sympathies. We sincerely missed you and hope you will be with us at our Spring meeting."

ACTION: It was regularly moved, seconded, and unanimously passed that the suggested telegram to J. C. Ruddock, M. D. be sent as an expression of the Medical Advisory Committee.

C. R. Miller, M. D. reported for John C. Ruddock, M. D. on the activities of this group. His report is attached as Appendix B.

C. R. Miller, M. D. explained the reason for the request that Mr. Porter contact the Automobile Manufacturers' Association indicating the desire of the Medical Advisory Committee of the API to contact a similar group in the Automobile Manufacturers' Association. C. R. Miller, M. D. elaborated on the thought of the subcommittee for collecting a packet of medical articles on atmospheric pollution. The actions of the subcommittee regarding Dr. Goldblatt's recommendations for medical research in air pollution was discussed by Dr. Miller.

Suggestions were made that the subcommittee reconsider Dr. Goldblatt's recommendations solely on the basis of the availability or absence of factual medical knowledge as to the health aspects of air pollution which may be of concern to the petroleum industry. The Medical Advisory Committee and its subcommittees were not expected to render decisions in matters of economics and public relations.

After much discussion, the following action was taken on the report of the Subcommittee on Atmospheric Pollutants.

ACTION: It was regularly moved, seconded, and unanimously passed that the Medical Advisory Committee receive, without endorsement, the report of the Subcommittee on Atmospheric Pollutants

The proposed expenditure of the $5,000 in the 1961 budget was discussed at length.

ACTION: It was regularly moved, seconded, and passed, with one negative vote, that the budgetary recommendation of the Subcommittee on Atmospheric Pollutants be accepted.

ACTION: It was regularly moved, seconded, and unanimously passed that the chairman of the Medical Advisory Committee request the members of this committee to send, in writing, to the chairman of the Subcommittee on Atmospheric Pollutants any suggestions which they have for research on the medical aspects of air pollution. If this has been done previously, it should be repeated at this time. The chairman of the Subcommittee on Atmospheric Pollutants should summarize these comments for transmittal to members of the Medical Advisory Committee and for consideration of his subcommittee members.

C. C_9 - C_{12} Aromatics

Kieffer Davis, M. D., chairman of this subcommittee, presented his report which is given in Appendix C.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted.

D. Certificate of Appreciation

J. W. Osborn, M. D. reported that this committee had not met. A Certificate had been recommended at the 1960 spring meeting for J. C. Ruddock, M. D. and had just been presented.

E. Carcinogenicity

R. E. Eckardt, M. D., chairman of this subcommittee, presented his report, which is given as Appendix D.

ACTION: It was regularly moved, seconded, and unanimously passed that this report be accepted.

F. Dermatology

Leo J. Wade, M. D., chairman of this group, presented his report which is given as Appendix E.

ACTION: It was regularly moved, seconded, and unanimously passed that this report be accepted.

G. Epidemiology

George M. Saunders, M. D., chairman of this subcommittee, gave his report which is included as Appendix F.

ACTION: It was regularly moved, seconded, and unanimously passed that this report be accepted.

H. Medical Policies and Administrative Practices

Ralph F. Schneider, M. D. gave his report which is attached as Appendix G.

ACTION: It was regularly moved, seconded, and unanimously passed that this report be accepted.

I. Physical Agents

G. H. Collings, M. D., chairman, gave his report which is attached as Appendix H.

ACTION: It was regularly moved, seconded, and unanimously passed that this report be accepted.

J. Specialty Petroleum Products

C. H. Baylor, M. D., chairman, gave his report which is attached as Appendix I.

ACTION: It was regularly moved, seconded, and unanimously passed that this report be accepted.

K. Toxicological Reviews

In the absence of H. W. Gerarde, M. D., chairman of the Subcommittee on Toxicological Reviews, his report was read and is given as Appendix J.

ACTION: It was regularly moved, seconded, and unanimously passed that this report be accepted.

L. Industrial Hygiene

Jack Spence presented his report which is given as Appendix K. Who should do the study on lung cancer, in relation to the inhalation of oil mist, was discussed since the Subcommittee on Carcinogenicity has been discharged. It was agreed that this should be referred to the chairman of the Medical Advisory Committee for his assignment.

ACTION: It was regularly moved, seconded, and unanimously passed that the report be accepted as amended by changing recommendation number 3 to refer the need for study of lung cancer, in relation to the inhalation of oil mist, to the chairman of the Medical Advisory Committee instead of the chairman of the Subcommittee on Carcinogenicity.

VI. REPORT OF LIAISON MEMBERS

A. Smoke and Fumes

Clark Miller, M. D. reported for J. C. Ruddock, M. D. who had attended a number of meetings of the Smoke and Fumes Committee of the Division of Refining. Clark Miller, M. D. agreed to report to the Smoke and Fumes Committee the Industrial Hygiene Subcommittee proposal that the Medical Advisory Committee, in cooperation with the Smoke and Fumes Committee, review the desirability of giving financial support in the amount of $25,000 to the cooperative lead-in-air study being undertaken by the U. S. Public Health Service along with certain participating industry groups.

B. Labeling

A. E. Dooley, chairman of the Interdivisional Committee on Labeling, reported on the activities of this group. His report is attached as Appendix L. He reported that on February 1, 1961, the Federal Hazardous Labeling Act for household goods goes into effect. An inter-association group, of which the API is a member, is working with the Department of Health, Education, and Welfare establishing definitions which will apply to petroleum products. The inter-association group has requested that a toxicologist be assigned to help them. Dr. Horace Gerarde was appointed to work with Allan Dooley in his activity with the inter-association group working on the hazardous labeling act.

C. First Aid Training

T. M. Frank, M. D. reported on his liaison work with the Central Committee on Accident Prevention.

D. Wax Committee

R. E. Eckardt, M. D., chairman of the Advisory Committee to the Wax Research Project, reported on this group's activities. His report is given as Appendix M.

E. Quarantine Service

G. M. Saunders, M. D., liaison with the Quarantine Service of the U. S. Public Health Service, gave his report which is attached as Appendix N.

F. Petroleum Food Additives

L. E. Curtis, M. D., chairman of the Interdivisional Committee on Petroleum Food Additives, reported on the activities of this group. A copy of his report, which he plans to give to the Medical and Health Committee, is attached as Appendix O.

VII. 1961 BUDGET

Chairman Osborn reported that in the 1961 budget is an item for the activities of the Medical Advisory Committee in the amount of $40,500. This has been approved by the Budget and Review Committee, and the Executive Committee. It is subject to approval of the Board of Directors at their meeting tomorrow. Beginning January 1, 1961, the Medical Advisory Committee's budget will be on a calendar year basis. Therefore, monies for the 1962 budget should be submitted by each subcommittee on or before the spring meeting in 1961.

VIII. NEW BUSINESS

No new business was brought before the Medical Advisory Committee.

IX. NEXT MEETING

Chairman Osborn announced that the next meeting of the Medical Advisory Committee and subcommittees will be in the Denver Hilton Hotel, Denver, Colorado, April 6, 7, and 8, 1961.

E. O. Mattocks, Reporter

Approved:
J. W. Osborn, M. D., Chairman