purposes and a good part of this is just thrown away. We have found enough values in the fly ash from incinerators to be comparable to the assay of gold and silver in a normal mine out in the West. We think that the loss of these metals in municipal refuse is a very serious problem from a resource standpoint and that these solid wastes are a source of values that can help us to balance our supply-demand situation.

So we believe that aside from the pollution problem, we must develop the technology to recover and recycle every bit of these metals.

And we think this is entirely possible.

For example, in our own State, Chairman Miller, we have been looking at the mill tailings on the mother lode around Grass Valley to see if we can make brick or stone or aggregate out of them. We found we are making gold bricks up there, for some of these tailings have values as high as \$2 a cubic yard. This is well worth recovery.

So again, I think a key aspect of this problem is to make the economics as attractive as possible for gathering and reusing every bit of

the values.

Chairman MILLER. I believe they are using tin cans now. They burn the tin off to process some of the tailings from the copper mines.

Dr. Hibbard. Yes, they do.

Chairman Miller. And they can reclaim copper cheaply and practically this way.

Mr. Davis. May I inquire as to a definition?

As an elementary chemistry student, I recall the definition of a solid was that which is distinguished from liquid or a gas. In this discussion of the solid waste disposal, is that the definition you gentlemen would use?

Mr. VAUGHAN. I think the act itself defines solid or solid waste by defining what comes under its jurisdiction. That is pretty broad.

Mr. Davis. I am not familiar with it. I am interested if it includes vegetable matter.

Mr. Vaughan. Yes, it does; all agricultural wastes.

Mr. Davis. It might be helpful to read that.

Dr. Hibbard. It says:

Garbage, refuse and other discarded solid materials, including solid waste materials resulting from industrial, commercial, and agricultural operations, and from community activities, but does not include solids or dissolved material in domestic sewage or other-

Mr. Davis. That would be, chemically speaking, liquid?

Mr. VAUGHAN. That is right.

Mr. Davis. Thank you.

Mr. Daddario. Proceed, Mr. Darnay. (Mr. Darnay's biography follows:)

## ARSEN J. DARNAY, JR.

Arsen J. Darnay joined Midwest Research Institute in mid-1965. His fields of primary specialization are market research, technological forecasting, and long range planning studies. Related special abilities include advertisting research, public relations, and sales strategy planning. Mr. Darnay has done work in the international trade area, aided by specialized linguistic abilities.

Since joining Midwest Research Institute, Mr. Darnay has been project leader on a specialized short range techno-economic study project. The program calls for individual reports, issued in a series, dealing with technological and socio-