I have the location of these somewhere in my notes. They are specially located installations which are regulated either by the State or the Atomic Energy Commission. They can receive this kind of radioactive waste.

In general I would indicate that there is essentially no radioactive material disposed of onsite at a power reactor except for those effluents which have gone through processing and are deemed safe to release

to the environment.

These latter categories include both liquids—no solids because in every case I am aware of they are shipped off site—both liquids and

The statement I made at the outset of my remarks, that these releases are well within acceptable limits for continuous exposure,

would be the thing that would apply here.

I might also say one other thing which I think is important. The AEC regulatory people, and I am sure this also applies to the industry, do not look at those radiation protection guides and limits as something you should build up to. From a policy standpoint, if you will, the effort is made to keep the quantity of radioactive materials that are released to the lowest practicable minimum. Certainly from a safety standpoint they have to be within these prescribed limits.

Mr. Mosher. In this transportation by rail and highway I assume you are confident that you have adequately guarded against accidents and all that sort of thing when you refer to these casks. Have you had adequate experience which demonstrates that?

Dr. Lieberman. We have. Rather than going into detail if you would like I am sure we can provide this information for the record. I would simply say in summary fashion that our transportation

experience has been quite excellent.

There have been accidents but in all of our experience there has

been no individual in the public adversely affected.

There have been situations where, for example, in the worst situation I can recall, to close a truck terminal for a period of time and clean it up.

In connection with this question of transportation again this goes back to identifying the problem and assuring that you have the

technology to cope with it.

We carried out a very interesting and very useful operations research study of trucking radioactive materials. This was done for us by the Johns Hopkins University. We utilized the accident records we got from the ICC for large truck movements and related these accidents to the season, the day of the week, hour of the day, geographical area, road type, and so forth. We identified out of that what kind of accident rate we might expect. What are the technological factors we should be looking at? This goes back, in addition to the requirements for a cask for shielding and protection against radiation, to carrying out a program to drop test casks to see whether we can model the behavior of casks under impact and fire, and this work has been going on.

Another example is the project we carried out in cooperation with the Transportation Corps of the Department of Defense in which