ELABORATION OF A PLAN OF ECONOMICAL VIABILITY FOR IMPLANTATION OF A PROCESS OF RECYCLING OF LUBRICATING OILS AND INDUSTRIAL SOLVENT

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Abstract

The concern with the environment is increasing in society and a lot of companies have spent efforts in the sense of to eliminate or to minimize the generating problems of environmental impacts. Some companies of the chemical section have as residues of the productive process, industrial solvents and lubricating oils of cut, chemical products that can cause serious risks to the environment and the human health, because after the use period recommended by the manufacturers, they deteriorate partially, forming toxicant compositions, that in agreement with the Brazilian environmental laws should have adapted final disposition. For the inexistence in the proximities, of specialized companies in recycling processes for these types of residues, usually the units industrial consumers of these products, are forced to stock these materials in their dependences, generating expenses with stocking and causing environmental damages to the human health, in case these products are stored in an inadequate way.

In this work, the researched companies operate as a dealer of chemical products for cleaning and maintenance of machines and industrial equipments and of protection equipments and safety of the work in the chemical section (E1) and the other as representative of the companies that act in these areas (E2). These companies verified a market gap in your area of performance (Tubarão-SC): the lack of recycling companies of industrial solvents and lubricating oils of cut.

Having as one of the main concerns, the healthy maintenance of the environment, E1 sees the recycling of products as one in the most lawful ways and worthy of relationship with the environment, because the oils and the recycled solvents come back to the market saving exchange value and minimizing the environmental pollution. This company has shown interested in the implantation of a process of recycling of lubricating oils of cut and industrial solvents in your dependences, seeking to assist, initially, the customers of E2.

The goal of this work was to analyze the economical viability of this enterprise. For that, it was done a case study (accomplished inside of a specific company -E1), where they were identified the process of recycling of lubricating oils of cut and industrial solvents; the

initial investment, the periodic costs of production and the periodic entrances (coming of the sale of the recycled products) and it was determined: the Payback time, the IRR - Internal Rate of Return and Net Present Value.

The used approach was predominantly quantitative, besides the qualitative approach, apparent in the description of the process to be used in the company. The work was accomplished during the year of 2001, having as population-objective researched the suppliers of machines and equipments, with the supplier of the equipments used in the recycling and all the customers of the company E2, that acts in South of Brazil, having a set of customers two hundred of fifty companies.

The used sample was chosen intentionally, being adopted the following criteria: they are potential customers and they have interest in recycling that material, because the storage of the used products causes them costs. Interviews were not accomplished - structured with the bosses of the purchase and sale departments of some famous companies customers in the south area and in Brazil, totaling a sample of fifteen companies. In the interviews it was selected information on the processes and the costs of materials, of equipments and of laboratory.

In the case of the secondary data, they it was used, preferentially, the bibliographical revision and the documental research in the companies, as reports, technical bulletins, that informs the types of used products, the necessary amount of consumption for production and the produced amount of residues.

The data were analyzed with base in the deterministic methods of analysis of investments: Interest Return Rate, Net Present Value and Payback time, where it was verified the viability of the implantation of the process of recycling of the lubricating oils of cut and industrial solvents. Starting from the obtained results, of the knowledge of the process and of the market little explored, the business becomes attractive and E1will be able to find at the environmental market its great opportunity for growth.