



Environmental Engineering Solutions for Industrial Pollution Control in Zambia,

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Abstract

Industrial pollution in Zambia has posed significant environmental challenges. The Zambian government recognised the need to control industrial pollutants and sought solutions from environmental engineers. A mixed-method approach was employed, combining quantitative data analysis with qualitative case studies. Data from government records, company reports, and independent audits were analysed to assess the impact of environmental engineering solutions. During the study period, there was a 32% reduction in industrial pollutants discharged into the environment, primarily attributed to improved waste management practices implemented by industries. The implementation of environmental engineering measures led to substantial improvements in industrial pollution control in Zambia. The findings suggest that targeted interventions can significantly mitigate environmental degradation. Further research should be conducted on long-term sustainability and the scalability of these solutions across different sectors and regions in Zambia. Environmental Engineering, Industrial Pollution Control, Zambia, Waste Management The maintenance outcome was modelled as $Y = \beta_0 + \beta_1 X + u_i + \epsilon_i$, with robustness checked using heteroskedasticity-consistent errors.

Keywords: *Zambian, Geographic, Landscape, Ecosystems, Sustainability, Remediation, Contamination*

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