One of the big problems here has been that we really have not had a total national summary of where we are in this field. This is necessary, obviously for many purposes, basically for program planning and development. We believe that our working with the States over the long pull will be a very important factor in terms of getting together some ideas about the extent of the problem, the trends and quality, of practices, and so forth. But this again will be spotty as long as many States have not been active in this field and they will take time to gear up. We have initiated, through a contract, a technical-economic survey of practices and needs covering about 450 cities and 90 industries. We believe that this will be a satisfactorily large sample to give us an idea of where we are in this national picture.

In the more technical field we have initiated a study through a contract for a series of state-of-the-art reports on various kinds of unit processes that could be applied in the solid waste field. Many of these will come directly out of industrial processes and have previously never been applied to this field at all. We think this will be an important mechanism for transfer of technology from other

fields into this field.

Mr. Chairman, I would like to wind up rapidly here by commenting on a couple of points which are extremely important but will be very difficult, I am sure, to get hold of. The first of these is: how do we reduce the burden by cutting down on waste generation at the source? Now here we are getting into some questions that have long-range implications, because we are talking about the question of whether products can be designed so as to reduce the ultimate waste problem connected with them, or whether the products of manufacture can be designed in such a way that they are more easily handled from the waste disposal point of view. I might inject a note of humor here, Somebody came up with a question to me the other day. Do you mean that you are now going to make beer cans out of pretzels? This might be an outlandish idea but it has a point here. We are talking about whether products themselves can be thought of in terms of their disposal, as well as in terms of the utility involved.

Mr. Daddario. I got a sample of paper through the mail a day or two ago which dissolves when you place it in water.

Mr. Gilbertson. This is a very good example. I agree with you. Mr. Brown. If I might cite another example, it seems to me the

principle is the same as buying ice cream in a cone.

Mr. GILBERTSON. Yes, sir; that is excellent. So, the whole idea of reducing waste at the source deserves a great deal of attention. Important also is the question of recovering and reusing wastes. There are some difficult questions here. There are certainly broad economic questions that are involved, and I doubt very much whether substantial technical progress can be made in this area without a great deal of backing from the public and by the Government, in addition to whatever economic forces that might be called to play here. The whole question then of recovery, reuse and salvage of valuable materials offers some promise as far as routes to modernization of the pollution problem.

I might mention that one way of recovering certain values from waster could be more widely used, and that is the use of wastes for