ample of the interrelated complexity of many of these problems. In solid wastes in general, one of the things we are doing at the moment is making a nationwide survey to reveal the magnitude, location, and composition of all major tailings dumps. From these we are getting samples which will be examined for mineral values and for ways and means of disposing of the waste.

One of the things we are trying to do is grow vegetation on various types of waste. If we can't do any thing else, possibly we can turn these piles from gray to green. They will at least be a little better

looking from the standpoint of appearance.

Summarizing, it is believed that much scientific information is available on environmental pollution for application toward limiting the amount of air, water, and land pollutants which are a byproduct of our industrial system.

However, there is a great lack of engineering technology for successful abatement of many of the pollutants without putting an eco-

nomic strain on the industry and public in general.

We believe that through continued research and development it will be possible to solve the problems confronting the Nation effectively and economically. However, such solutions must balance public need against economic considerations. In other words, the economists are telling us to use the principle of minimizing total cost. Total cost includes both economic cost and social costs and the commitment of resources costs. If cleaner air, water, and land is to be attained without disrupting the economy, increased efforts by both industry and Government will be required.

The conversion of waste materials into useful products will help minimize these economic burdens. The Bureau recognizes its responsibilities in many areas of pollution abatement and will continue to work for technically and economically feasible solutions to the pollu-

tion problems in these areas which confront our Nation.

Mr. Daddario. Thank you very much.

We have asked you a number of questions as we have gone along and you were extremely helpful to us.

Mr. Roush, do you have any further questions?

Mr. Roush. No further questions. Mr. Daddario. Mr. Chairman?

Chairman Miller. No, I only want to congratulate Dr. Hibbard for his very fine statement. I think it pinpoints much of the gaps in our technology as all of the statements have so far, but I think that's why we are having these hearings—to try to pinpoint some of these

gans.

I am conscious of the fact that to do many of these things is going to be costly. Who should pay for them? Should the general public pay for them in the price of an automobile? Should we include an increment to take care of the old car when it is run off the highway and has to be cut up? I can see where industry would complain, but some place these problems have to be solved and somebody has got to pay for them. I think this is one of the things we have got to begin to take a look at. We are interested in one phase of the problem, but the economics of the whole system must be given very serious consideration, too. Thank you.