control to be discharged into any interstate water without treatment or control regardless of the water quality criteria and water use or uses adopted;" and (2) "... no standard will be approved which does not require all wastes ... to receive the best practicable treatment or control unless it can be demonstrated that a lesser degree of treatment or control will provide for water quality enhancement commensurate with proposed present and future water uses.

The intent of this and other policy statements is to meet the requirement of the Federal Water Pollution Control Act, as amended, which is to enhance the quality of water. In this country, secondary treatment has become the conventionally accepted level of treatment necessary to protect present and future water uses and yet meet the test of economic and technical feasibility. It is usually the degree of treatment implied in the phrase—"best practicable treatment."

Most water pollution control officials can agree on a general definition for secondary treatment as applied to municipal wastes. It is more difficult, however, to get a concensus on a precise definition for industrial wastes. Thus, the use of phrases like "comparable degree of treatment" or "equivalent high degree of treatment." Recognizing the vast differences in the characteristics of industrial wastes, the definition of acceptable treatment will have to be applied with reason and tailored to the amenability of specific wastes to receive treatment. In all cases, the test of technical and economic feasibility must be met.

The standards as adopted by the States often place industrial biodegradable wastes in the same category as municipal sewage. When acceptable treatment is defined numerically for these wastes it often is expressed as at least 80 to 90 perent removal of the biochemical oxygen demand (BOD). The States and this Department recognize that some highly concentrated organic industrial wastes may require removal efficiencies exceeding the 80 to 90 percent figure.

Acceptable removal efficiencies for non-biodegradable wastes have not been de-

fined by the States nor have quantitive guidelines been issued by the Federal Water Pollution Control Administration. The thrust of pollution abatement efforts in the past has been usually directed at stream standards, not effluent standards. To meet drinking water or aquatic life protection standards this may have required removal efficiencies of certain inorganic pollutants that exceeded the 80 to 90 percent values. This is particularly true for materials such as heavy metals and cyanide. These materials and organic compounds such as phenols can seriously impair the usefulness of water resources, when present in very

small quantities.

In summary, the phrase "comparable degree of treatment" will be interpreted reasonably by State and Federal water pollution control officials. It will take into account feasible technology and economics. In many instances the requirement for this degree of treatment will mean the construction of conventional secondary treatment facilities. Furthermore, in the case of biodegradable waste, it may mean effluent quality similar to that for municipal effluents (a few States have expressed their requirements in this fashion). Also, in some instances, it will mean in-plant process controls coupled, if necessary, with waste treatment.

A high degree of waste treatment or control should implement our goal of preventing water quality degradation down to some limiting value required for specific water uses. It will also meet Secretary Udall's goal of making water as clean as possible, not unclean as possible.

Sincerely yours,

FRANK C. DILUZIO, Assistant Secretary of the Interior.

TAX INCENTIVES FOR INDUSTRIAL WASTE TREATMENT FACILITIES, BY JAMES G. WATT 1

Present water pollution control programs make wise corporate decisions extremely difficult. Before an executive can commit the resources of a corporation for waste treatment facilities, he needs to know how much water treatment is necessary to assure the desired water quality and how soon the facilities must be in operation. Can he be sure of what the government requirements will be tomorrow, next year, or two years from now? He needs to know the various alternatives available for financing the pollution control and abatement facilities. Can he anticipate what financial "benefits" might be made available if he were to wait for Congress to act?

¹ Secretary, Natural Resources Committee and Environmental Pollution Advisory Panel, Community and Regional Resource Development Group, Chamber of Commerce of the United States, 1615 H Street, N.W., Washington, D.C. 20006, Presented to the Association of State and Interstate Water Pollution Control Administrators at its Annual Meeting in Hartford, Connecticut, on December 13, 1967.