

## **Solid Waste Landfilling Practices, Related Problems and Sustainable Solutions in Turkey**

**Authors :** Nükhet Konuk, N. Gamze Turan, Yüksel Ardali

**Abstract :** Solid waste management is the most environmental problem in Turkey as a result of the rapid increase in solid waste generation caused by the rapid population growth, urbanization, rapid industrialization and economic development. The large quantity of waste generated necessitates system of collection, transportation and disposal. The landfill method for the ultimate disposal of solid waste continues to be widely accepted and used due to its economic advantages. In Turkey, most of the disposal sites open dump areas. Open dump sites may result in serious urban, sanitary and environmental problems such as an unpleasant odor and the risk of explosion as well as groundwater contamination because of leachate percolation. Unsuitable management practices also result in the loss of resources and energy, which could be recycled and produced from a large part of the solid waste. Therefore, over the past few decades, particular attention has been drawn to the sustainable solid waste management as a response to the increase in environmental problems related to the disposal of waste. The objective of this paper is to assess the situation of landfilling practices in Turkey as a developing country and to identify any gaps in the system as currently applied. The results show that approximately 25 million tons of MSW are generated annually in Turkey. The percentage of MSW disposed to sanitary landfill is only 45% whereas more than 50% of MSW is disposed without any control.

**Keywords :** developing countries, open dumping, solid waste management, sustainable landfilling, sustainable solid waste management

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