

Education, and Welfare, is a continuous process. There are no formal means yet established for coordinating the efforts of the FWPCA and the air and solid waste pollution programs of the PHS, Department of Health, Education, and Welfare. Since many of the staff of the Federal Water Pollution Control Administration were employees of the Public Health Service and a number of commissioned corps officers have transferred to these programs from the Federal Water Pollution Control Administration, a great number of professional contacts, both formal and informal, have been developed and are maintained.

With respect to the public health aspects of water pollution abatement programs, an interdepartmental agreement concerning consultation on health aspects of water pollution control has been developed. This agreement was signed by Secretaries Udall and Gardner on August 8, 1966. The President is now reviewing this agreement.

*Question 16: Is your agency concerned with research into aspects of social science so as to better prepare the public to take necessary action in connection with pollution abatement? Please give details of what is being done, or reasons why this is not being done.*

Answer: Under proposed expansion of research activities, the research and development program of the Federal Water Pollution Control Administration will conduct research into socioeconomic aspects of the water pollution problem where there are gap areas in the existing social sciences and to the extent that progress in the elimination of pollution is inhibited by these deficiencies of knowledge. Some of our research grants have dealt with socioeconomic research but because of limited funding in the past, direct research has not been conducted on socioeconomic aspects of water pollution. Definition of specific research needs in this area is planned during the current fiscal year. Several specific research needs already recognized include development of methodology to determine (1) the optimum modes of financing and cost allocation of water pollution control programs; (2) the most effective institutional arrangements, both on a nationwide basis and on a regional basis, for the most efficient quality management of the water resource. Research will be initiated in these areas in fiscal year 1968.

*Question 17: Is your agency doing any research into the effects in the way effluent charges would work to reduce pollution? Please give details of what is being done, or reasons why this is not being done.*

Answer: The Federal Water Pollution Control Administration completed a preliminary study of the effluent charge during 1965. This study was designed to determine the amount of the charge that would produce the same water quality objectives as would be achieved by prescribed treatment levels. Data and experience gained from the Federal Water Pollution Control Administration comprehensive quality control study of the Delaware River estuary were used. The theoretical computations showed that a variable charge from 5 to 8 cents per pound of biochemical oxygen demand (BOD) discharged to the stream would be appropriate.

Additional research on the problem is now being planned. Administrative and technical problems which were not considered in the first effort will be examined. It is necessary to evolve (a) the costs required to administer the system of effluent charges, (b) the optimal