

STANDARD OIL COMPANY OF CALIFORNIA

L. E. CURTIS, M. D.
MEDICAL DIRECTOR
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225 BUSH STREET
SAN FRANCISCO 20, CALIFORNIA

April 22, 1960

RICHARD DILLON, M. D.
REGIONAL PHYSICIAN
605 WEST OLYMPIC BOULEVARD
LOS ANGELES 54, CALIFORNIA

Dr. Robert A. Kehoe
The Kettering Laboratory
College of Medicine - Eden Avenue
Cincinnati 19, Ohio

Dear Dr. Kehoe:

I am enclosing a summary of the April 8th meeting on Clinical
Studies - Gasolines Containing Tetramethyl Lead.

Very truly yours,

LEC:ma

L. E. Curtis
L. E. CURTIS, M. D.

Enclosure

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STANDARD OIL COMPANY OF CALIFORNIA
PRODUCT ENGINEERING DEPARTMENT
SAN FRANCISCO, CALIFORNIA

MEETING WITH DR. R. A. KEHOE
APRIL 8, 1960

FILE 121.20
APRIL 12, 1960

A meeting was held in San Francisco at 9 a.m., Friday, April 8, to discuss a proposed program to provide the U.S. Public Health Department with lead assimilation data from persons engaged in the blending and handling of commercially sold gasolines containing tetramethyl lead (TML). Attending the meeting were Dr. R. A. Kehoe of the Kettering Laboratory, representatives of the lead suppliers and members of interested groups within the Standard Oil Company of California (SOCal) corporate family. Dr. L. E. Curtis of the SOCal Medical Department presided. A complete list of those persons attending is attached.

The principal purpose of the meeting was to finalize a program for collecting data on lead assimilation by SOCal employees engaged in the manufacture and marketing of gasolines containing TML. A proposed program submitted by Dr. Kehoe was used as a basis for discussion.

It was agreed early in the meeting that enough data be submitted to the Surgeon General that no doubt could remain regarding the safety of those persons handling gasolines containing TML and that the program for accumulating these data be designed to cover the most hazardous situations encountered rather than a broad statistical approach.

Dr. Kehoe stated that, based on a visit to the Richmond refinery and to several East Bay service stations, he believes that hazards from handling leaded gasolines in the Bay Area are very mild and if conditions at other SOCal refining areas are similar, his program, as written, could be somewhat simplified.

This simplified program, as agreed to by all participants at the meeting, is outlined in the following paragraphs. A separate program to quickly obtain data on lead assimilation as indicated by urinalysis will be conducted by the SOCal Medical Department in cooperation with the Medical Department of the duPont Antioch plant. Dr. Curtis feels that these data are needed at an early date in order to assure that SOCal employees are fully protected.

TEST PROGRAM TO OBTAIN DATA FOR SURGEON GENERAL

Purpose: To evaluate the increased hazard, if any, to petroleum workers engaged in blending and handling of gasolines containing TML compared to that of gasolines containing tetraethyl lead (TEL).

Duration: One calendar year from start of test.

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Persons To Be Studied: SOCal employees engaged in those operations which are judged to be most hazardous from a gasoline vapor standpoint. These include refinery and service station personnel as follows:

I. Gasoline Blenders and Tank Car Unloaders - 10 Men

Five men each from Richmond and El Segundo refineries

II. Truck Loading Rack Personnel - 16 Men*

- a. 12 Marketing Services Department tank truck loaders at Richmond loading racks
- b. 4 Manufacturing Department tank truck loaders at Bakersfield loading racks*

III. Miscellaneous Categories - 13 Men

- a. 5 men employed as barrel fillers at Richmond refinery
- b. 4 inspectors at Richmond Long Wharf
- c. 4 men regularly making gasoline distillation inspections at Richmond Chemical Laboratory

IV. Service Station Personnel - 42 Men

- a. 20 employees (Manager and Assistant) from 10 high volume Standard Stations in the Bay Area
- b. 20 employees (Manager and Assistant) from 10 high volume Standard Stations in the Los Angeles area
- c. 2 employees (Manager and Assistant) from one high volume Standard Station in Bakersfield
- d. In each of the above an effort will be made to insure that test personnel will remain employed by SOCal for the duration of the test.

V. Underground Garages - 5 to 10 Men

An inspection of the Union Square Garage will be made by Dr. Kehoe and if, in his opinion such an installation should be studied, an attempt will be made to include employees of that company and/or employees of the Pershing Square

* The relative exposure to gasoline vapors by persons employed at the Bakersfield loading racks will be investigated by Mr. C. H. Apple of the Manufacturing Department. If it is found that only an insignificant degree of exposure exists, these men will not be included in the program.

garage in Los Angeles. These persons are not employed by SOCal; however, Mr. Curtis believes they will not object to being included in the program.

vi. Total Personnel To Be Studied - 80 to 90 Men

Samples To Be Collected: The sampling procedure will be uniform for all persons studied and will be as follows:

- I. Urine samples will be collected quarterly starting immediately and continuing for one year.
- II. Blood samples will be taken immediately and again after one year.
- III. All samples will be taken under the direction of the SOCal Medical Department and will be forwarded to the Kettering Laboratory for analysis.
- IV. Physical examinations of all persons studied in this program will be made under the direction of the SOCal Medical Department immediately and at the conclusion of the program.

Environmental (Lead-In-Air) Studies: In addition to the clinical phase described above, extensive lead-in-air measurements will be made at many of the test locations. This phase of the program is not yet finalized and will be discussed at a meeting set for 2 p.m., Wednesday, April 13. Dr. Kehce has asked that Mr. J. Cholak of the Kettering Laboratory act as coordinator for this study. Mr. Cholak will attend the April 13 meeting.

Cost of the Program: Charges for the sample analyses will be borne by the lead suppliers. The Standard Oil Company of California will provide the personnel to be studied and will arrange for the physical examinations and collection of blood and urine samples.

D. W. HOUSER

DWH:jn
Attach - Attendance List

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ATTENDANCE LIST
MEETING - APRIL 8, 1960

Kettering Laboratory

R. A. Kehoe, M.D.

Ethyl Corporation

H. J. Gibson
J. F. Koehnle

E. I. duPont de Nemours & Company

J. G. McIlhiney
L. A. Gerlach, M.D.

Standard Oil Company of California
Corporation

Medical Department

L. E. Curtis, M.D. (Chairman)

Personnel Department

J. A. Spence

Product Engineering Department

H. R. Porter
D. W. Houser

Western Operations, Inc.

Manufacturing Department

C. H. Apple

Marketing Employee Relations Division

J. V. Trunnell

Marketing Services Department

B. C. Manuel
T. G. Woods

Retail Sales Department

R. C. Volheim

Standard Oil Company of California
Product Engineering Department
April 12, 1960

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