Mr. CARPENTER. I think you have adequately answered unless you have something you want to add.

Mr. Griswold. I would like to expand a little on that, John. This question is asked of witnesses at committees of Congress and Senator

Muskie asked it on one occasion.

Now, there is a tendency for air monitoring stations in given regional areas within a metropolitan area to peak out at certain levels under average conditions. And as Dr. Middleton says, the outlying areas tend to build up, but on the short-term basis where the potential for episodes occur you have to take meteorology very much into consideration.

Now, when I say meteorology, I could say a lot of things, but just to put it in context, the air over a large city might be like the Mississippi River down on the delta area. There are stagnant areas where the air doesn't move. There are other parts of the area where the air moves very quickly and rapidly, up to 7 miles an hour, where in the stagnant areas it is just circling around. It isn't being evacuated.

Now, when you have an expanded area with high levels of pollution over it, where the air condition or meteorology tends to maintain stagnant periods in certain areas, the concentrations build higher and

higher in those areas.

Follow me?

Mr. CARPENTER. Yes.

Mr. Griswold. In other words, a control officer with the responsibility for 16½ million people isn't worrying about averages, he isn't worrying about a 24-hour peak; he is worried about 14 consecutive

days where these stagnant areas build up.

These are the situations under which you have your so-called episodes. And these are what you consider in developing a control program, to see that this doesn't happen, because God help you if this happens and you don't have a pretty good explanation for why you let it happen.

Mr. CAPPENTER. If you have any more on episodes, we might take

that at this time.

Mr. Auerbach. I think we would like to get an answer in the record on it. That is, is episode elimination a possible alternative to yearround improvements in air quality?

Mr. CARPENTER. Right.

Dr. MIDDLETON. The answer is very simply, "No." I think it is based again on our earlier discussion that you have different effects at these high episodes as contrasted to lower level, long periods of time.

Episodes are to be avoided for the reasons that Mr. Griswold just spoke to you about. But to try and control air pollution simply on an episode basis is not good sense, it is not proper, it is an improper attitude for the Government to assume, it doesn't discharge the Federal responsibility for the protection of the health of people.

Mr. Felton. Is there any normal period that an episode will last

in different regions of the country?

Dr. Middleton. Yes. In Los Angeles there are periods, Mr. Felton, when it is normal for inversions to last for—

Mr. Griswold. Fourteen days.

Dr. Middleton. Don't you have 253 days a year in Los Angeles when you can expect inversion of 1 to 2 days regularly?