

## INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

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

## Development of a Environmental Methodology for Solid Wastes Management in Higher Education Institutions

C. R. Vaz <sup>a</sup>, A. B. Fagundes <sup>b</sup>, P. C. Machado <sup>c</sup>, I. L. Oliveira <sup>d</sup>, J. L. Kovaleski <sup>e</sup>

- a. Universidade Tecnológica Federal do Paraná, Ponta Grossa, caroline-vaz@hotmail.com
- b. Universidade Tecnológica Federal do Paraná, Ponta Grossa, borges.fagundes@gmail.com
- c. Universidade Tecnológica Federal do Paraná, Ponta Grossa, pmachado@utfpr.edu.br
- d. Universidade Tecnológica Federal do Paraná, Ponta Grossa, <u>ivanir@utfpr.edu.br</u>
- e. Universidade Tecnológica Federal do Paraná, Ponta Grossa, <u>kovaleski@utfpr.edu.br</u>

## **Abstract**

This work aimed to present a critical analysis about the development of a methodology for solid wastes management in Higher Education Institutions (HEI). Researches were undertaken on technical rules and on the specialized literature on Environment over the last ten years. In a comparative study between methodologies ISO 14001 and Cleaner Production (CP), it was verified convergent and complementary points to its implantation in a HEI. It was done a case study at UTFPR-PG, where factors like environmental aspects and impacts, initial environmental diagnostic, purposes and targets and the way the campus fits with CP were surveyed and analyzed. It was possible to conclude that the application of ISO 14001 altogether with CP can effectively contribute for an improvement in the competitivity of HEI´s and magnify the vision about the environmental tools application in this sector.

Keywords: Higher Education Institution, Cleaner Production, ISO 14001.