

Redefining Urban Landfills - Transformation of a Sanitary Landfill in Indian Cities

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Abstract : In India, over 377 million urban people generate 62 million tons of municipal solid waste per annum. Forty-three million tons are collected, 11.9 million are treated and 31 million tons is dumped in landfill sites. The study aims to have an overall understanding of the working and functioning of a sanitary landfill from the siting to the closure stage and identifying various landscape design techniques that can be implemented in a landfill site and come up with a set of guidelines by analyzing the existing policies and guidelines pertaining to landfills. Constituents of municipal solid waste, methods of landfilling, issues, impacts, Mitigation strategies, Landscape design strategies, design approaches towards a landfill, infrastructure requirements, end-use opportunities have been discussed. The objective is to study the ecological and environmental degradation prevention methods, compare various techniques in remediation, study issues in landfill sites in India, analyze scope and opportunities and explore various landscape design strategies. The understanding of the function of landfills with respect to Municipal solid waste and landscaping is conveyed through this study. The study is limited to Landscape design factors in landfill design guidelines and policies mentioned with regard to the issues and impacts specific to the Indian context.

Keywords : sanitary landfill landscaping, environmental impact, municipal solid waste, guidelines, landscape design strategies, landscape design approaches

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