

Dr. HIBBARD. Technology is trying to find ways of doing this so that these mechanisms will not deteriorate so soon.

One of the devices we have been using is actually developed by Du Pont. It has been operated 50,000 miles by the Du Pont Co. without serious deterioration.

The other question is really a regulatory one. An alternative, for example, is to have a car inspected every month or every 2 weeks. This is why I say it is a matter of tradeoff with what you are willing to pay. If you are willing to pay for it in terms of inconvenience or cost in this way you can put it into effect very promptly. If the public is not willing to go through the bother of inspections in those periods which we believe to be critical then that is something else.

Mr. DADDARIO. Dr. Middleton, what does your experience tell you about that particular problem?

Dr. MIDDLETON. The motor vehicles that are sold nationally beginning in the fall of 1967, the 1968 models, the certificates of conformity awarded to the automotive industry for new vehicles, and Dr. Hibbard is making a very critical distinction there—authority vested in the Department of Health, Education, and Welfare is for new motor vehicles and engines—these certificates are awarded based on the lifetime of the vehicle such that a car, authorized as being in conformity, is manufactured, based on the samples tested, and that it will last within the limits imposed.

That is to say that the test procedures, the durability testing, and the amount of maintenance required are such that there is every assurance that these vehicles will be in compliance, and by way of some information on this, perhaps, we can give you some facts.

Let me say that in the testing of motor vehicles—I am trying to find that information.

Mr. DADDARIO. Why not give us your guess as you remember it at this point?

Dr. LUDWIG. The surveillance tests that have been conducted over the several years since cars with devices, which have been required in California since 1966 and 1967, would indicate that they are exceeding slightly the 275 parts per million and the 1½ percent CO.

Whether this is 285 and 1.55 or something like this I cannot recall exactly.

Mr. DADDARIO. You mean better than?

Dr. MIDDLETON. No, do not meet.

Dr. LUDWIG. Do not meet the standards. They are slightly above the standards after 1 or 2 years of deterioration.

It is difficult to extend this into the future because the only way you can get car owner mileage on automobiles is to wait to see what happens in the third year.

Mr. DADDARIO. It would be difficult for the owner to come to a judgment as to whether or not his vehicle is meeting the standard or not.

Dr. MIDDLETON. These vehicles are actually run 50,000 miles for durability tests. Every 4,000 miles they are measured.

From this we have a decay factor which tells us whether this system will last for the lifetime of the vehicle, expected to be 100,000 miles.

This is the data that I think will be of interest to you.