

Mr. DADDARIO. Dr. MacKenzie, I have a question I would like to ask you about in this area of recycling. Does the Public Health Service, because it has such a heavy requirement in the area of health, and because of the emphasis that needs to be placed on it, find itself inhibited in any way in doing research in recycling, which seems to be a part of this particular problem? Because you have necessary mission emphasis, do you find it more important to solve these problems than to have heavy research work which needs to be done in the recycling area?

Dr. MACKENZIE. I think I can only answer this in general terms, Mr. Chairman. The importance of recycling has appeared obvious to all technical people who have examined the problems of waste management. It is particularly true in my view in the water field and in the solid wastes field. We have special interests in relation to recycling in connection with possible buildup of residues that may build up in a recycling process and might affect health. This in no way limits our interest in recycling as a method or as a procedure which should be fully evaluated. It merely throws in a cautionary element to which we must give particular attention.

Mr. DADDARIO. Could you emphasize the precautionary elements?

Dr. MACKENZIE. For example, there is a great deal of talk about recycling water for reuse. In some of the processes that are under consideration, there is associated buildup of, let us say, dissolved materials in the water, unless one is using a distillation technique which can effectively remove these.

We must look at the buildup of such dissolved materials in the water as this might have physiologic or toxic effects, particularly if water is going to be used for household or drinking purposes. This does not mean that we are against reuse, and I want to emphasize this, because one of the major ways of reducing water pollution obviously for many years has been to attempt to "bottle up" the waste material by recycling the water in industrial processes. This is an accepted method and one which should be highly encouraged for use now and further development. I see no conflict, Mr. Daddario, in these objectives if one looks at the total picture and takes into account the limitations that might be imposed under a particular circumstance.

Mr. DADDARIO. From the standpoint of the way in which we are handling the research activities in all of this, are you satisfied—recognizing that we have not gone very far since the legislation has been passed to allow full development to take place—are you satisfied with the structure that exists in order to attack this problem? Or would we be getting at it more quickly if we were to put all of the responsibility in one place?

Dr. MACKENZIE. I think we have a variety of organizational structures in the waste management field on the Federal level, sir.

Mr. DADDARIO. It is this variety which causes us so much concern.

Dr. MACKENZIE. I can understand this concern. I do not have any panacea that would solve this, or any pat solution for it. I think there are a variety of ways in which these activities can be organized. I think the important consideration is that there not be undue duplication and that there be full coverage of what needs to be done.