

rent equipment design and optimization of current collection practices. A bigger and better compactor truck is an example of this practice. Similarly, the development of smaller, more mobile collection equipment such as the scooter or train system or the containerized technique for handling commercial, industrial, or high residential density wastes is also a current practice.

The Swedish pneumatic system or the liquid transport of ground solid wastes as being investigated at Drexel University is the closest thing to what may be a new collection technique. The research undertaken at Drexel University is in its very preliminary stages and cannot be considered as an imminent method for public use. The Swedish pneumatic system consists of a vacuum pipeline which moves refuse from piped apartment buildings to a centralized storage and disposal area. This system has not been tested in our country although we have reason to believe that an example of this collection system may be available in the coming months.

(Mr. Vaughan's prepared statement follows:)

PREPARED STATEMENT OF RICHARD D. VAUGHAN, CHIEF, SOLID WASTES PROGRAM, NATIONAL CENTER FOR URBAN AND INDUSTRIAL HEALTH, PUBLIC HEALTH SERVICE, U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, CINCINNATI, OHIO

Mr. Chairman, I am pleased to be here today and welcome this opportunity to present a report on the adequacy of technology in the field of solid waste management and what the Solid Wastes Program of the Public Health Service is doing to close existing gaps in this technology. The Solid Wastes Program was established to carry out the directives of the Solid Waste Disposal Act of 1965 which has as its objectives:

- (1) To initiate and accelerate a national research and development program for new and improved methods of proper and economic solid waste disposal.
- (2) To provide technical and financial assistance to appropriate agencies in the planning, development, and conduct of solid-waste disposal programs.

In enacting this legislation Congress recognized the increasing problems of solid waste management which have been accentuated by continuing technological progress and improvement. The Congress also recognized the fact that inefficient and improper methods of solid waste disposal threaten the health and well-being of the Nation including interference with community life and development. Following the directives in this Act, the Public Health Service has established an organizational entity to address itself to these problems and find solutions for today and tomorrow and thus, assure adequate protection of the air, land, and water resources of this country from degradation through inadequate and improper management of solid waste.

During his testimony before this committee on July 21, 1966, Mr. Wesley Gilbertson, then Chief of the Office of Solid Wastes, discussed the history of federal activities in the solid waste management area and described the National solid waste problem as he saw it at that time. He described the Solid Waste Disposal Act and its provisions, as well as the structure of the organization established by the Public Health Service to carry out the provisions of this legislation. Mr. Gilbertson pointed out to this committee, plans of the Office of Solid Wastes to learn more about solid waste practices in this country and hopefully close the technology gap in this area. I shall not repeat this information but rather would like to discuss with you what has been accomplished in the interim by the Public Health Service to better understand the adequacy of solid waste practices and problems in this country and develop effective technology to cope with these problems.

The improved technology we seek must satisfy other requirements in addition to being scientifically sound. These innovations must also be economically feasible for our society and must be safe from the standpoint of public health and the protection of our precious natural resources—our land, air, and water.

Technological development alone—no matter how effective, how economical or how safe—will not do the job that is needed to be done to improve solid waste management in this country. Once new solutions are found and proven effective by research and development, their practicability and applicability to a real situation must be demonstrated. The public's attitude towards solid waste management must be changed to allow acceptance of new concepts. Communities which are jurisdictionally autonomous but collectively make up regional or metropolitan areas, must learn to cooperate and work together for the adoption and implementation of solid waste collection and disposal techniques which economically and effectively serve the best interests of all. No matter how innovative new technology is, the facilities involved must be operated properly to achieve the benefit intended by the developer. This then is the com-