

and phosphates these byproducts have a fertilizing effect on the waters with a resultant proliferation of undesirable aquatic growths; notably taste- and odor-producing algae.

Not all potential pollutants lend themselves to such a neat and simple classification. Radioactivity, for example, does have die-away characteristics; but with some radioisotopes this decay is so slow that they might more properly be regarded as a persistent form of pollution. The same might be said about certain toxic compounds.

Furthermore, some substances exert synergistic effects; that is, they combine in the presence of each other to multiply their individual pollutional potential. This is the case with compounds that impart taste and odor characteristics. Phenolic materials exhibit this tendency. Some of them alone in rather high concentrations cause relatively little taste and odor difficulties; but in association with even the most minute quantities of chlorine or organic materials their undesirable effect is markedly multiplied.

The conclusion to be drawn from this brief outline of the nature of pollution is that we are dealing with an exceedingly complex array of materials and of reactions. This is not to suggest, however, that technical measures have not or cannot be contrived to cope with the situation. It does call attention to the need for professional competence of a high order to diagnose conditions and to prescribe appropriate remedial measures.

IMPACT AND SIGNIFICANCE OF POLLUTION

The impact and significance of water pollution may manifest itself in different ways. As a consequence the "pollution problem" means different things to different people.

To the public at large, pollution asserts itself in terms of offensive sights or smells in a river or lake, or by the evidence of an unnatural taste or odor in the drinking supply. The outdoor enthusiast identifies pollution as any abnormal condition that interferes with fishing, swimming, or boating. An industrial plant manager catalogs pollution as something that degrades the quality of water required for processing, cooling, or steam generation. And to health authorities pollution is anything that may be classified as contamination and a potential threat to public health and safety.

Because of these multiple points of view there is an elusiveness to the definition of pollution. Presumably they all seek, to express the same notion; namely, that pollution is an impairment of quality that is prejudicial to the suitability of water for defined uses. However, this is not at all apparent in the proposals relative to policy and practice for the control of pollution.

Control of pollution has been historically identified as an environmental sanitation measure. However, it encompasses much more than this. It is much more meaningful to delineate the pollution problem as the quality-management element of a water resources program. Today it would be a narrow view, indeed, to conceive of pollution-control efforts designed only with regard to sanitation significance.

Economic and social consequences of water quality degradation compel attention to control measures that are referenced to goals