



INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

"KEY ELEMENTS FOR A SUSTAINABLE WORLD: ENERGY, WATER AND CLIMATE CHANGE"

The contribution of Cleaner Production in the Improvement of Work Conditions and Workers Health: A Case Study

E. C. Batiz^a, M. G. Farias^b

*a. Sociedade Educacional de Santa Catarina, Joinville, Brasil,
eduardo.batiz@soclesc.org.br*

*b. Universidade do Estado de Santa Catarina, São Bento do Sul, Brasil,
r2mgf@udesc.br*

Abstract

The present article brings to discussion a very interesting and up to date aspect: the synergy between Work Security, Health and Hygiene, Ergonomics and Cleaner Production. A case study has been developed in a chemistry laboratory of a university in order to assess the main causes of sonorous pollution and the consequent use of disposable ear protectors (EPI's). Noise level measurements were conducted in some specific points of the laboratory. Results showed two main causes of noise generation: i) maintenance plans that were not fulfilled, and ii) lack of concern for keeping the laboratory environment free of noise. Based on the concepts of Cleaner Production all the centrifugal machines were submitted to corrective maintenance, including cleanliness and substitution of parts. This procedure resulted in the reduction of pressure noise levels in approximately 17 dB, below the noise level that required the use of EPI's. This also created better working conditions and economy by the reduction of solid residue generation. It was verified strong synergy between Work Security, Health and Hygiene, Ergonomics and Cleaner Production in the improvement of the work conditions, besides the elimination or reduction of residues and increasing in the workers security and health.

Keywords: Work Conditions, Sonorous Pollution, Cleaner Production.
