

260 ADEQUACY OF TECHNOLOGY FOR POLLUTION ABATEMENT

Before the enactment of Public Law 159—84th Congress in 1955, the Bureau of Mines was the leading Federal agency in air pollution abatement. Even though the Bureau published almost 200 technical papers on air pollution between 1910 and 1950, the funds available for this work were generally very small and most of the research was performed under "conservation" and "health and safety" appropriations. The Bureau had an Office of Air and Stream Pollution about 1950, but funds were not available to expand this office into an effective air pollution agency. Limitations on budget requests were normally made in advance of such requests. These limitations came either from the Bureau of the Budget or by Departmental directive. As a result, only the most urgent problems could be included in a budget presentation and stay within the limitations imposed. Smoke control was the principal air pollution problem eliciting public support during this period and the Bureau did obtain limited funds for work in this field. Additionally, very limited funds for acid mine drainage and mine sealing were provided during the years preceding World War II.

Public Law 159 provided that the Surgeon General, in cooperation with other Federal agencies, should recommend and perform research on the prevention and abatement of air pollution. This law provided for appropriations to the Department of Health, Education, and Welfare for the Federal air pollution program. The Bureau has cooperated fully with HEW through the use of funds transferred from that agency. In addition, the Bureau has used appropriated funds to perform research which has pollution abatement implications. The following table shows the relationship between Bureau requests for air pollution project funding and the actual funds transferred from HEW.

Fiscal year	Project funds requested	Funds received
1956.....	\$300,000	\$98,000
1957.....	(1)	125,000
1958.....	425,290	227,000
1959.....	481,490	227,000
1960.....	463,790	243,000
1961.....	485,690	300,000
1962.....	467,300	350,000
1963.....	791,200	450,000
1964.....	825,000	500,000
1965.....	1,013,600	600,000
1966.....	985,000	670,000
1967.....	2,116,000	* 759,000

(1) Unknown.

* Estimate.

However, the table does not tell the entire story. As a rule, the Bureau requests funding on projects it believes, from discussions with PHS officials, may have a chance for approval. For this reason, less projects are proposed to PHS than are suggested by our field scientists.

Incineration is another example where fiscal limitations have seriously restricted research efforts. In the mid-1950's, the Bureau cooperated with the Public Health Service in research aimed to develop engineering guidelines for incineration. Although good progress was made, the work was terminated when funds for Bureau work were no longer available.

It has been estimated that the Bureau's efforts in abatement of air pollution at the source would need to be expanded by a factor of about 5 if it were to be in a position to provide the much needed technologic information on the handling and use of fossil fuels. Research on solid wastes is presently funded at \$4,300,000 per year, and this may need to be increased in the near future. Acid mine drainage work is performed principally in cooperation with the Federal Water Pollution Control Administration (FWPCA). The Bureau expects to expend approximately \$450,000 on this work in FY 1967 in addition to contract work by private companies for direct assistance to the program. The contract work is handled directly by FWPCA.

Dr. HIBBARD. I would like to turn my attention to certain of the specific questions which are raised in chapter 6 of your report of the Research Management Advisory Panel.