

APPLICATION OF CLEANER PRODUCTION TECHNIQUES IN DAIRY INDUSTRIES

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A thesis submitted in Partial Fulfillment
Of
The Requirement for the Doctor of Philosophy Degree
In
Environmental Sciences
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ABSTRACT

The Pollution resulting from Dairy Industry sector threw its sheds mainly on water resources in case of direct disposal or public network in case of indirect disposal due to high organic loads elevating BOD and COD .

The study in the first part introduce cleaner production techniques dedicated to two Dairy Companies representing Large / Small scale production capacity and in the second part propose a mobile treatment unit for the whey with some modifications for the international treatment unit using HYSCS 7.2 software for modeling .

Cheese industry is the biggest sector in the Egyptian dairy industry. Thus, the main pollutant of Dairy Industry is the whey, that can could be transferred to different products such as powder products. These can be used as a supplementary nutrient or pharmaceutical products or food aiads; avoiding traditional methods of whey treatment and disposal and hence sustainable development could be achieved in Dairy Industry.

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