ABSTRACT
POTENTIAL OF ENVIRONMENTAL POLLUTION FROM SOLID WASTE TREATMENT IN COMPOSTING HOUSE AT EAST SURABAYA

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Solid waste treatment in composting houses Surabaya are windrow composting. This treatment contributed emission to environment. The aims of this study are to investigate potential of green house effect emission, acidification and eutrophication.

This study was taken place at 6 composting house in East Surabaya. The analysis contained of solid waste composition analysis, characteristic of compost and leachate, and potential of polution analysis with Life Cycle Assessment (LCA) using Simapro. For characteristic of compost and leachate analysis, sample taken 3 times during composting process. Parameters for this study were temperature, pH, BOD, COD, ammonia, and phosphat.

The results shown that solid waste composition in composting house were leaves and grass waste. The raw material were affectung the potential of polution from composting. The effect were global warming of 13.18-19.93%, acidification of $1.9 \times 10^{-5}$ - $11.5 \times 10^{-5}\%$, and eutrophication of 5.23-22.34%.

Keyword : acidification, composting house, eutrophication, global warming, life cycle assessment (LCA), Simapro.
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