



# 7<sup>th</sup> INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION Academic

“CLEANER PRODUCTION FOR ACHIEVING SUSTAINABLE DEVELOPMENT GOALS”

---

## Parameters for Evaluation of Contaminated Areas: Analysis of Federal Regulations in Brazil and Colombia and Relevance of Air Quality Monitoring

BEZERRA, R. P. L. <sup>a\*</sup>, SILVA, R. C. P. <sup>a</sup>, JUCÁ, J.F.T..<sup>a</sup>

*a. Universidade Federal de Pernambuco, Pernambuco*

*\*Doudoranda em Engenharia Civil, raisaprota@gmail.com*

---

### Abstract

The management of Urban Solid Waste remains a great challenge for developing countries due to political, economic and cultural aspects. In the present work, the environmental laws of Brazil and Colombia are assessed regarding the management of contaminated sites and the aspects addressed in them will be compared, focusing on the parameters used for diagnosis, evaluation and monitoring of these areas. Three case studies of biogas monitoring in contaminated areas are presented with aiming to emphasize the relevance and the impact caused in the surroundings of these sites due to old solid waste deposits, since the decomposition of the organic matter present in them generates gases (biogas) that in certain concentrations may pose a risk to human health. Finally, it is recommended that regulatory frameworks in both countries focus not only on soil and groundwater quality control, but also on the control and monitoring of air quality within the scope of actions on contaminated areas management.

*Keywords: Management of contaminated sites Environmental Regulations. Risk. Biogas..*

---