Cleaner Production Opportunities in a Dairy Farm and Cheese Factory

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Abstract

According to the National Institute for Federalism and Municipal Development (INAFED by Spanish acronym), Sonora´s livestock activity possess the national prestige of being one of the main livestock producers in Mexico because of its magnificent quality and its ability to cover the demand of products as well as its important contribution to the national exports. Internationally, this state has been recognized by the United States of America for being a disease free zone referred to livestock production. One of the derivates obtained from the cattle is cheese; all around the state is possible to find different places where this food is produced, from small producers who make the cheese in a home-made manner with gas or even wood stoves in some small communities, to big industries who count with sophisticated equipment and a big investment capacity to commercialize and also export this product.

As the cattle raising and cheese production are common activities within the region, analyzing this industries from the cleaner production perspective takes a higher relevance. The aim of this paper is to show relevant results from a study conducted on a cheese production facility in a small city at the northwestern side of the state. The most important opportunities found were those for reducing the energy demand for thermal processes and improving the manure management system, among others; such things will not only achieve an improvement on the company´s environmental performance, but also it will provide a considerable economical benefit which is expected to work as a motivation for further and deeper research and analysis.

Keywords: Dairy farming, Cheese, Cleaner Production.