

**SOLID WASTE GENERATION AND COLLECTION
FOR RECYCLING IN SMALL AND MICRO ENTERPRISES:
A CASE STUDY OF BRAAMFONTEIN DISTRICT,
JOHANNESBURG**

Abstract

A survey was carried out on small and micro enterprises in the Braamfontein region of Johannesburg, to determine the aggregate compositions of solid waste materials generated and collected for recycling purposes, and to determine the attitude(s) and perception(s) of manager(s) and owner(s) of such enterprises, to the collection of solid their waste(s) for recycling purposes.

A stratification method based on staff numbers was used to select 60 random samples of small and micro enterprises. Results reveal that 62% of these businesses were not collecting their solid wastes for recycling purposes, despite a high daily occurrence of recyclable (paper: 95%, plastic: 72% and organic: 68%) wastes in their daily waste streams. Low levels of collection by businesses were attributed to 'time-factor' issue in the collection of their recyclable wastes, while the provision of more recycling facilities in the area could improve their participation.

Waste to landfill transportation trends in Johannesburg's landfills were analyzed, as a measure of the waste problem in Johannesburg. Results suggest about 18% reductions in recycling waste materials transported to the various landfill sites in the city, from 2004 to 2008, and a 14% increase in other categories of general solid wastes for the same period. Despite the reductions in recycling waste materials recorded, the city recorded low levels of waste recovery practices for recycling purposes, particularly in small and micro scale commercial sectors.

In achieving the City of Johannesburg's wastes reduction goals, particularly the waste reduction targets set in the Polokwane Declaration, of reducing the amount of wastes disposed of by 50%, achieving a 25% reduction in disposable wastes by 2012 and to developing a zero waste plan by 2022 (City of Johannesburg, 2008), the municipality needs to play a pivotal role by providing needed recycling infrastructures, educating the society on the need for sustainable waste management and providing waste collection and management incentives.