can be treated in this context. Presumably the abatement of these waste problems rests in examining, in their entirety, specific production-marketing processes to determine the points at which established controls may be applied most successfully and economically. This approach associates environmental quality responsibilities with agency missions, and recognizes that specific segment of the economy may be both sinners and sinned against. Calling attention to cases of the latter, particularly, is a responsibility we all share. It affords a useful device for insuring the recognition of broad problems. Efforts by one agency to assess the efforts of other agencies at the same level in the government often are not successful.

Question 13. Secretary Gardner has stated regarding Federal leadership in environmental quality: "We believe such leadership should come from a department or agency whose fundamental responsibilities are fully consistent with the central purpose of controlling air pollution and improving the management of solid waste problems—and that purpose is to protect the public health and welfare." What is the rationale for water quality in which water pollution control is separated from health relationships and placed in the Department of the Interior?

Answer. This question was largely answered in the preceding statement. A number of water quality problems are of a "resource" nature. The Department of Health, Education, and Welfare has responsibility for health aspects of water quality. The transfer of the authority for general control of water pollution from HEW to Interior was based upon judgments that the general problem was one of conservation of resources rather than "health and welfare," and that the water quality control program must be integrated with overall water and related land resources planning and development.

Question 14. Do you believe that the public health impacts of air and water contaminants will be dfined adequately to provide motivation for environmental improvement? Please explain.

Answer. Where environmental contaminants have public health impacts, they should most assuredly be the principle consideration in motivating improvements. The definition of the effects on human health is a difficult problem. This point is further discussed under Question 16. As mentioned previously, however, there are other values which must be considered in environmental quality. Levels of contamination for which no adverse effects on health can be demonstrated may be undesirable for aesthetic or other reasons. This would necessitate establishing standards which are unreleated to health.

At any rate, there are ample reasons for not delaying action until the exact qualification of effects on human health has been accomplished.

Question 15. What is the basis of national policy for the environment—human health and welfare or resource management?

Answer. This point was discussed under Question 12, and amplified in the responses to Questions 13 and 14.

Question 16. Dr. Bennett stated "we are almost totally lacking in knowledge on what the effect will be of exposure to relatively low concentrations of pollutants over a period of 10, 20, or 30 years." When do you estimate that we will have such knowledge and what will it cost to obtain it? When do you estimate that HEW will have sufficient knowledge to issue reliable criteria for such low concentrations?

Answer. Many of the pollutants with which we are concerned currently have been in our environment for long periods of time; for example, those resulting from various combustion processes. However, with accelerated industrialization and increased population density these problems have been aggravated. Other contaminants have been introduced into our environment comparatively recently, and their long-term effects have not yet been established. In short, the majority of our pollution problems have been of comparatively recent concern. It will be a long time before reliable information on long-term effects is available.

Synthetic organic pesticides are a case in point. Their use became widespread in the late 1940's and 1950's. A significant concern for the hazards, the persistent chemicals presented was expressed in the 1950's culminating in the publication of "Silent Spring." Although monitoring of man, his food supply and various components of his environment indicate there are no short-term effects, the question still remains of long-term hazards which have not yet been expressed. For example, there are illustrations that these materials accumulate in food chains.