BIOGRAPHICAL STATEMENT ON DR. LEON W. WEINBERGER

Born and raised in New York City. BS, CE from the Cooper Union, MS and DSC from Massachusetts Institute of Technology in Sanitary Engineering.

Professional affiliations and honor societies

Fellow, American Society of Engineers, Water Pollution Control Federation, Member of Society of the Sigma XI American Water Works Association.

Protessional history

1966-Present Assistant Commissioner, Reearch and Development, Federal Water Pollution Control Administration, Department of the Interior.

1963-1966—Chief, Basic and Applied Sciences Branch, Division of Water Supply and Pollution Control, Department of Health, Education and Welfare. 1957–1962—In charge of sanitary engineering program and Director of Re-

search Laboratory at Case Institute of Technology.

1949–1962—Associate Professor of Civil and Sanitary Engineering at Case In-

stitute of Technology.

1949-1962—Consultant in water supply, waste water disposal, and stream pollution to city, State and Federal Governments, and over 20 industries. Has authored more than 50 scientific papers.

PREPARED STATEMENT OF DR. LEON W. WEINBERGER, ACTING ASSISTANT COMMISSIONER, RESEARCH AND DEVELOPMENT, FEDERAL WATER POLLUTION CONTROL AD-MINISTRATION, U.S. DEPARTMENT OF THE INTERIOR

Mr. Chairman, members of the committee, I am very pleased to appear be-

fore you to discuss research and development in water pollution control.

In the U.S. Department of the Interior, the Federal Water Pollution Control Administration (FWPCA) carries out a program of scientific and engineering research broadly directed to: (1) The determination of the causes and effects of pollution of the Nation's water resources, and (2) The Development of pollution prevention and control measures necessary to maintain the national water resources at a quality suitable for domestic and municipal water supplies, industrial and agricultural purposes, recreation, propagation of fish, aquatic life, and wildlife, and other beneficial uses. In carrying out our program, every effort is made to encourage and to cooperate with appropriate public (whether Federal, State, interstate, or local) authorities, agencies, institutions, and individuals.

My presentation is concerned mainly with research and development in the technological aspects of water pollution control. It is, of course, important to recognize the need for scientific information on the water quality requirements for all water uses (the effects of pollution) and the economic and

sociological aspects of water pollution control.

Many of the water pollution problems facing our nation today can be alleviated by the application of existing technology. In fact, during the next five years or so, the most significant forward strides in water pollution control will be made in this way. It is equally clear that, in addition to current prob-lems for which there are no acceptable solutions, future population and industrial growth and concentration, changing land uses, and increased demands on our limited water resources create a situation where new technologies must be developed and applied. Problems result from the sheer mass of pollutants and from a whole host of new pollutants which are likely to be highly complex in composition and in their mode of effect.

The analytical tools, scientific knowledge, and engineering controls which were sufficient for the problems of the past are proving increasingly inadequate in dealing with present pollution problems and will become even more inadequate to cope with foreseeable future problems. Thus, water pollution control research must develop an effective new technology while program administrators attempt to control pollution with available knowledge. It must be pointed out that in addition to research and development, there are a number of other very important elements in an effective water pollution control program, namely: competent manpower, adequate planning and administration, economic resources to construct and operate pollution control facilities.

and a strong enforcement effort.