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INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

“INTEGRATING CLEANER PRODUCTION INTO SUSTAINABILITY STRATEGIES”

Diagnosis of Civil Construction Waste Generation in the Toledo-PR City - Analysis from 2005 to 2010

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Abstract

The current profile of Brazilian economic development, based on various production processes, intense industrial activity and population growth are some of the factors responsible for the rising generation of municipal solid waste. In the present scenario of growth of the Brazilian economy, the construction industry is one of the activities with the greatest growth potential and at the same time constitutes a sector with significant volume of waste generation, with serious implications for the environment. In this context, the study aimed to present the results of diagnostic generation of construction waste (RCC) in the City of Toledo-PR, for the period 2005 to 2010. The methodology included four stages, which are: development of a database with the evolution of films of the buildings in the city of Toledo-PR, during the years 2005 to 2010; estimate the potential of RCC according to the types construction (renovation, expansion and new), diagnosis of the current collection system in the city of Toledo RCC-PR, and finally the processing and systematization of the results by means of thematic maps and charts. As an example for the year 2010, the results showed a generation of 31 178 (t / yr) for RCC from the new buildings, 1815 (t / yr) for reforms and 3217 t / year for expansions. Thus the total RCC generated in the city of Toledo was 36,210 t / year. The topic maps show the total generation of RCC in each district during the years 2005 to 2010 and the central area is the neighborhood with the highest waste generation, followed by buildings located in neighborhoods Workers' Village, Coopagro Garden, Garden and Porto Alegre. Finally, a comparison was made between the total waste generated (36,210 t / in 2010) and total RCC collected (average 76.6% of total). Thus concludes that it is necessary to optimize the management system of RCC, as the research on the characteristics of the throne RCC shows that over 90% of these residues are likely to use, a situation which is not the case in the city of Toledo-PR.

Keywords: Civil Construction Waste (RCC), RCC Estimate Generation, Collection of RCCs, Toledo-PR

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