



Planned industrial estates under law 2545/97: an empirical analysis of wastewater treatment systems

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ABSTRACT

This paper refers generally to the Planned Industrial Estates (PIEs) established under Greek Law 2545/97. A number of key features of PIEs are discussed here, including the prefectures in which the estates are established, the Greek Official Gazettes in which the establishment acts were published, the surface area in acres to be covered by the estates, the years of completion of the infrastructure, and the numbers of established businesses involved. The paper also refers to the infrastructure that should exist in a PIE and, in particular, to the wastewater collection network and the wastewater treatment plants (WTPs). The key features of the wastewater treatment systems of all Planned Industrial Estates in Greece established under Law 2545/97 (14 case studies) are presented in the form of a table and are analysed using economical, environmental, and operational criteria. The analysis shows that for the small Planned Industrial Estates (i.e., industrial parks—IPs—and light industry parks—LIPs), it is economically, environmentally, and operationally preferable for industrial wastewater to be disposed of into large operating municipal wastewater treatment plants, rather than into decentralised systems within IPs and LIPs, given that the municipal plants have excess capacity, are at a relatively small distance from the PIEs, and are compatible with the required treatment. The analysis highlights the need to initiate an integrated techno-economic study in view of the new Operational Programme, “Competitiveness and Entrepreneurship”, of the Greek Ministry of Economy for the period from 2007 to 2013, which was co-financed by the European Union, and will include actions related to the development of new PIEs.

Keywords: Industrial wastewater; Wastewater treatment systems; Law 2545/97; Industrial park (IP); Light industry park (LIP)

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