

## **Design of Collection and Transportation System of Municipal Solid Waste in Meshkinshahr City**

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**Abstract :** Solid waste production is an integral part of human life and management of waste require full scientific approach and essential planning. The allocation of most management cost to collection and transportation and also the necessity of operational efficiency in this system, by limiting time consumption, and on the other hand optimum collection system and transportation is the base of waste design and management. This study was done to optimize the exits collection and transportation system of solid waste in Meshkinshahr city. So based on the analyzed data of municipal solid waste components in seven zones of Meshkinshahr city, and GIS software, applied to design storage place based on origin recycling and a route to collect and transport. It was attempted to represent an appropriate model to store, collect and transport municipal solid waste. The result shows that GIS can be applied to locate the waste container and determine a waste collection direction in an appropriate way.

**Keywords :** municipal solid waste management, transportation, optimizing, GIS, Iran

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