

Improper solid waste disposal associated with high rates of solid waste generation in urban areas in Kenya is alarming. The relative lack of adequate management is associated with rapid urbanization and industrialization without commensurate solid waste disposal facilities. This has resulted in solid waste being dumped in open spaces causing blockage of drainage channels, posing health hazards and damaging aesthetic values of the environment, yet relatively few mitigation measures are in place. Population growth rate in Nairobi has been increasing, on average by about 6 percent per annum, exerting pressure on all facilities planned initially. Consequently, people work in Nairobi while residing in nearby towns such as Machakos which is near Athi-River town, an industrial area. This results in population increase in the Municipality. The question is, is the Council aware that, some people seek residence in Machakos town while working elsewhere and is it prepared for the ensuing pressure on its solid waste disposal facilities? To close this gap, this study focuses on solid waste management practices in Machakos town. Specifically, the study sought to classify and determine quantities of solid waste generated; and to explore and assess solid waste disposal methods. Further, solid waste management systems in place were assessed against environmental safety requirements. In the study, 198 respondents were sampled from commercial, service, industrial and residential sectors. Data were also gathered from interviews and discussions with key informants dealing with waste management. Public perception on aspects of waste management was measured by use of Likert type test. Quantities of solid waste from each sector were also assessed. Resulting data were then analyzed using the Statistical Package for Social Scientists (SPSS). The study identified 20 types of solid waste, which was further grouped into 4 categories depending on nature, size and mass. Results indicate that solid waste generated from the urban sectors varied significantly by type ($p < 0.05$, F-test). The extent of solid waste minimization was significant, ($p < 0.05$) that is, in terms of re-use, resell, donation and as feed to domestic animals. The perception of Machakos town residents towards aspects of safe disposal and other management options of solid waste were significant ($p < 0.05$) in influencing its generation and management. The study concluded that the commercial sector generates the highest quantities, 56.83 percent of total solid waste with residential sector generating the least, 7.62 percent, the per capita solid waste being 1.265kgs compared to an average of 1.203kgs in other world studies and that solid waste management practices in Machakos town compliance level with environmental safety requirements of NEMA is at 60 percent. From the study, it is recommended that Machakos town residents be trained on solid waste composting and recycling in order to benefit economically by increasing crop productivity through using the compost manure and selling the recycled products; Machakos Municipality Council to increase trucks for ferrying solid waste from 1 to 3 and personnel from 11 to 20 in order to safely dispose all the SW generated in Machakos town; and that the government of Kenya should further enforce its regulations on waste from plastic materials.