Diagnosis of waste from a red ceramics towards to cleaner production

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Abstract

There are not many diagnoses and studies, produced on the waste situation and residue generation in the field of the production process of the red or structural ceramics industry. Also, there are not many qualitative and quantitatively information about the waste and residues that have been generated. Therefore, this study seeks to preliminarily diagnose the waste situation at the company Villar Produtos Cerâmicos de Tangará-RN, with a view to proposing cleaner production (CP). The research method consisted on bibliographical and documentary research, as well as a case study of the cited company, including technical visits, observations and analysis of inputs and outputs of the production processes, following the CP methodology of the Brazilian National Center of Clean Technologies . The results showed that the largest input waste was concentrated in the extrusion, cutting, drying and burning processes. The first three added up to a water waste of 39.88%. The last two together wasted 76.23% of electricity. And, only, the burning was responsible for 30.15% of the clay waste. It is concluded that it's imperative for the red ceramic industry to take advantage of CP techniques to reduce production waste.

Keywords: cleaner production, sustainability, red ceramics, diagnosis, waste.