

This salt problem is the concern throughout the world, as Mr. Warne pointed out, in Pakistan and elsewhere. He points out, and I merely confirm the fact, that you have to deal with it.

No. 8 is the removal of sulfur oxides. The dilemma you are in whether you take it out from the stacks or you take it out from the fuels, either from the coal, from the oils, or from the gas. The British at one of their powerplants tried to take it out from the stack by scrubbing. They ended with a dilute sulfuric acid which was worse than what they had before, except that it was in another effluent.

All the testimony indicates that we do not have at the moment a significant economical removal method either from the fuel or from the stack.

One can remove particulate material from stacks and it should be. Such processes are valuable, efficient, and reasonably economical.

I would remind the group I asked Chairman Lilienthal of the Atomic Energy Commission many, many years ago, approximately 15 to 16 years ago, where I was serving then as the Chairman of the Stack Gas Committee of the Atomic Energy Commission, the question which your committee has asked from each witness: What kind of a quantitative standard or criterion should we have for stack gases in all of the AEC operations. He said, "Zero."

Of course, he then hastened to add that this was not only improbable but impossible and, of course, it has turned out to be both improbable and impossible.

What it did do, however—because his request was to keep it down to the absolute minimum—it resulted in an improvement in industrial filtration systems for stack gases of extraordinary character in a period of 2 or 3 years.

But here you had an interesting situation where you had one Federal agency, covering all the plants, whose criterion could control all and which, incidentally, had a great deal of money. But it did result in the fabrication and the development of air-cleaning devices for minute quantities of particulate matter and dissolved matter and very, very small-sized matter which had never been heard of before.

This I think is a significant thing, that if your criterion can be good and can be necessary, you push industrial process developers, as it did in that case, into highly improved technology.

Now, on disposal of solid wastes, I merely want to remind you that one of the very heartening pieces of testimony was the testimony of the Chief of the Bureau of Mines on the potential of the elimination of one of our greatest difficulties; namely, the automobile junkyard. How this will evolve as time goes on and whether these pilot plant operations with low-grade taconite does pan out is still an open question. It was one of the few indications, however, that we would be able to handle the solid-waste problem, particularly on the junk side. And that would cover not only the automobile, but the washing machine, the refrigerator, and all that now is disposed of only by taking it from the consumer when it has been finally made obsolete and giving it to me. I say giving it to me, when I mean depositing it on the shores of Lake Erie or on the estuary of the Hudson or in my parks and the like, and say, "Well, now, you do something with it." More than that is required, of course, as the Bureau of Mines witness indicated.