

Dr. ECKARDT. I am thinking of material damage, plant damage, agricultural damage, corrosion of buildings, reduced visibility, all of the nonhealth factors that may be associated with air pollution.

Mr. MOSHER. I thought it would be helpful for clarification. You are making that distinction so far very definitely?

Dr. ECKARDT. Yes.

Mr. DADDARIO. Will you proceed, please?

Dr. ECKARDT. In addition, in June of this year, the institute will join with the Air Pollution Control Association, the American Industrial Hygiene Association, and the Industrial Medical Association in cosponsorship of a symposium on air quality criteria.

Parenthetically, I might add here that the National Center on Air Pollution Control has been invited to participate in this symposium to any extent that they desire.

This symposium will be held in New York City. Its purpose will be to provide an opportunity for medical and environmental scientists, from both the public and private sectors, to review the present state of knowledge concerning the effects of air pollution—and to air their views concerning what would constitute reasonable air quality criteria in the light of present knowledge.

As this committee undoubtedly knows, air quality criteria are not themselves prescriptions for air quality. They are scientific judgments, based as far as possible on available data.

Ideally, such data would convincingly relate specific time concentrations of pollutants, or combinations of pollutants, to specific effects on man and his environment.

In practice, however, this may not be so simple because the toxicologist has learned that curves relating time-dose to effect are not linear. This is because the effects at high concentrations and short exposure times often differ qualitatively from the effects produced by low concentrations over prolonged exposure.

Moreover, very few efforts have ever been made to develop appropriate data relating long-range, low-dose exposure to air pollutants with specific effects on health. Thus, any criteria issued at this time with regard to such long-term, low-dose effects must necessarily be regarded as speculative and should be so labeled.

An excellent illustration of this is the fact that during the past year no fewer than three separate sets of criteria for sulfur oxides have been issued—one by the U.S. Public Health Service, one by the State of Pennsylvania, and one from Holland. The figures arrived at by each group were different, even though many of the same source data were used and the approach and concern were presumably quite similar.

Mr. DADDARIO. Dr. Eckardt, how do they differ? Are they more or less stringent? Why do you call these three to our attention beyond the fact that there were three sets of criteria developed in this way?

What is so important about it?

Dr. ECKARDT. The importance of this is the level at which effects are attributed. In the air quality criteria by the PHS basically they are talking about a tenth of a part per million for SO_2 on a 24-hour basis. The State of Pennsylvania proposes 0.25 parts per million on a 24-hour basis. The report from Holland, as I remember the figure, is three-tenths part per million on an 8-hour basis. These levels are those