

ment of environmental pollution, both now and in the future. I think it is important to distinguish between the Nation's present and future needs in this area. On the one hand, we already have at our disposal enough technical know-how to achieve a significant degree of control of many of our most serious environmental pollution problems. Our most immediate need, then, is to see that this technology is applied, and this is a challenge which clearly calls for the development of appropriate control programs at all levels of Government.

But there can be no doubt that a need also exists for better control technology to arm us against future pollution problems. The search for more effective and more economical control techniques must be an integral part of any national attack on environmental contamination. Moreover, to protect ourselves and future generations against the projected growth of many pollution problems, we will almost certainly need to find ways of maintaining our high levels of economic and technological progress without adding to our already substantial capacity for polluting the environment.

These tasks will, of course, require a continuation, indeed expansion, of present research and development activities in the field of environmental pollution. Both Government and industry have a responsibility to share in this vital work. Those industries which are significant contributors to pollution as well as others which have technical capabilities in pollution control have both a responsibility and a great opportunity to help the Nation fight pollution. Insofar as the Federal Government is concerned, we in the Department of Health, Education, and Welfare have always felt that research and development constitute an essential part of our programs in environmental pollution. Through our own research activities and through support of research by non-Federal agencies and institutions, we are engaged in a constant effort to raise the level of the Nation's technical capability for controlling pollution in all its forms.

In order to make an informed appraisal of the present status of efforts to control environmental pollution problems in this country and to provide a sound basis for deciding on the scope and direction of future efforts, it is essential that we take a brief look at the roots from which these problems arose and the ways in which they have grown and evolved.

Environmental pollution problems are a by-product of many interrelated factors in the development of our present way of life. To deal with such problems intelligently, we must place them in their social and historical perspective. It is my intention, Mr. Chairman, to discuss this subject in broad outline and then to look more closely at the specific problems of air pollution and disposal of solid waste.

In this century, our remarkable progress in science and technology has given us an unprecedented capacity to alter man's environment—both by choice and by chance. We can and we are reshaping it by deliberate choice through the application of our increasing scientific and technical knowledge. And for the most part, the results have been of immense benefit to all of mankind.

But there is another side to the coin of technological miracles—the side that has been tarnished by some of the unplanned and unforeseen consequences of the ways in which the very same scientific and technical knowledge has been used. The problem of air pollution and the many problems associated with disposal of solid wastes are among the most important consequences of our failure to anticipate and prevent environmental contamination arising from the heedless application of technical knowledge.

This country has arrived very belatedly at its present point of sharpened interest and activity in the field of environmental pollution control. We have just begun to recognize that man's ability to contaminate his environment has long since surpassed the essentially limited capacity of our air and water to purge themselves of such contamination. And we are only beginning to see in all its complex ramifications the vital connection that exists between man's well-being and the quality of his environment. That we have been tardy in this respect is not really surprising, for environmental contamination, in contrast to the immediate short-term benefits of technological innovation, is essentially a slow and subtle process, and some of the most important health and welfare hazards of such contamination are not always readily apparent. Our understanding of these problems is still incomplete, but where our knowledge is not complete, the areas of uncertainty relate not to whether environmental contamination threatens public health and welfare—for that is not in doubt—but to the question of how best to deal with a serious problem before it reaches truly critical proportions.