Environmental Engineering and Management Journal

April 2020, Vol.19, No. 4, 713-720 http://www.eemj.icpm.tuiasi.ro/; http://www.eemj.eu



"Gheorghe Asachi" Technical University of Iasi, Romania



GENERATION AND PHYSICAL CHARACTERIZATION OF HOUSEHOLD WASTE IN ANNABA CITY

Hamza Cheniti^{1*}, Tayeb Serradj², Khaled Brahamia³

¹Department of Mining Engineering, Higher National School of Mines and Metallurgy, Ex CEFOS Chaiba BP 233 RP W129, Sidi Amar, Annaba, Algeria ²Mining Department, BADJI Mokhtar University BP 12, 23000 Annaba, Algeria ³Department of Territory Management, BADJI Mokhtar University BP 12, 23000 Annaba, Algeria

Abstract

This study is a physical characterization of household waste in the town of Annaba (Algeria North East). Based on an adequate sampling protocol that takes into account the constraints of Algerian cities; Annaba city was taken as a case study for the rapprochement of the situation in Algeria. A quantity of 90 to 120 kg was sorted for each type of habitat in the city during four seasons of the year 2010 to 2011 according to 11 components of household wastes. Variations in the percentages of some components depending on the seasons and the type of habitat were recorded, especially the organic matter, the plastic, the glasses, and metals. Also; the weighing of the samples showed the variation of the production ratio per capita according to the season and the type of habitat. However, the largest production ratio was recorded for the height standing and the small one for low standing.

Key words: household solid waste, waste composition, waste generation, waste management

Received: January, 2018; Revised final: October, 2019; Accepted: October, 2019; Published in final edited form: April, 2020

^{*} Author to whom all correspondence should be addressed: e-mail: chenitimanagement@gmail.com