

STATEMENT OF DR. GERALD F. TAPE, COMMISSIONER, ATOMIC ENERGY COMMISSION, AND DR. JOSEPH A. LIEBERMAN, ASSISTANT DIRECTOR FOR NUCLEAR SAFETY, DIVISION OF REACTOR DEVELOPMENT AND TECHNOLOGY, ATOMIC ENERGY COMMISSION

Dr. TAPE. Thank you, Mr. Chairman.

The principal testimony this morning will be given by Dr. Lieberman. He has a statement which he has prepared for you. However, I would like to say just a few things before Dr. Lieberman proceeds with his statement.

I think it important to recall that when we are talking about the presence of radioactive materials and radiation as a potential environmental contaminant, we are talking about something that we cannot see, don't feel, don't smell. Many of the things we think about in terms of contaminants can be detected with the normal senses. You realize there is something not quite right.

So, in the field of atomic energy, which deals with radiation and radioactive materials, it has been necessary from the very beginning to be alert to this difference between other materials and radioactive materials. Therefore, we have had to develop a research and development program, and an operational program, which look toward instrumentation and toward developing knowledge of the situation. Advanced analysis is used to be able to predict what may or may not happen, and then operational procedures and practices which would take all of these into account are established.

So I think it quite interesting that from the very beginning of the functioning of our agency we have had to recognize and have recognized the potential impact of this particular type of potential contaminant.

Recognition of the nature of these potential problems has very logically resulted in the development and application of a policy toward preventing possible adverse environmental effects, rather than trying to cure something that may have already taken place. So, the emphasis has been on prevention.

Another factor which I think is important to recognize is that we started from the beginning when there were no nuclear reactor plants. In other words, we developed them and developed the safety and the operational procedures connected with them from the beginning. So, again, where other areas may have the problem of trying to cure a situation which is already in being but is getting worse because of the magnitude of the problem, we started at a time when there was essentially no such contamination, and we have prevented such contamination from developing.

This has led us to a research, development, and operational program which has been directed toward obtaining basic information on the nature and behavior of the radioactive materials with respect to the environment. From the very beginning, our biomedical research program has had a very strong component looking at the interaction of radiation and the environment. We have had to develop the technology to provide for the proper management and handling of these radioactive materials. This has been done through AEC's own operational program which was involved first in the military program and later in setting the pattern for the civilian work. We have had to carry out operations in a manner that gives priority to safety, not only radiation