

DO WE NEED AN INDUSTRIAL WASTE FOUNDATION?

There Are Definite Advantages to Cooperative Basic Research in Many Industrial Areas

(Chemical and Engineering News, 10 Dezembro 56, pág.6033)

The water problem in the United States becomes more serious with each passing day, despite optimistic reports of progress in the search for large-scale economical methods to make sea water potable and satisfactory for all industrial purposes.

Even if some of these methods eventually are feasible, they will solve the problem only partially. Municipalities and industry to an ever-increasing extent must depend upon our streams and rivers. This means, of course, a rational control of pollution in an era when there will be a much larger population and a huge upward surge in manufacturing. Unless much scientific progress is made quickly, the situation undoubtedly will become much worse as the over-all economy continues to expand.

We have talked with many experts in the field. They agree that the most acute need is for a great expansion in fundamental research. We must know much more about the complex reactions that occur in streams if we are to use them properly.

One of the 1956 Gordon Research Conferences was on the theme "Scientific Bases for Water Quality Criteria". We did not attend the sessions, but we have been told that the general conclusion was that there is not yet enough scientific knowledge available to propose sound criteria, except in a few instances and to a limited extent. This state of affairs in the year 1956 is discouraging. Yet the chemical industry alone is expending more than \$40 million annually for pollution control, and between 2.5 and 4% of all construction costs are for pollution control equipment. Industry is not sitting on its hands in this matter, though much more needs to be done.

A year or two ago, a proposal was made by Richard D. Hoak of Mellon Institute that an industrial wastes foundation be established. In his address before the Industrial Hygiene Foundation, he mentioned how a foundation could serve a variety of needs, of which fundamental research on water pollution would be a significant one. He made clear one thing the foundation should not do—it should not usurp the functions of consulting engineers and plant designers.

To summarize, he stated that the need for an organized program of fundamental research on water pollution arises from (1) a serious lack of dependable data upon which to base control measures; (2) predictions of greatly increased demand for industrial water over the next 20 years; (3) a growing necessity for conservation of water through reuse; and (4) a clear indication that waste-treatment requirements will become increasingly stringent.

The late Al Smith, in the heat of a political campaign in the thirties, asked, "Who is going to coordinate the coordinators?" This is a good point. Too much coordination can be almost as bad as none—it can lead to regimentation and stifling of individual or group initiative. But broad cooperation on problems where many groups have a mutual interest can be highly productive and can help to eliminate useless duplication.

Many highly successful cooperative research efforts can be cited. We

doubt that industrial safety would be so advanced in the National Safety Council did not exist. The same can be said of the relationship of the Industrial Hygiene Foundation and the health of workers in our plants and factories.

The cost of doing research is going up and there is not an unlimited number of scientists who can do basic research. Those we have must be employed with the greatest possible efficiency. In practice this means elimination of duplication and fast dissemination of newly discovered knowledge.

The exploring of ways and means of creating an industrial waste foundation seems particularly pertinent to us at this time. Air and stream pollution are pressing problems--the need for more basic research on a continuing basis in both fields is quite evident. In many instances the same individuals are concerned with both--perhaps there is need for closer liaison which two foundations could provide. At least the possibilities should be seriously considered.

Fundação Cuidar o Futuro