Some of the organizational materials on these charts would help you to see how this comes about. If it is your pleasure that I be responsive at this particular time, I should say we know quite a bit about many pollutants. We know much about particular ones. There are some we do not know as much about as we would like. But the ones that have adverse effects on health have been known for some time; and we are improving our knowledge of them. For those pollutants for which we have information, such as the oxidants, sulfur oxides, and some particulate matter, we recognize adverse health levels. We have published criteria on sulfur oxides already; we shall reevaluate them in time. We are in the process of publishing other critieria as reported to the Senate Public Works Committee.

At this time I would like to call on Dr. Blomquist, a doctor of

medicine, to comment further on our health criteria.

Mr. Daddario. Why don't we come to that after Dr. Ludwig finishes his statement? I think it is important that he does explain the way in which you are developing a system of meteorological knowledge. Then

we will come to Dr. Blomquist.

Mr. Ryan. Mr. Chairman, I would like to go back to the question you asked because it is a very key question. That is, do you now have a system so that when you issue an air pollution advisory, some action follows in the local government? I ask this question because in November 1966, at the time of the Thankgiving Day inversion in New York City, you did predict the stagnation of the air and all the conditions that led to that inversion. You predicted it some 24 hours before it happened, as I recall. Yet, New York City and New York State did nothing. It was 24 hours after Thanksgiving Day, when it started, that New York City issued the first alert, 48 hours after you had given them notice. New York City received the warning on Wednesday, November 23 at 12:07 p.m.; the official alert was issued on Friday, November 25 at 1:15 p.m.

What are you planning to do in the future to get action at the local level? It is all very well to be able to predict the episode. It is more important, if the local government fails, that you, with your knowledge, take action so that the people in the local areas are protected. There was a 48-hour time gap between the issuance of the air pollution advisory and the first public alert in New York City, which is inexplicable, over Thanksgiving Day. If it had not been for the fact that it was a holiday, we would have had a great deal more than the 168

excess deaths which occurred during that period.

Mr. Daddario. Following what Mr. Ryan just said, I think it gets back to the point that I just touched on. At that stage of the game could

you go to court to force the local government to do something? Dr. MIDDLETON. I am suggesting that the local government itself

wishes to do something. I am suggesting that the State of New York and the city of New York wish to do something. The difficulties of integrating air monitoring and the recording of information on pollutant concentration, the difficulties in identifying the specific sources of the principal pollutants are the items that the local control agencies need to stipulate; such as the air pollution potential predictions come and the levels of pollution begin to rise, there can be agreement in the New York-New Jersey metropolitan area that when selected pollutants