

tory in the field of pollution, and you indicate the degree of success there.

Has this effort been extended to other areas or other types of problems? I ask this with regard to transportation on which we will hear some testimony after you. One of their areas of research and development is in the tunneling field, and I gather from recent reports that I have seen that the AEC has done some substantial work in the area of tunneling which might actually represent a breakthrough in this field.

Now, has there been an exchange of technology between what you are doing and what the Department of Transportation might be interested in doing in this field?

Dr. TAPE. Department of Transportation—I do not know that we have been explicit with them on this subject, Mr. Brown.

On Housing and Urban Development I can answer in the affirmative. We have had exploratory discussions with HUD, first of all, concerning our laboratory operations complex and what facilities we have. I know they are most interested in getting their own research and development programs going and they will be faced, as I am sure you will hear, with the questions of how can they best carry out the work they need to do.

As to tunneling, we have talked directly to Dr. Rogers and I think there are two areas of our work which are of interest. One comes from the weapons area where there is tunneling going on. The technology of drilling large holes in the earth, some of the largest holes—

Mr. BROWN. Are you distinguishing between that and tunneling?

Dr. TAPE. I am distinguishing only because some people don't think of the vertical hole as a tunnel so I was going to include it by explicitly stating it.

This is an area in which we have done a lot of development not so much ourselves, but the industry, the miners, and so on, have developed it to meet our needs.

Another area which I think may have a tremendous carryover into housing and urban development is work that is going on at Oak Ridge under the heading of "Civil Defense" which is partially supported by Civil Defense and partially supported by us. Here the question of tunnels starts with Civil Defense. But it is related to many other facets of urban development. I see tunnels in future cities to be a basic part of transportation, communications, power distributions, and other services.

I don't think we have talked to transportation. On housing and urban development we have done a lot.

Mr. ROUSH. Thank you, Dr. Tape and Dr. English. We appreciate your appearance before the committee. There may be some questions the committee would like to propound in writing to you in the future, and we hope you would respond to those.

Dr. TAPE. We would be glad to respond.

U.S. ATOMIC ENERGY COMMISSION,
Washington, D.C., June 17, 1968.

HON. EMILIO Q. DADDARIO,
*Chairman, Subcommittee on Science, Research and Development, Committee on
Science and Astronautics, House of Representatives*

DEAR MR. DADDARIO: Your letter of May 15, 1968, requested that I provide answers to questions related to effective utilization of Government laboratories. I trust that you will find the answers which I have enclosed useful in preparing the hearing report.