

individual undertakings that deal with pollution research in the Federal Government. It is a rather unmanageable document at this point in time. It has no figures in here on dollars. It includes many things which are important in understanding pollution, but just what to do with it and how to digest it has been beyond us so far.

We have also asked for similar kinds of information from the Science Information Exchange, managed by the Smithsonian Institution, and the printout from there I think will be even more voluminous than the one we have obtained this way. A preliminary tabulation on expenditures is appendix 4 to my prepared statement.

Our problem I think is not in obtaining sufficient information, our problem is trying to find it in a compact enough form to be useful to us.

Having basically looked at information readily available, we asked the agencies to supply responses to a questionnaire, a copy of which is present in the appendix to the prepared testimony here.

We did not ask about expenditures on pesticides or pest control-related research because these data had already been gathered by another group under the Federal Committee on Pest Control, which is made up of representatives of the Departments of Agriculture, Interior, Health, Education, and Welfare, and Defense. The data were similar enough that we have included them here in table 2 of this testimony. The total figures on 1967 expenditures which we thought related to pollution that was spent on pesticides and pest control research was \$65,868,000. The other data gathered have not been summarized in all of the detail we would like as yet. The total expenditure in 1967 reported here is \$146,890,000. In 1968, it has increased to \$184,925,000. The overall totals, assuming the same level of pesticide research expenditures in fiscal year 1968 as in fiscal year 1967, would be at least \$210 million in 1967 and \$250 million in 1968.

I must point out that there are underestimates of the amount of money actually expended that is germane to research on understanding and controlling pollution. There are moneys in here, substantial amounts of them, which would be spent regardless of whether pollution was a problem or not. For example, there is a need to increase the efficiency of pest control for agricultural reasons, and the research devoted to improving control methods is included here because it does reduce, or will permit us to reduce the amount of pollution, but it equally would go on regardless of this particular problem, but perhaps not so vigorously.

The same thing applies to many other areas. Some of these are included, some are not. So the figures are inaccurate and underestimates to that degree.

In addition to asking for data on funds, we also asked the agencies to tell us as precisely as possible the kinds of research they were conducting. We have not progressed far with the analysis of these data. Some of the approaches to analyzing this information are included in part in several appendices to the prepared testimony here. One example is from the Federal Water Pollution Control Administration, the second one is from the Public Health Service.

The high points I would like to point out in the numbers as they exist here now are that in 1968, \$45 million is programed for research on the effects of pollution—the effects of pollution on man, on crop plants and animals, on nondomesticated plants and animals, on ma-