STATEMENT OF DR. ARIE J. HAAGEN-SMIT, CALIFORNIA INSTITUTE OF TECHNOLOGY

Dr. HAAGEN-SMIT. Thank you, Mr. Brown and Mr. Bell. Gentlemen.

The problem is a very large one, as you have pointed out. I would like to discuss briefly a few sections of that general problem.

I sent in a brief statement to Washington, and I will follow this closely.

In the first place, I would like to talk about stationary sources of pollution and then about moving sources, the automobile, naturally. Then about the efficiency of the different methods that are available now. Then I would like briefly to mention some of the criteria that we have to establish to see how far we have to go, what decisions we have to make between economy and between the health of the people.

Now, my statement that I sent to Washington started out with this sentence, "The nationwide application of existing methods of air pollution control would go far toward cleaning the air of most of our cities."

Now, this is not contrary to what you are trying to accomplish. The only thing that I want to express here is that most of our cities would be greatly benefited by the application of existing methods. We can mention quite a number of cities all over the country that would be greatly benefited with ordinary engineering methods and with existing dust collection and fume collection methods.

This, however, doesn't take away the fact that we have to refine our methods. The increase in the population, and the increase in the urbanization demands more and more technical skill to accomplish what we want to do.

I was most impressed about 2 years ago to see in the New York World's Fair what they call a demograph, which showed how many people were being added to the United States. A light flashed on when somebody was born every 7½ seconds. Every 17 seconds somebody died. So you have an excess there. Every 12½ seconds there is an extra person in the United States.

As you know, when you divide that into the number of seconds that there are in a year, you will see that easily amounts to around 10 million people. So we have to work hard to keep up with just the growth of our population.

Now, Los Angeles has dealt quite well with its stationary sources, as you will undoubtedly hear from Mr. Fuller. We had here some rather ugly problems in the metals industry, the steel factories—two large steel factories—some 120 foundries, and, of course, we had a number of large refineries. All of these have been controlled.

If we go to the area of Torrance, Dominquez, and in the southern part, such as Vernon, there is the difference between day and night compared to when we started in 1950. As a matter of fact, the real estate development in that area—in the Inglewood area and Rolling Hills area—would not have been possible without the control of the stationary sources which have been taken care of by the air pollution control district.

While it might cost a little, the financial advantages of the control are so great that we could easily spend much more than is being