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INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

“TEN YEARS WORKING TOGETHER FOR A SUSTAINABLE FUTURE”

Analysis of the technological impact for industry and its effects on the production and destination of its waste: a case study of the industry of surfboards.

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Abstract

The concept of Cleaner Production advocates the continuous application of preventive and integrated environmental strategies to processes, products and services, incorporating the most efficient use of natural resources and minimizing the generation of waste and pollution, as well as the risks To human health. But not always technological innovations in production bring with it an improvement for Cleaner Production. The surfboard industry has been dismissive of P & L. Works pointed to a concentration of the residues of the productive process in the manufacturers due to the verticalization of the production stages. But from the incorporation of the technology of machining of the blocks of polyurethane through Computerized Numerical Control (CNC) there was a horizontalization of the process. The introduction of the technology provoked the emergence of companies that started to incorporate the productive sector. From this structural change of the industry came the questioning of which actors produce waste and how they manage it. The objective of this work was to map the current process, identifying the residues in the actors inserted in the productive chain detailing how these wastes are managed. A case study was carried out where the object analysis was carried out through the application of a field study where a mapping addressed the qualitative and quantitative issues of the production of surfboards. The data collection was done through a visit to the pre-selected targets through the application of Cleaner Production forms. Throughout the research it was evident that the links of the production chain can be executed by different actors participating in the industry, with a decoupling of the links from the manufacturers, mainly related to the volume of production. That is, the largest concentration of outsourcing of steps occurs in the smaller manufacturers with a shift in the volume of materials and waste for large distributors, large manufacturers and rolling mills. It was clear that the introduction of CNC technology was responsible for the decentralization of waste, previously focused only on manufacturers, but that technological innovation had no impact on waste reduction or reuse, or even better disposal management.

Keywords: *Cleaner Production. Technological Impact. Waste Management. Surfboard industry.*