(a) Assuming this legislation is enacted, what criteria will DHEW use to decide whether to use existing AEC capabilities as an alternative to establishing new and duplicate capabilities at public expense?

Answer. To carry out research responsibilities specified in H.R. 10790, DHEW would search out potential resources within the Department, in other Federal agencies and also in private organizations and industry. The guiding criteria regarding the utilization of AEC's facilities, or any other facilities, would be capability and availability to carry out the specific research activities to be undertaken. The Department of Health, Education, and Welfare would prefer not to develop new facilities and new research teams if appropriate facilities and personnel are available to do the work in other Federal agencies, or private enterprise.

Question 4. The Atomic Energy Commission has mentioned its efforts to bring the capabilities of its laboratories in pollution research to potential user agencies and the drafting of specific proposals for related research. What proposals has DHEW received from AEC for pollution-related research in AEC laboratories? When were these received? What is the present status of these proposals? What are their prospects? What difficulties, if any, have you encountered in dealing with these proposals and with the AEC?

Answer. Exchange of information on needs and capabilities and discussion of proposals has taken place on a number of occasions between representatives of AEC and its contractors and officials of various organizations of DHEW.

The Deputy Director and other officials of the former Bureau of Disease Prevention and Environmental Control (BDPEC) have participated in a series of meetings with the Atomic Energy Commission to explore capabilities and joint interests. Representatives of AEC have made information available on facilities and capabilities and such information has been disseminated to appropriate persons for their consideration. DHEW and AEC have recently initiated a jointly funded study with the Argonne National Laboratories. This study will provide information essential to air pollution control activities.

Proposals involving pollution research have been received and prosecuted within the context of the National Cancer Institute's collaborative research program with the Atomic Energy Commission at the Oak Ridge National Laboratory in Oak Ridge, Tennessee. This program was initiated in January 1963 to investigate the roles of radiation, viruses, and chemicals as causes of cancer. The initial funding provided for the establishment of facilities that would permit inhalation studies using experimental animals. Subsequent to the availability of facilities, the Fiscal Year 1965 proposal for the collaborative program included inhalation studies on co-carcinogenesis to "Investigate the Role of Air Pollutants, Radiation, and Viruses in Various Combinations in the Induction of Lung Tumors in Mice."

This study has been continued and expanded each fiscal year since its inception. The NCI has not received any other proposals from AEC for "Pollution-Related Research in AEC Laboratories."

The recent status of this activity was as follows:

"In the past year two additional inhalation chambers have been installed, calibrated and are now in use. A more toxic chromium compound that is 60 times more soluble than Cr_2O_3-calcium chromate dust is being dispensed in these chambers to mice that have been pretreated with various combinations of radiation and virus infection. With these additions the total number of C57B1/6 mice in the experiments has risen to 7,547. At this time 645 have been sacrificed for initial or terminal examination and 2,329 have been found dead. The gasoline smog and chromic oxide dusted animals have had from 2,200 to 3,000 exposure hours while the calcium chromate dusted animals have had 900 to 1,000 exposure hours. Periodic routine examination has revealed that all animals have remained free from the nine murine viruses that can be determined as well as endo and ecto parasites and specific mouse pathogens such as Pseudomonas and Salmonella. These factors have contributed to lengthening the life span of the mice considerably beyond that reported for previous smog experiments. Thus the median death time for these SPF mice in the chambers will be over 20 months regardless of treatment with the controls perhaps as high as 26–28 months. This longer lifespan should materially enhance the chance for tumor induction and some evidence is developing along these lines. When all groups are compared at an equal age of 16 months, the mortality for mice living on wire is greater than for those living in pans. This is definitely reflected in the increased incidence of urogenital disease in the males and hair loss in the