Assessment and Implementation of a Cleaner Production Opportunity Furniture Industry in a Metropolitan Region of Belo Horizonte, Minas Gerais

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Abstract

Based on the application of concepts and methodology of Cleaner Production - CP in an industry of the furniture sector - Mod Line Soluções Corporativas Ltda -, installed in the municipality of Contagem, Metropolitan Region of Belo Horizonte, as a management tool available for achieving eco-efficiency and obtain environmental benefits associated with economic gains, promoted himself in two productive sectors of the company an audit of generation of waste and effluent, using tools for evaluating material flows and water, to support the identification, assessment and deployment of nine preventive opportunities for CP, which resulted in minimizing waste and industrial effluents generation, and consequently, decreasing the inflow of raw materials, inputs and water. The deployment of nine opportunities for CP provided for undertaking an annual savings of about U.S. $ 103,000.00, obtained by minimizing of the generation of solid waste and wastewater emissions, in amounts equivalent to 374,000.00 kg and 200,000.00 L, respectively, added to reduce the annual consumption of 381,000.00 kg of raw materials and 200,000.00 L of water, ie, the minimization of process losses. This article will be a description and assessment of only one of the opportunities for CP, of which nine were implanted, through the adoption of technological innovations in the production process involved, resulted in considerable environmental and economic benefits.

Keywords: Cleaner Production (CP), Optimization production processes, Environmental management, Industry furniture, Brazil (Minas Gerais).