



3rd INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

“CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD”

Incineration: An Inevitable Alternative for Waste Disposal

R. M. C. Coutinho^a, A. L. O. Coutinho^b, L. C. Carregari^c

a. Enfermeira. Aluna de Especialização em Gestão Ambiental UNIP Campinas. email: raquel@unip.br

b. Engenheiro mecânico. MBA em Gestão Empresarial. email: arcouti@uol.com.br

c. Biólogo. Especialista em Gestão Ambiental. email: lucas.carregari@yahoo.com.br

Abstract

According to the Brazilian Institute for Geography and Statistics, Brazilian population (about 180 million inhabitants in 2004) produces close to 85 million tons of waste per year, or 225 tons per day, and this amount is household waste only, generated in homes or workplaces. This research aims to expand the general knowledge through literature review in scientific databases regarding the use of techniques, and methods or processes that can minimize the effects of solid wastes may pose a risk to life, the quality of life and the environment. Specific objectives: to describe the use of key technologies in solid waste management and reporting major damage that solid waste pose to public health and the environment. The most common methods in Brazil for the disposal of non-recyclable solid waste are the landfills or the famous dumps. The latter have caused many problems, such as the emission of odors and water and soil contamination. It is noticeable that many of the toxic elements present in the original residues are still present in the landfill, uncontrolled and unknown, and this is contributing to air pollution, soil and water bodies, besides facilitating the proliferation of macro and micro arrays. This research aims to expand the general knowledge through literature review, regarding the use of techniques and methods or processes that can minimize the effects of solid wastes to expose life to risk, quality of life and the environment. Fortunately the dumps are prohibited, and landfills have become unviable due to its cost and the rejection of the population directly affected is no longer possible to forget the trash or hide it. We must not turn it into garbage, and chances are many, but not equally efficient and viable. The only viable solution in the relatively short time, with proven technology and without major environmental impacts, is to convert municipal waste into industrial feedstock for the production of electricity through incineration. We know that the European Union, North America and some other developed parts of the globe, incineration is very widespread and used in hospitals, airports, industries and even cities. But in Brazil, this type of waste for disposal is not explored yet and one of the main reasons is the low cost of disposal in landfills and also the lack of legal requirements that require the total destruction of waste. Undoubtedly, after the enactment of Law 12.305/10, establishing the National Policy on Solid Waste, incineration is has a larger consideration, because the law provides for the waste management hierarchy that includes the recovery.

Keywords: *Incineration, Solid Waste, Environmental Law, Industrial Waste.*

“CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD”

São Paulo – Brazil – May 18th-20nd - 2011