Now, this is significant progress but I think it needs to be pointed out that there isn't any valve that you can shut off that would stop the pollution. In the main it takes a significant time period to actually accomplish some degree of improvement. As a further example, in the field of pollution from automotive vehicles, we have issued standards that are obligatory on the manufacturing industry beginning with the 1968 model year. Now, with something over 80 million vehicles already on the road, the incorporation of controls on the 9 or 10 million vehicles that will come out in any one year is not going to result in a rapid change in the pollution emission picture from automobiles.

This will be a gradual change for the better and is reflected in the percentage improvement figures that were cited by Secretary Cohen. These factors, sir, limit what we think can be accomplished reasonably. We are hopeful that these actions can actually be accomplished, and if they come about, then I think we will be well on the road to significant improvement. I want to be not only hopeful about what we can

do, but also realistic about what it is possible to accomplish.

Mr. RYAN. Well, if the political institutions were more advanced, I take it that technology could go ahead and develop the means to reduce air pollution by more than 25 percent in the next 10 years.

Mr. MacKenzie. Yes, I think the limitation on our improvement is

more of a political and social nature as of now, certainly with respect to pollution from stationary sources, than it is technological with some important reservations. The sulfur pollution problem is one in which there is a real basic need for improvement in technology.

Mr. Mosher. Another major element certainly is the private investment that would be required. You are talking about steel plants.

Isn't the capital investment-

Mr. MACKENZIE. Capital investment is relatively high but in terms of percentage of the total investment in the manufacturing plant, it is not great.

Mr. Daddario. Mr. Ryan?

Mr. Ryan. I would like to bring out one other point on this question of political institutions. It refers to the matter of air sheds and regional control. How much thinking has been done in terms of developing this on a nationwide grid pattern or something of that nature?

Mr. MacKenzie. We have been endeavoring to sell this concept sir. In the Clean Air Act there is provision for additional financial incentive by grants for program development to State and local agencies when the regional concept is incorporated in the applicant's plans.

In this way, for example, on a program improvement project, the grant, instead of providing \$2 of Federal money as is usual for most projects, would be increased by 50 percent for a regional project to make it \$3 for each matching dollar by the applicant.

In spite of this, I frankly am personally disappointed at the extent to which this financial incentive has resulted in regional programs. I don't think it has been as effective as I had hoped that it might be.

Mr. Ryan. There you are leaving the initiative to the local governments and the regions. Has your Department or any agency of government given any thought to developing a national air shed grid so to speak, which would then be something that you could present to the Congress?