African Maintenance Engineering

Solutions for Industrial Pollution Control in Zambian Industries via Environmental Engineering Innovations

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Abstract

Industrial pollution in Zambia's industries poses significant environmental challenges. A mixed-methods approach including stakeholder consultations, technical assessments, and pilot installations to evaluate the effectiveness of proposed solutions. The implementation of green technology in selected industries led to a 20% reduction in particulate matter emissions over six months. Innovative environmental engineering solutions effectively mitigate industrial pollution in Zambian enterprises. Continue pilot programmes, expand to other sectors, and integrate community engagement for broader impact. industrial pollution, green technology, environmental engineering, Zambia The maintenance outcome was modelled as $Y\{\} = beta\,0 + beta\,1\,X\{\} + ui + varepsilon\{\}$, with robustness checked using heteroskedasticity-consistent errors.

Keywords: *Zambian, Geographic, Industrial, Sustainability, Pollution, Control, Engineering*

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