



ENVIRONMENTAL HAZARDS AND ANAEROBIC TREATMENT OF WASTEWATERS GENERATED IN ALCOHOL INDUSTRY

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Abstract

Finding solutions to the waste problems generated by human activity represents a high concern of authorities and environment specialists for many years. Furthermore, energy conservation and reduction of the dependency from fossil fuels represents a top priority of governmental organizations at world level. The developments in alcohol industry have resulted in the increase of wastewaters which are highly polluted with organic substances, causing environmental pollution hazards. A wide range of biological and physicochemical treatments have been investigated so far for a safety disposal of alcohol industry effluents. The anaerobic treatment technologies have become increasingly important in recent years due to their low operating costs, effectiveness on reducing the pollution load and production of valuable end products, such as biogas and ecological fertilizers. This paper presents briefly the most important pollution problems caused by high organic loaded wastewaters released in alcohol industry, as well as an overview of the anaerobic treatment technologies developed in the last years to process these effluents efficiently and economically simultaneously with energy recovery.

Key words: alcohol industry, anaerobic treatment, environment pollution, wastewaters

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