

Management of environmental risks

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The meticulous exam of environmental impact is a recent subject that and has become a world challenge. Concepts and instruments that make possible a precise analysis and its repercussion in the ecosystem have been object of investigation of universities and research centers of everyone.

The incorporation of improvements in the methodologies of Environmental Impact Assessment takes another dimension when the Brazilian companies look for the certification of ISO 14000, and also the incorporation of the new Law on Environmental Crimes to the Brazilian Civil Code.

In that context, it is verified that a methodology that identifies the acceptability and degree of risk of a certain environmental impact doesn't still exist. That article proposes a methodology for the definition of the degree of risk of an environmental impact, based on the preliminary analysis of risks. That methodology is structured to identify the dangers that can be caused due to the occurrence of undesirable events to the environment.

The attentions with the environment objectifying the scientific study are old and they refer to the understanding and apprehension of the natural way and to the identification and study of its components. The study of the environmental impacts began to be systematized in the USA in the decade of 30, for evaluation of the influence that some great projects exercised on the affected populations. [1]

In that research work it tried to center the attentions in the Environmental Impact Assessment (EIA) and starting from there to propose a methodology to offer some information about how proceed in the identification of the sceneries of accidents, being studied the events capable of cause them and its consequences. For this identification the technique of Preliminary Analysis of Dangers was – PAD used .[2]

The Preliminary Analysis of Danger - PAD is a methodology structured to identify the dangers that can be caused because of the occurrence of undesirable events. This methodology can be used for systems in development beginning or in project phase, and also as general revision of safety of systems already in operation. In PAD are analysed the causes of each one of the events and its respective consequences, being made a qualitative evaluation of the frequency of occurrence of the accident scenery, of the severity of the consequences and of the associated danger. Therefore, the obtained results are qualitative, not supplying numeric estimate. Besides, they are suggested measures preventive and/or mitigating of the dangers, in an attempt of eliminating the causes or reduce the consequences of the sceneries of identified accidents.

The Preliminary Analysis of the Dangers–PAD arose on the safety's program of the Army American (U.S. Military Standard System Safety Program Requirements). Because of its military inheritance PAD sometimes is used in areas of the process that can liberate a great amount of energy in an uncontrollable way for example, during a fire or explosion of a potency transformer.[3]

Firstly, will be seen here the Environmental Impact Assessment (EIA) and in sequence the suggested methodology is presented, being taken as example for validation of the technique, the case of the environmental impact provoked by exhibition of the human being to eletro-magnetic fields. This abstract

shows inclusively the technique as tool for the practice of the risk management in any other activities that operate with technological and environmental risks.

The application of Management of Environmental Risks–MER, propitiates a satisfactory qualitative evaluation of the technological and environmental risks in the industry, in polluter projects besides being extremely useful in the licensing procedures and environmental audit, and it can become eminently a tool in the implantation of ISO 14000. It is capable to aid in the identification of dangers and situations that can drive to an undesirable event, besides identify project alternatives capable to eliminate some of the dangers.

The proposed method is shown applicable in the evaluations of technological and environmental risks in the industry, in polluter projects besides being extremely useful in the licensing procedures and environmental audit, could become eminently a tool in the implantation of ISO 14000.

That methodology can also be shown useful as subsidy for the calculation of the pecuniary value Environmental Insurances policy. Between the several modalities of plans of those types of insurances, is emphasized the insurance of Civil Responsibility for commercial and/or industrial establishments land the insurance of Civil Responsibility about Environmental Pollution, also well-known as “green insurance.”

Those modalities of safe, already existent ,there is some time, in developed countries, potentially has large application as important tool in a preventive way, aiding in Management of Risks and Environmental accompany plans and, even, in audits that look for the certification ISO 14000.

References

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