

CONTACT REPORT

Date: April 8, 1960

Place: Standard Oil Company of California, 225 Bush Street,
San Francisco, California

People present -

Standard Oil Company of California -

Dr. Curtiss, Messrs. Spence, Harold Porter, Don Hauser,
and five other people from California's Marketing and
Manufacturing Operations

E. I. duPont -

Mr. McIlheny and Dr. Gerlach

Kettering Laboratory - Dr. Kehoe

Ethyl Corporation -

John Koehnle and H. J. Gibson

This meeting was arranged by Drs. Kehoe and Curtiss to discuss details of implementation of the work required to provide data necessary to satisfy the requirements set forth in the letter received by Dr. Kehoe from the Surgeon General's office. This letter had indicated that the Surgeon General's office would expect from the TEL industry at the end of a year a report on the effects of substitution of X-105 for TEL. Dr. Kehoe had spent April 7 touring Standard of California installations in the Bay area in company with Mr. Spence to provide background for this meeting.

Dr. Curtiss opened the meeting by stating its purpose and indicating that in his opinion the occupational health problems with employees with Standard of California are relatively simple. He said he felt that this phase should be separated from the problem of developing information which would prove that X-105 is acceptable from a public health standpoint. He then turned the meeting over to Dr. Kehoe for his comment.

Dr. Kehoe emphasized that in addition to an occupational health problem there was the larger problem of public health. He agreed with Dr. Curtiss that the two could, and should, be separated cleanly. He and Dr. Curtiss will watch over the health of California employees while he will also be looking for information which will provide a report acceptable to the United States Public Health Service as well as to the health services of other countries in which the antiknock might be used. He said that exposure in the California refineries would be extremely mild. He congratulated Standard of California on their safety program, but said that it had the unfortunate aspect that the

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exposure would not be great enough to provide conditions which were most desirable for evaluating the effects of the antiknock. He said this meant that the TEL industries would have to carry out exposure studies elsewhere than in the refineries of the Standard Oil Company of California. His tour of the California properties indicated that probably the worst exposure was for the men loading tank trucks, but that even this exposure was not as severe as might be expected. He said there were some drum fillers, some inspectors, and a few other people working under somewhat undesirable conditions.

Dr. Kehoe said that he and Mr. Spence had agreed on using the people below for the physiological studies within the California company.

Blending - five regular employees at Richmond having an average exposure of 48 hours per year per man and five regular employees at ElSegundo presumed to have similar exposure. Dr. Kehoe said that he expected to find nothing from this group of people, but he needed good data even though the results might be negative.

Tank Car Loading - six men at Richmond have an average exposure of a half an hour per day each. Conditions are so good that it was agreed that no useful purpose would be served by including these men.

Tank Truck Loading - It was agreed by Dr. Kehoe and Mr. Spence that the motor transport people who drive trucks, unload trucks, and on occasion load their own trucks, should not be included because of minimum chance of exposure. The same conclusion had been reached with respect to the drivers employed by Signal Oil who have similar duties. The only people in this group who should be considered for inclusion are the 12 loaders at Richmond who average one to two hours per day exposure. It is believed that there are four people at the Bakersfield refinery who should be included in the group. The Standard people were particularly anxious to have them included since high temperatures during the summer season result in very high vapor losses in the first stages of truck loading. They pointed out that vapor losses had been so severe under such conditions that they had had to install automatic equipment which would permit the loaders to get away from the trucks during loading.

Drum Filling - Five people at Richmond will be included along with five relief people, all of whom have light exposure.

Inspectors - There are on the "long wharf" at Richmond four men whose duties consist largely in taking samples from barges and tankers as they are loading, and running simple tests on such samples to determine that the proper gasoline is going in to the proper compartment. Dr. Kehoe was of the opinion that these people might have a reasonably high exposure level.

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Control Laboratory - In this laboratory there are ten men involved in routine checks on gasoline quality. Of these, it was felt that four might have a reasonable exposure level since they spend most of their time running distillation tests.

The thirty-nine men will have four urine samples and two blood samples during the 9-month sampling period. These samples are to be taken under California medical staff supervision and be shipped to the Kettering Laboratory for analysis. Each of these men will have a complete physical examination at the start and at the end of the 9-month period conducted by the California medical staff. In addition, extra checks will be made on urine samples which will be submitted to the duPont lab under the direction of Dr. Gerlach.

Attention was next turned to the question of service station and garage exposure. Dr. Kehoe emphasized once again, as he had on March 10, that he did not expect any significant level of exposure, but he must have data for the Public Health Service. After some discussion it was agreed that twenty stations would be selected for this study. Ten of these are to be in the Los Angeles metropolitan area and ten in the San Francisco Bay area. These are to be selected on the basis of high gallonage of Chevron Supreme gasoline and, hopefully, on the secondary basis of a low turnover of personnel. It had been agreed that managers and assistant managers should be included in the sample. It is to be expected that forty to fifty people will start the program. In the case of transfers from one station to another it was agreed that the man was more important than the station, and that sampling would follow the man. There was some discussion as to the stations to be selected, but this was left to the California Marketing group and Dr. Cholak. Each of the people selected will be given a complete physical examination at the start of the program. Whether a physical will be given at the end of the program will be left to the judgment of the California medical staff, which will give all of the physicals. Two blood and four urine samples will be taken during the 9-month period and, as in the case of the previous group of samples, sent to the Kettering Laboratory for analysis.

Dr. Kehoe indicated that he would like to have a garage operation similar to that of the Yellow Cab fleet, but there were no very good suggestions as to where such a garage might be found. One possibility is the Union Square garage in San Francisco. Here, a very high volume of premium gasoline is pumped. It may not have enough mechanical work to qualify it as a garage, however.

There was some discussion of the environmental program which will parallel the physiological program, but Dr. Kehoe indicated that setting this program up was the responsibility of Dr. Cholak. Dr. Cholak presently plans to arrive in San Francisco on April 12 and spend the remaining three days of the week with Mr. Spence and representatives of Ethyl and duPont setting up the air sampling program. Generally speaking,

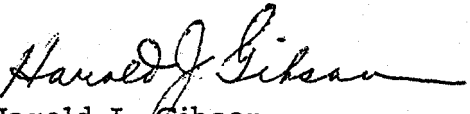
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the environmental program is designed to provide environmental data at all locations in which physiological checks are being carried out. In addition, it is expected that it will provide some data as to environmental conditions somewhat away from any of the test locations. Sampling will be on a regular basis, again to be worked out between Dr. Cholak and Messrs. Koehnle and McIlheny. It was agreed that the TEL suppliers product service people could probably handle this work. However, this cannot be determined with certainty until after Dr. Cholak's visit.

There was some discussion of the hazards which would result from the use of X-105 insofar as tank cleanings were concerned. Dr. Kehoe emphasized that the only way to avoid hazard here was to avoid exposure. This is just as true of X-105 as it is of TEL. He reiterated that he saw no problem insofar as tank cleanings are concerned if exposure was avoided by the use of proper equipment.

To summarize, approximately forty men in the direct employ of Standard of California in refinery handling of gasoline are to be followed for physiological effects of X-105. Necessary physical examinations are to be carried out by the California medical staff, while the necessary analyses of urine and blood samples will be carried out at the Kettering Laboratory. Approximately forty men in service station work are to be put through similar physiological tests. Here again, the California medical staff assumes responsibility for all necessary physical examinations, while blood and urine samples are to be sent to the Kettering Laboratory for analysis. The environmental study samples will also go to the Kettering Laboratory for analysis, as required. The work of taking the necessary samples will be the responsibility of the Ethyl and duPont product service people. The exact program is to be the responsibility of Dr. Cholak of the Kettering Laboratory. After the program is further formalized, Dr. Kehoe will meet with representatives of duPont and Ethyl to decide exactly how costs should be shared. However, Ethyl has already been committed by the writer to pick up half of the Kettering Laboratory costs for analysis of samples, preparation of reports, etc. This is in accordance with the agreement reached by Mr. Sabina and Dr. Kirby.


Harold J. Gibson.

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