



EVALUATING THE PERFORMANCE OF SOLID WASTE MANAGEMENT MODELS

Konstantinia Tsilemou^{*}, Demetrios Panagiotakopoulos

*Laboratory of Project Management, Department of Civil Engineering, Democritus University of Thrace, Venizelou 84,
67100 Xanthi, Greece*

Abstract

The great variety of available Solid Waste Management System (SWMS) models, along with a plethora of continuously developing technological advancements in the design and operation of the treatment facilities and collection and transport schemes, the continuous updating of national (and/or European) regulations on waste management and the increased computer literacy and availability, renders the selection of a SWMS model a complex endeavor. From the view point of a municipality, the following question arises: "*How can one select an appropriate model for a particular case at hand?*" The objective of this paper is to suggest a rough procedure for evaluating the appropriateness of a SWMS model for a given situation. The procedure suggested in this paper is employed, in a way of an example, for the comparison of two, readily available models. Both of these models have been applied to the city of Xanthi, Greece; the idea was to compare them using two SWMS scenarios: the existing SWM system and a proposed system.

Keywords: solid waste management, models, evaluation criteria, indicators, multicriteria analysis

^{*} Author to whom all correspondence should be addressed: e-mail: nttsilemo@civil.duth.gr