

conomic return or incentives, the technology to handle such material has been largely neglected.

I would like to discuss for a few moments the role of the Bureau of Mines in this area because I think it is not as well known as it should be.

The Bureau of Mines, by its organic act, is charged with the responsibility to conduct scientific and technologic investigations in the mining, preparation, treatment, and utilization of minerals and mineral fuels with a view of improving health conditions, increasing safety and efficiency, and conserving our resources through prevention of waste. In accordance with its initial congressional mandate, the Bureau has been engaged for more than 50 years in research investigations designed to conserve our natural resources, and in many studies aimed at minimizing pollution, since pollution from wastes often represents inefficient use of our resources.

In the water area these investigations have included acid mine drainage alleviation through mine sealing, economic means of utilizing or disposing of mine wastes, and prevention of contamination by leaching of mine tailings. And while we have made progress in many of these areas, the problems have expanded much more rapidly than the solutions.

In the field of air pollution abatement the Bureau is concerned with engine exhaust fumes. It has also been active in research on the utilization of mineral fuels and in general with the minimization of pollution. Here again, our research has not been able to keep pace with the growth of the problem.

The Bureau has had a longstanding interest in the reduction of sulfur oxides pollution resulting from the combustion of fossil fuels and from metallurgical operations. In these areas we have worked on the cleaning of coal to remove sulfur-bearing waste; desulfurization of petroleum products; improving combustion efficiency to conserve fuel resources and produce less pollutants for a given energy production; and the removal of sulfur oxides from waste gases and conversion to useful products of commerce.

Mr. DADDARIO. You talk about the lack of ability to keep up with the need and you state that this is largely due to lack of funds. Have you proposed programs which would definitely be of help but which have not been supported by funding? Or is it a problem which involves the amount of funds which would allow you to develop an adequate research effort?

Dr. HIBBARD. The answer to the first question is "Yes." We have proposed programs which have not been funded. The answer to the second question is also "Yes," because the problem has increased so rapidly almost algebraically.

Mr. DADDARIO. Could you go into that a bit, and perhaps submit for the record any details that may be necessary?

Mr. MOSHER. Mr. Chairman, I would especially like to know, when Dr. Hibbard says that programs have not been funded, where this decision has been made. Was it higher up than your own department, has it been a Budget Bureau decision, or has it been made by Congress, the White House, or who?

Dr. HIBBARD. I think I will ask Mr. Perry to answer that question because I have been in my post only 9 months.