

technical disciplines. These disciplines, with the related accumulation of organizational experience, were to be found in several of the Federal departments and agencies. Several prominent examples are the meteorological competence of the Weather Bureau, U.S. Department of Commerce, the plant physiology competence in the U.S. Department of Agriculture, and the combustion and fuel technology experience of the Bureau of Mines, U.S. Department of the Interior.

Accordingly, a series of contractual arrangements was developed between the Public Health Service and the several Federal departments and agencies. From the central Federal air pollution appropriation made to the Public Health Service, funds were transferred, under the terms of the Economy Act, to the contractor Federal agencies. A summary listing of these contractual arrangements follows:

FEDERAL AGENCY AND NATURE OF SERVICES PROVIDED

Department of Agriculture

Research studies and technical assistance activities to determine the effects of air pollutants on agriculture and to explore the use of agricultural damage as indicators of air pollution. Department of Agriculture scientific personnel have been assigned to the Division of Air Pollution laboratories in Cincinnati, Ohio, under this arrangement.

National Bureau of Standards, Department of Commerce

Research projects concerned with the chemical reactions of various pollutants in the atmospheres and with the development of analytical procedures for the determination and measurement of certain pollutants. This work has been principally carried out in the research facilities of the National Bureau of Standards.

Bureau of Mines, Department of the Interior

A variety of research projects relating to combustion processes, including work on sulfur dioxide removal from flue gas, desulfurization of fuel oil, removal of pollutants from motor vehicle exhaust, analytical methods for measurement of motor vehicle exhaust, extinguishment of burning coal mine waste piles, and incineration techniques. These activities have been carried out in several of the Bureau of Mines' laboratories.

Weather Bureau, Department of Commerce

Research and technical assistance activities concerned with the meteorological aspects of air pollution. These include the transport of air pollutants, diffusion and dispersal of pollutants, tracer studies, development of episode forecasting techniques, and adaptation of the meteorological factor to land use control in industrial zoning. The Weather Bureau has a team of professional meteorologists assigned to the Division of Air Pollution research laboratories in Cincinnati, Ohio, where the principal activities are conducted; some air pollution research is carried out in Weather Bureau facilities.

Library of Congress

Air pollution literature abstracting services which have been coordinated with the related activities of the Air Pollution Control Association and appear as APCA Abstracts. The Library concentrates on foreign journals and on the biological sciences.

Tennessee Valley Authority

Studies to document flume behavior and related elements under various meteorological conditions with emphasis upon studies concerned with sulfur dioxide emissions. This work is primarily carried out at TVA plants and facilities.

Census Bureau, Department of Commerce

The Census Bureau has been used intermittently, on a contract basis, as a key input factor for epidemiological studies involving large population groups. Studies associating various diseases with air pollution, particularly in urban areas, make use of data developed by the Bureau.

For the most part, these contractual relationships started in 1956 and have continued to date. The specific, discrete, projects which are undertaken by the contractor agencies are developed through technical discussions and negotiations and are documented in formal letters of agreement between the Public Health Service and the agencies concerned. Technical progress and related fiscal reports are submitted to the Public Health Service on a quarterly basis.