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INTERNATIONAL WORKSHOP
ADVANCES IN CLEANER PRODUCTION

“INTEGRATING CLEANER PRODUCTION INTO SUSTAINABILITY STRATEGIES”

Method for Data Collection and Analysis of Environmental Performance Assessment Inmetal Mechanic Industries

ANTUNES, C. V.^a,UGAYA, C. M. L.^a

a.Universidade Tecnológica Federal do Paraná, Curitiba, celso.antunes@gmail.com,

a.Universidade Tecnológica Federal do Paraná, Curitiba, cassiaugaya@utfpr.edu.br.

Abstract

The Metal Mechanic industry stands out for relevance in the economy and the broad scope, including metallurgy, manufacture of metal products and machinery manufacturing. In view of the inputs used and waste generated during industrial processes, there is an important cause of environmental impacts. A methodology to reduce environmental impacts in the production process is the Cleaner Production (CP). Therefore, it is necessary to identify what the root causes of these impacts. In this context, both the CP as well as the environmental standard ISO 14001, in item 4.3.1 titled Environmental Aspects, states that the organization should establish procedures to identify the environmental aspects of activities, products and services within the defined scope of the environmental management system. Moreover, both not recommend or determine a specific method geared to this purpose. Moreover, the Life Cycle Assessment (LCA), a technique used to evaluate the environmental impact of products, depends on data of each process from extraction to product disposal and Frischknecht et al (2007) present a consistent collection data along this chain processes. Thus, in order to optimize data collection by organizations for environmental assessments, it is suggested that both the implementation of the CP as the ISO 14001, use the form of data collection in ACV. In this paper we present a case study in manufacturing products of the metalworking industry, demonstrating the viability of this proposal.

Keywords: *Cleaner Production, Life Cycle Assessment, Environment, Sustainability.*