

2. Weinberger, L. W., Stephan, D. G., and Middleton, F. M., "Solving Our Water Problems—Water Renovation and Reuse," New York Academy (July 1966).
3. South Tahoe Report, Smith, C. E. and Chapman, R., "Reclamation of Coagulant, Nitrogen Removal, Carbon Regeneration in Wastewater Reclamation" (June 1966).
4. McKee & Wolf, "Water Quality Criteria," 2 ed., Resources Agency of California State Water Quality Criteria (1963).
5. Pickering, Q. H., Henderson, C., and Lemke, A. E., "Toxicity of Organic Phosphorus Insecticides to Different Warmwater Fishes," *Trans. Amer. Fisheries Soc.*, 91, 2, 175 (April 1962).

Mr. FULTON. I once had a course in statistics, and I am still statistics-minded. I want to compliment you on your statement and openmindedness. I think you have been excellent.

Dr. WEINBERGER. Thank you.

Mr. DADDARIO. Will you summarize?

Dr. WEINBERGER. Mr. Chairman, I have indicated some of the more recent accomplishments in our area of advanced waste treatment as well as some of the accomplishments during this last year in industrial pollution control.

I have talked very briefly on the matter of purification. I do have in parentheses "enrichment of lakes, streams, and estuaries." I call attention to the fact there is industrial-Federal cooperation, a joint Government-industry task force which was established. One of the things this task force will attempt to develop will be a procedure for determining on a scientific basis the potential for creating problems from the introduction of all impurities into lakes and streams. It is again recognized that our information is limited in this field and that we need some more scientific information if there is to be cooperation between industry, the Federal Government, and all other interested and capable scientific groups.

I introduce a reference, Mr. Chairman, to this interim report as well as a report that was not prepared by us but by Professor McKie at Cal Tech which goes into a full treatise on the setting of water quality criteria and has thousands of references in it of specific work carried out.

Thank you.

Mr. DADDARIO. Dr. Weinberger, we will put your statement in the record. It is an important one, and offers many opportunities for questions beyond that which we could possibly fit into a morning's discussion. We will be in contact with you about additional questions.

(Dr. Weinberger's complete prepared statement follows:)

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

Mr. Chairman, Members of the Committee, I am pleased to appear before you to discuss research, development, and demonstration (R and D and D) in water pollution control. This early reference to the second "D"—demonstration—is quite deliberate because of the importance of that facet of our program in the prevention and control of water pollution.

#### ROLE OF R AND D AND D IN POLLUTION CONTROL

An effective water pollution control program consists of a number of elements, namely: scientific and technical answers and solutions, economic resources to construct and operate pollution control facilities, a strong enforcement and pro-