Proceedings of the 8th International Conference on Environmental Science and Technology
Lemnos Island, Greece, 8 – 10 September 2003
Full paper Vol. B, pp. 815 - 823

THE USE OF LCA FOR THE APPLICATION OF ISO 14000 IN COTTON PROCESSING INDUSTRY

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EXTENDED ABSTRACT

Without any dispute, textile industry is one of the most economically powerful industries on the globe. Subsequently, textile industry due to its intensive production composes a sector with high environmental impact. Hence, the necessity for integrated and sophisticated environmental management systems (EMS) for those companies belong to that industrial sector looks quite apparent. It has been widely accepted that a company's goals that have been set under the notion of Sustainable Development can be met only if those companies shift from the current "strictly" product-related environmental management systems to the more integrated and comprehensive corporation-related environmental management systems. That is a system, which screens and considers the company as a unified system, trying to cover every aspect of its activity. However, radical changes regarding a company's environmental behavior and performance demand deep understanding of the implications and interactions between the different sectors of that company and its surrounding environment, as well as, a concrete picture of what the final scope of that change might be. Life Cycle Thinking (LCT) could the optimum mean for a company to put under the spotlight the patterns of that change and additionally LCT should be the basis for every company's activities aim at managing company's operations and supplier networks and incorporating Design for Environment principles into every stage. In the Literature, Life Cycle Assessment (LCA) is the management tool, which tries to evaluate and bring on surface any potential environmental burden a product might cause at any stage of its whole life cycle. Furthermore, LCA composes the management tool, which could reveal spaces for improvement either in the input or the output phase of a product. On the other hand ISO 14000 is one of the most widely known and used certified environmental management systems which requires an evaluation of environmental aspects and those aspects which would be considered "significant", and thus, making a company to potentially investigate its supply chain due to the possible "influence". The aim of this paper is to briefly analyze the importance and contribution of Life Cycle Thinking to the drawing and implementation of any integrated EMS such as ISO 14000 in textile industry.

Keywords: LCA, ISO14000, Environmental Management System, Life Cycle thinking