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ANALYSIS OF THE MATERIAL COMPOSITION OF MIXED MUNICIPAL SOLID WASTE IN THE KOŠICE REGION OF THE SLOVAK REPUBLIC

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Abstract

This work focuses on the analysis of material composition of mixed municipal solid waste (MSW) in the city of Košice, the second largest city in Slovakia, and in the village of Poproč, which is representative of the region. The paper describes the characteristics of the monitored localities, the methodology and the original evaluation procedure. The analysis of the mixed MSW composition in Poproč was performed in 2009-2010, and in Košice in 2011. In both cases, the analysis was carried out in each season in four campaigns according to a regular interval of waste collection. 36 samples were analyzed in Košice with an average weight of 236.1 kg, and 4 samples were analyzed in Poproč with an average weight of 208.2 kg. The mixed MSW was sorted into categories and subcategories. The biodegradable waste had the highest content at both sites. The content of the biodegradable MSW in Poproč was about 25 % lower than in Košice because of the built-up area type. The content of packaging was 24 % in Košice and 29 % in Poproč.

Key words: analysis, material composition, mixed municipal solid waste (mixed MSW), sieving, sorting

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