

## Environmental Risk Assessment of Mechanization Waste Collection Scheme in Tehran

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**Abstract :** Purpose: The mechanization system for the urban services was implemented in Tehran City in the year 2004 to promote the collection of domestic wastes; in 2010, in order to achieve the objectives of the project of urban services mechanization and qualitative promotion and improve the urban living environment, sustainable development and optimization of the recyclable solid wastes collection systems as well as other dry and non-organic wastes and conformity of the same to the modern urban management methods regarding integration of the mechanized urban services contractors and recycling contractors and in order to better and more correct fulfillment of the waste separation and considering the success of the mechanization plan of the dry wastes in most of the modern countries. The aim of this research is analyzing of Environmental Risk Assessment of the mechanization waste collection scheme in Tehran. Case Study: Tehran, the capital of Iran, with the population of 8.2 million people, occupies 730 km land expanse, which is 4% of total area of country. Tehran generated 2,788,912 ton (7,641 ton/day) of waste in year 2008. Hospital waste generation rate in Tehran reaches 83 ton/day. Almost 87% of total waste was disposed of by placing in a landfill located in Kahrizak region. This large amount of waste causes a significant challenge for the city. Methodology: To conduct the study, the methodology proposed in the standard Mil-St-88213 is used. This method is an efficient method to examine the position in opposition to the various processes and the action is effective. The method is based on the method of Military Standard and Specialized in the military to investigate and evaluate options to locate and identify the strengths and weaknesses of powers to decide on the best determining strategy has been used. Finding and Conclusion: In this study, the current status of mechanization systems to collect waste and identify its possible effects on the environment through a survey and assessment methodology Mil-St-88213, and then the best plan for action and mitigation of environmental risk has been proposed as Environmental Management Plan (EMP).

**Keywords :** environmental risk assessment, mechanization waste collection scheme, Mil-St-88213

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