

demiological, statistical, and clinical studies of illness and death in the general population as well as among special groups in the population.

Mr. FELTON. Let me frame the question in another way. I assume, for example, that we would not abate traffic going to New York because one person may get sick. Would these standards protect the sickest?

Dr. MIDDLETON. That is a different question. Air quality standards are not the same thing as air quality criteria. Air quality criteria describe the air quality that must be achieved to prevent the occurrence of various adverse effects on health and welfare. Air quality standards prescribe the air quality that a State or community has decided it will actually try to achieve and maintain. This decision must, of course, be influenced by knowledge of the adverse effects of air pollution, as presented in air quality criteria, but it will also be influenced by economic, technical, legal, and other factors. So it is in setting standards that a State or a community decides the extent to which it will actually try to protect people, the extent to which it will actually try to prevent soiling and damaging of buildings and materials, the extent to which it will actually try to prevent injury to vegetation, and so on.

Mr. WILLIAMS. Under the Air Quality Act of 1967, Mr. Felton, we are charged with developing and publishing air quality criteria; in addition, we will develop and publish data on air pollution control techniques. Then it will be up to State governments to set air quality standards and develop plans for implementation of the standards. It is at this stage that States will, first, be prescribing the air quality they will actually try to achieve and maintain in air quality control regions we designate, and second, prescribing schedules for accomplishing this. Since the Air Quality Act requires State standards to be consistent with the air quality criteria we publish, this will mean that their standards must be at least good enough to protect people's health. Economic and technical factors must be and will be taken into consideration primarily in the formulation of plans for implementation of the standards.

Dr. MIDDLETON. I think it would be well to refer to the introduction to the sulfur oxides criteria, published by the Department in March 1967. I will read it slowly.

The criteria presented here then are not exact expressions of cause and effect that have been replicated from laboratory to laboratory. Instead the criteria are useful statements of the effects of the sulfur oxides in the atmosphere derived from a careful evaluation of what has so far been reported.

As more studies of these effects expand our knowledge the criteria will be modified accordingly.

The use of these criteria by State and local governments may vary with individual judgment and with local circumstances. In the Federal Clean Air Act the American people have expressed through their representatives a strong desire for clean air. Guidelines for the choice of criteria are that the quality of the air be good enough that—

Now there are seven points—

1. The health of even sensitive or susceptible segments of the population would not be adversely affected.
2. Concentration of pollutants would not cause annoyance such as the sensation of unpleasant tastes or odors.
3. Damage to animals, ornamental plants, forests and agricultural crops would not occur.