

the Bureau payroll, much as the agricultural people are around the world, and they should be stationed at key embassies.

Senator GRUENING. I wonder whether you would be willing to supply us with a little outline prospectus for such an agency. Then, we will see if we can get action on it.

Dr. HIBBARD. I would be very happy to supply it.

Senator GRUENING. We would like to have it so that we can get action in this Congress.

Dr. HIBBARD. The other area in data gathering where we are weak is in regard to end-use material patterns. We know in general that a given substance goes into, say, the transportation industry. But we must know more specifically how it is used so that we can project changes in end-use patterns.

For example to go into an area in which I am particularly acquainted, there is now a tendency to use fiberglass or reinforced plastic for automobile bodies. A typical question would be, What is the impact of this on the long-range requirements for glass and steel? You have to have a fairly sophisticated knowledge of a good many subjects in order to make these projections.

So we also need more capability in this end-use area.

Now, again we are talking about world end uses, not just United States, because this is a competitive matter. And while we have, I believe, the authority to look at this sort of thing, and we do this very closely with the Department of Commerce, the current system is not sophisticated enough to do it right. And we need additional resources here.

Senator GRUENING. Thank you. Senator Fannin?

Senator FANNIN. Thank you, Mr. Chairman.

Dr. Hibbard, I certainly want to commend you for a very fine statement, and also your fine responses to the questions.

Have you developed any type of a program for the study of the slag that develops over the years at different mines that have smelters? This has been quite a factor, I know, in my State of Arizona. And because of new technology, I wondered what has been done so far as the recovery of minerals from these wastes is concerned.

Dr. HIBBARD. We have done the following: We have a program where we are getting samples of all the large waste dumps and tailings piles in the United States. And we are analyzing these materials to see whether or not they might be reworked and disposed of that way. We are also analyzing them for other uses, like making brick. And then lastly, if we find that neither of these two will work, we are trying to find ways and means of growing vegetation on them. So that the program is progressing.

Incidentally, I always hark back to gold. We found in the Grass Valley area of California some tailings piles which have enough gold in them to make it worthwhile to rework them.

But this program in my opinion is not being carried on with the urgency it deserves. This is far more urgent in my opinion than the modest resources we have been able to bring to bear on it would infer.

Senator FANNIN. Thank you, Doctor. I do want to say that, as you know, the committee members were very elated when you came to the Department and when you took over the directorship of the Bureau of