



## INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

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

# Model of analysis of Performance of Healthcare Waste (HW) Management by Indicators, São Carlos-SP, Brazil

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### Abstract

Healthcare Waste (HW) management in Brazil has been discussed since last years, mainly by RDC 306/2004 and Resolution Conama 358/2005, which laws require improvements in all stages of this management (segregation, internal collection and packaging, external transport and storage), and give the responsibility of these wastes to their generators. The city of São Carlos produce, monthly, about 20 tonnes of HW and, approximately, 50% come from Santa Casa of São Carlos. The management of the realized procedures in this hospital was never evaluated until now considering performance improvement. Investigated methods pointed to some applications using performance indicators and these can be evaluated by Factorial Analyses (FA) and Analytic Hierarchy Process (AHP). A framework of interview was elaborated containing 29 qualitative observation variables, which questions were applied to 98 employers in this hospital. The obtained information were associated a different scales of response, according suggestions of Saaty. The SAS and Statistica programs were used to generate several simulations by FA, which results (performance indicators) were analyzed by experts. AHP method was used to compare the indicators to both groups (workers and experts). This paper illustrated the application of two different methods as analyze model to identify satisfactory performance indicators to evaluate HW management in the health establishment.

*Keywords: Performance indicators, healthcare waste, Factorial Analyses, AHP method, waste management.*

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