

Certainly we should not compromise with health protection, but many of our most objectionable environmental conditions are not health matters. In such cases, the remedial needs differ widely from place to place. Although administrative convenience might be served by having uniform requirements on discharges of similar character, this, too, would be economically wasteful as a general policy. The resultant quality of the environment for its continuing beneficial use is what's important.

Premised on the foregoing philosophy, let me now go to the question of the adequacy of technology for pollution abatement and control. Earlier I referred to lack of definition of environmental quality. Obviously, this complicates judging the adequacy of applicable technology, for it means we really do not know what we ought to shoot for.

Be that as it may, we can tackle gross problems and undertake what obviously needs doing, and learn more about ultimate refinements as we go along. While there may be some gaps in existing technology to deal with even the grosser aspects of pollution, we believe that much progress can be made with a stern application of what we now know. Although we shall always be interested in decreasing the cost, this is much more likely to come about gradually by evolutionary development from a combination of operating experience and constant research attention than by massive research effort scattered along a broad front. In order that the remedial cost burden not be unnecessarily great, it will be helpful to set interim objectives at conservative levels, with subsequent tightening as scientific evidence and expert opinion provide justification. Also, as reuse and recycling of resources are increased, levels corresponding to "too much" may be expected to become progressively lower.

While the chemical manufacturing industry certainly has further contributions to make to added progress, it has a substantial record of past attention to environmental controls. A 1962 survey brought out that 125 member companies of MCA had invested \$212 million in air pollution control facilities and \$263 million in water pollution control facilities, and was spending \$64 million annually to operate them. Projected additional investment for such facilities over the ensuing 5 years was \$119 million. More than 95 percent of the nearly 10-billion gallon daily waste water volume from the 875 reporting plants met the public agency requirements in effect at that time.

MCA has had an organized Water Resources Committee active for 30 years, and an Air Quality Committee active for more than 15 years. They have prepared technical manuals that have had widespread distribution. They have planned seven educational 1-day workshops within the past year, and arranged for 4 week-long seminars providing instruction in the most up-to-date techniques for chemical waste treatment, with six additional seminars scheduled for the coming year. The workshop programs are designed to encourage participation by, and interchange with, public agency personnel; and the regular meetings of the two committees are purposely held in various States so as to receive and confer with State and local agency officials.

Inasmuch as environmental controls by the chemical industry are but extensions of applied chemical engineering, it should not be surprising that we are confident of being able to devise and use adequate